Map & Globe Skills
Hands-on Social Studies Program

Now I can read all kinds of maps.

I can read graphs too.

Check your region of the United States.
# Exploring Where & Why®
## Map and Globe Skills
### Hands-on Social Studies Program

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For information about ordering this program guide, 2MGS500, or related components, call 800-621-8086.
Program Reviewers
Dr. JoAnne Buggey, Professor
Department of Curriculum and Instruction
University of Minnesota, Minneapolis, MN

Melissa Green, Classroom Teacher
Social Studies and Language Arts
School District 65, Evanston, IL

We also want to thank the many principals, curriculum supervisors, and teachers who so graciously allowed us to visit their schools and classrooms. The information we gathered was invaluable in developing social studies materials that create stimulating learning environments, address the growing diversity of our students, and meet the many needs of today’s teachers.

Stimulate the curiosity of your Junior Geographers.

Prepare students for testing in social studies and in reading and math.

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What is Exploring Where & Why® Map and Globe Skills?

Map and Globe Skills . . .

is Nystrom’s hands-on social studies program
for building and applying basic geography skills
and concepts.

Map and Globe Skills . . .

integrates hands-on and print materials
in activity-based lessons to help students
understand maps and globes and their
many uses.

Map and Globe Skills . . .

reinforces reading, writing, math,
critical thinking, and reference skills
in a content area.

What does Map and Globe Skills do?

- **Builds** a solid foundation of essential social studies knowledge,
skills, and concepts.
- **Integrates** assessment and evaluation.
- **Provides** learning opportunities for diverse student populations.
- **Reinforces** reading and writing in a content area.
- **Stimulates** a variety of intelligences.
- **Develops** critical thinking skills.
- **Ensures** success for all students.

Why a hands-on approach?

- Promotes active learning.
- Hands-on materials focus students’ attention on their own learning.
- Students work individually, in pairs, in small groups, and as a whole class.
- Variety of materials keeps students interested.

Social Studies Skills = Map and Globe Skills
Exploring Where & Why®
Map and Globe Skills
Components

30 Junior Geographer Atlases
9 Activity Globes
1 Teacher’s Guide
15 Political Desk Maps
15 Physical Desk Maps
9 Raised Relief Maps
1 Literacy Library
30 Markers

Literacy Library
Website
Teacher’s Guide

4 Skills Units • 1 Regions Unit

- Program correlates with:
  - The Five Themes of Geography
  - The Nystrom Junior Geographer Atlas

- Lessons build solid social studies skills and concepts.
- Variety of hands-on activities integrate the Atlas with:
  - Activity Globes
  - Desk Maps
  - Raised Relief Maps
- Teacher’s Guide pages for every lesson.
- 43 Student Lessons plus 5 Assessments

Teacher’s Guide Pages
Handy, easy to use:
- Step-by-step teaching plans
- Objectives
- Materials
- Teaching strategies tie directly to objectives
- Discussion questions clearly marked
- Answer keys
- Tips for teaching
- Time-saving ideas
- Extension activities

* Literature Links
* Cross-curricular Activities
* Class Record sheet for each unit

---

### Getting Started With Maps and Globes

#### Lesson 6

**East, West, and Intermediate Directions**

**Teaching**

1. Review north and south. Say:
   - Which direction is north? (toward the North Pole) Which direction is south? (toward the South Pole)
2. Have students turn to pages 10–11 of the Junior Geographer Atlas. Ask:
   - a. Read the title question to the class again.
   - b. Ask a student to read the introduction aloud.
   - c. Ask other students read the captions and the Junior Geographer speech balloons.

**Materials**

- 1 to 3 copies of the Junior Geographer Atlases
- 1 to 3 activity sheets
- 1 to 3 map markers

**Here’s a Tip!**

Teach this lesson in two parts.

**Day 1:** Using the Atlas
- Using the Map
- Using the Activity Globe

**Day 2:** Using the Map
- Materials
- Activity Sheets 6a–6b
- Map Markers

**Objective**

Students will be able to:
- Identify east and west as cardinal directions.
- Identify north and south as cardinal directions.
- Identify east and west as intermediate directions.
- Use directions to locate places.

---

**Getting Started With Maps and Globes**

**Lesson 19**

**Graphing Rainfall**

- Read a rainfall map.
- Identify rainfall patterns on a map.
- Graph rainfall.

#### Get Started

**Go Global**

Have students look at the rainfall map on the World Physical Desk Map. Have them select an area and research rainfall in that area. Then have them draw a bar graph showing your area’s rainfall for a month.

**Track Rainfall**

Have students track precipitation in a daily newspaper or on a weather Web site. Then have them draw a bar graph showing your area’s rainfall for a month.

**Illustrate Water Cycle**

Have students illustrate the evaporation and condensation process that cause rainfall. Remind students that this process is a recycling of the earth’s water.

**Answers**

**Activity Sheets 19a–19b**

<table>
<thead>
<tr>
<th>Q</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>b.</td>
</tr>
<tr>
<td>c.</td>
<td>d.</td>
</tr>
<tr>
<td>e.</td>
<td>f.</td>
</tr>
<tr>
<td>g.</td>
<td>h.</td>
</tr>
<tr>
<td>i.</td>
<td>j.</td>
</tr>
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</table>

**Rainfall in Inches**

<table>
<thead>
<tr>
<th>Rainfall Range</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>0–10</td>
<td>Forest</td>
</tr>
<tr>
<td>10–20</td>
<td>Grass</td>
</tr>
<tr>
<td>20–40</td>
<td>Woodland</td>
</tr>
<tr>
<td>40–80</td>
<td>Desert</td>
</tr>
</tbody>
</table>

**Pulling It Together**

- Answers will vary, depending on your location. Students should give a rainfall range, as well as describe rain in your area.
Northern and Southern Hemispheres

In this lesson, you will learn one way the earth can be divided into halves. Each half is known as a hemisphere, or half a sphere. Use pages 44–45 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using Grid Systems

1. A globe is a model of the earth. Like the earth, a globe is a sphere.
   a. On your Activity Globe, find a compass rose. Circle the N.
   b. With your finger, extend the arrow north to the North Pole.
   c. Now label the button NP for North Pole.
   d. Which ocean surrounds the North Pole?
   e. On the compass rose, find the arrow pointing the direction opposite north. Label the arrow S for south.
   f. With your finger, extend the arrow south to the South Pole.
   g. Label that button SP for South Pole.
   h. Which continent surrounds the South Pole?

2. The Equator is the imaginary line that is halfway between the North Pole and the South Pole.
   a. The Equator is where the two halves of the Activity Globe are joined together. With your finger, trace the Equator.
   b. With a Map Marker, draw the word Equator each place it appears on the globe.

3. The Equator divides the earth into two hemispheres. The Northern Hemisphere is north of the Equator.
   a. In the Atlantic Ocean, halfway between the North Pole and the Equator, write NH for Northern Hemisphere.
   b. In the Pacific Ocean, halfway between the North Pole and the Equator, also write NH.
   c. You see only the Northern Hemisphere if you look at the North Pole. Tilt the globe and look at the North Pole.

4. How many hemispheres are in a sphere?

Using Grid Systems

1. What does the graph at the right show about land and water on the earth?
   a. There is more land than water.
   b. There is more water than land.
   c. There are equal parts of land and water.
   d. The earth is 71% land.

2. Which is true about world maps?
   a. They are models of the earth.
   b. They are spheres.
   c. They show the whole world at once.
   d. They show the true size and shape of places.

3. Which of these identifies the symbols on a map?
   a. Legend
   b. Map scale
   c. Compass rose
   d. Grid lines

4. On the map to the right, 1 inch stands for
   a. 50 feet
   b. 100 miles
   c. 177 miles
   d. 78 miles

5. The distance from Charlottesville, VA, to Washington, D.C., is
   a. 1 inch
   b. 50 miles
   c. 75 miles
   d. 100 miles

Map and Globe Skills

1. Collect and review Unit Review 1a–1b or the marked globe.

2. For each unit, you need a Junior Geographer activity pack. For each unit, they took the written Unit Assessments for each continent.

3. If a continent is only in one hemisphere, label it NH (Northern Hemisphere) or SH (Southern Hemisphere). If a continent is in both hemispheres, label it NH and SH. Name it in the Both Hemispheres section of the chart.

4. For each unit, they took the Hands-on Review for the first time, have them take the Hands-on Review for the second time.

5. Photocopy this page so you have patches for students who have successfully completed the unit.

6. Review the lesson skills and concepts.

7. Test map-reading and graph-reading skills too.
Student Materials

Atlas provides content for hands-on lessons.

Tools for understanding where and why.

#30 Atlases
8 1/2" x 11", 88 pages, full color
- Skills units introduce basic skills and concepts.
- Regions unit provides a closer look at the United States—a perfect framework for state studies.
- Graphs present complex facts in simple, visual formats.
- Photos help students visualize natural and cultural features.

#9 Activity Globes
markable, 9"
- Engage students in hands-on activities to build and apply globe skills—continents and oceans, directions, hemispheres, latitude and longitude.
- Accurately show the world—location, size, distance, and direction.
- Reinforce the connection between a world map and the actual world.
- Emphasize global relationships and interactions.

#9 Raised Relief Maps
19" x 12", markable
- Depict landforms of the United States in dramatic three-dimensional detail.
- Demonstrate the relationship between the height of the land and elevation colors.
- Help students understand how flat maps show real places.
- Give new meaning to “hands-on.”
- Perfect for tactile learners.

See It, Feel It
Exploring Where & Why
Map and Globe Skills

15 Political & 15 Physical Desk Maps

Laminated and markable, 19” x 18”, fold to 19” x 13”, United States on one side, the World on the other

- Lessons develop map skills and geography concepts.
- Students add details as lessons unfold.
- Introduce students to a variety of maps and their uses.
- Thematic maps show patterns.
- Fold-back panel helps focus student attention.
- Demonstrate ways flat maps show three-dimensional places.

30 Map Markers
water-soluble ink, easy to use
- Use on the Desk Maps, Activity Globes, and Raised Relief Maps.
- Make social studies active, not passive.

Website
online resource
- Can be accessed anywhere, day or night.
- Provides a variety of resources: maps, graphs, photos, and links.
- Maps, graphs, and photos can be used in student presentations and reports.

Literacy Library
12 books, 12 sets of activities, 1 book bag
- Supports reading through social studies.
- Includes age-appropriate trade books that support the lessons in Map & Globe Skills.
- Cross-curricular activities extend the learning.
- Engaging stories can be read to the class or students can read them.
Using the Program

What is Map and Globe Skills?

Map and Globe Skills is a hands-on curriculum program that:

• Provides the very best materials and lessons for students to develop competency in using and understanding maps and globes—skills essential for becoming responsible citizens in our ever-changing world.
• Forms a basic framework for any state or regions curriculum.
• Reinforces the Five Themes of Geography.
• Integrates reference and hands-on materials in a variety of step-by-step lessons.

What does the program do?

Map and Globe Skills . . .

• Teaches students how to use a variety of social studies tools—maps, globes, and atlases—to learn about the world and the United States.
• Develops critical thinking, writing, and reference skills.
• Provides structured activities for successful group and/or individual work.

How is Map and Globe Skills organized?

Map and Globe Skills is divided into five units: four skills units and one region unit.

• Skills units build atlas, map, and globe skills.
• Regions unit focuses on regions of the United States. Students apply atlas, map and globe skills.

How will Map and Globe Skills fit with my curriculum?

Map and Globe Skills is flexible. Use this program as a foundation or customize it to fit your curriculum. Select lessons that:

• Match the skills and content you are teaching.
• Enhance your textbook.
• Fill a gap in your curriculum.
• Relate specifically to your state or region.

Is there an assessment component?

Map and Globe Skills offers several opportunities to assess student progress.

• Activity sheets can be collected and reviewed.
• Junior Geographer Activity Packs act as portfolios for student work.
• Unit reviews offer two assessment alternatives:
  • A paper-and-pencil written assessment that reviews what students learned, tests mapping and graph-reading skills, and reinforces test-taking skills.
  • A hands-on assessment that uses program components.
• Use the unit reviews as pretests or posttests.
• Track student progress on the class records on unit dividers.

I like my students to work in small groups. Does this program provide for group work?

The lessons in Map and Globe Skills provide many opportunities for cooperative learning.

• Most materials in Map and Globe Skills are shared. Set up routines so that everyone is involved in activities. For example, when working with globes, have groups pass them around so each student has a chance to point, circle, or identify.
• If related components are being used, such as desk maps and atlases, have group members point to the same place on every component. Keep all members engaged.
• Have students check their work with their partners or group members. Doing so builds security and eliminates many questions.
Are materials easy to clean?

Map and Globe Skills materials are designed for fast and easy clean-up.

• To clean maps and globes, use a spray bottle to dampen paper towels.
• Assign one student per group to clean and put away maps, globes, and markers.
• Choose another student to collect atlases.

Is there a technology component for Map and Globe Skills?

A special Web site—

JuniorGeographer.com— supports Map and Globe Skills. It has a variety of resources to extend the program, including:

• Outline maps
• Thematic maps
• Reference maps
• Photo tours
• Graphs
• Resource links

To sneak a peek, visit www.JuniorGeographer.com.

Here’s a Tip!

Use name tags to divide the class into groups or assign tasks. Duplicate the Junior Geographer name tag on page 10, or make your own.

• Use different colors—one color for each group.
• Number the tags for each group. Assign clean-up tasks based on number.
• Occasionally mix up the groups. For example, have everyone with the same number form a group.
• Put symbols on the name tags. Assign mapping tasks based on symbol. For example, have everyone with a ◆ outline your state.
Map and Globe Skills uses *The Nystrom Junior Geographer Atlas*, plus Desk Maps, Activity Globes, and Raised Relief Maps to teach skills and build knowledge. The skills units focus on atlas, map, and globe skills in hands-on activities. Students then apply these skills in the hands-on lessons for the regions of the United States.

### ATLAS, MAP, AND GLOBE SKILLS

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<th>Atlas Pages</th>
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<td><em>Skills</em>: 2, 13, 14</td>
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</table>
| Use legends to decode symbols.                           | 6–7         | *Skills*: 3, 4, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24, 25, 26  
|                                                          |             | *Regions*: 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 |
| Locate continents and oceans.                            | 8–9         | *Skills*: 4, 5, 6, 9, 10, 13, 14  
|                                                          |             | *Regions*: 27, 28, 29, 30, 31, 32, 39, 40, 41, 42, 43 |
| Use cardinal and intermediate directions.                | 10–11       | *Skills*: 5, 6, 13, 14, 15, 16, 17, 18, 24, 25  
|                                                          |             | *Regions*: 27, 29, 31, 33, 37, 39, 41, 43 |
| Use a map scale to measure distances.                    | 12–13       | *Skills*: 7, 18          |
|                                                          |             | *Regions*: 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 40, 41, 42, 43 |
| Identify political units (countries, states, cities).    | 14–15       | *Skills*: 4, 5, 6, 7, 8, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26  
|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42, 43 |
| Identify natural features (landforms and bodies of water). | 16–21       | *Skills*: 8, 9, 10, 11, 12, 18, 19, 20, 22, 25  
|                                                          |             | *Regions*: 27, 29, 31, 33, 35, 37, 39, 41, 43 |
| Trace river flow.                                        | 18          | *Skills*: 10, 12  
|                                                          |             | *Regions*: 27, 29, 31, 33, 35, 37, 39, 41 |
| Understand elevation and relief.                         | 22–23       | *Skills*: 12, 18, 21  
|                                                          |             | *Regions*: 27, 29, 31, 33, 35, 37, 39, 41, 43 |
| Locate places using hemispheres.                         | 24–25       | *Skills*: 13, 14        |
| Locate places using latitude and longitude.              | 26–29       | *Skills*: 15, 16, 17, 18, 21  
|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42, 43 |
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|                                                          |             | *Regions*: 28, 30, 32, 34, 35, 36, 38, 40, 42, 43 |
| Identify land use patterns.                              | 38–39       | *Skills*: 22  
|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42 |
| Identify population patterns.                            | 40–41       | *Skills*: 23  
|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42 |
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|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42 |
| Identify patterns in history.                            | 44–45       | *Skills*: 25  
|                                                          |             | *Regions*: 28, 30, 32, 34, 36, 38, 40, 42 |
| Identify economic patterns.                              | 46–47       | *Skills*: 26        |
| Add information to maps or globes using symbols and labels. | all lessons |                              |
**Map and Globe Skills** includes activities in which students use, apply, and develop a number of interdisciplinary skills. In fact, one of the benefits of social studies is that students must use a variety of skills in order to learn.

### INTERDISCIPLINARY SKILLS

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<th>Lessons</th>
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</thead>
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<td><strong>Critical Thinking Skills</strong></td>
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<tr>
<td>Gather and interpret data.</td>
<td>1, 7, 12, 19, 20, 21, 22</td>
</tr>
<tr>
<td>Classify and categorize.</td>
<td>1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 19, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42</td>
</tr>
<tr>
<td>Compare and contrast.</td>
<td>1, 2, 7, 9, 10, 11, 12, 20, 22, 23, 26</td>
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<tr>
<td>Sequence or order.</td>
<td>4, 7, 25, 33, 35, 43</td>
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<tr>
<td>Generalize or summarize.</td>
<td>3, 9, 12, 15, 19, 20, 21, 22, 23, 28, 30, 32, 34, 36, 38, 40, 42</td>
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<tr>
<td>Relate cause and effect.</td>
<td>19, 20, 23</td>
</tr>
<tr>
<td>Infer or predict.</td>
<td>16, 24, 25, 43</td>
</tr>
<tr>
<td><strong>Graphic Skills</strong></td>
<td></td>
</tr>
<tr>
<td>Interpret photos and illustrations.</td>
<td>1, 5, 6, 8, 9, 10, 11, 13, 14, 15, 16, 22, 23</td>
</tr>
<tr>
<td>Interpret graphs and diagrams.</td>
<td>4, 12, 18, 19, 20, 21, 26, 28, 30, 32, 34, 36, 38, 40, 42</td>
</tr>
<tr>
<td>Read a timeline.</td>
<td>25</td>
</tr>
<tr>
<td>Organize data graphically.</td>
<td>1, 2, 3, 7, 12, 13, 14, 22, 23, 24, 25</td>
</tr>
<tr>
<td>Complete a map.</td>
<td>4, 15, 16, 17, 18, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43</td>
</tr>
<tr>
<td>Complete a graph.</td>
<td>19, 20, 21, 26</td>
</tr>
<tr>
<td>Draw an illustration or diagram.</td>
<td>9, 10, 11, 19</td>
</tr>
<tr>
<td>Use atlases and maps as resources.</td>
<td>all lessons</td>
</tr>
<tr>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>Express ideas in writing.</td>
<td>3, 5, 13, 15, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43</td>
</tr>
<tr>
<td>Collaborate with peers in group discussions and lesson activities.</td>
<td>all lessons</td>
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</table>
The Map and Globe Skills lessons will help students recognize and understand the ongoing relationships between people and the land. They also clearly reflect the Five Themes of Geography.* The following is a summary of the Five Themes.

**Location**
The first geographical question is always “Where?” and the most fundamental geographic skill is the ability to describe where things are located. Location can be described in both relative and absolute terms.

- **Relative location** describes where a place is in relation to other places. Which landforms and bodies of water are nearby? Which other places are to the north, south, east, and west? Which places are at the same latitude?

- **Absolute location** directs us to a precise position on the earth’s surface—from our street address to latitude-longitude coordinates.

- **Reasons for location** can be practical, historic, geographic, or purely cultural.

**Place**
Besides having a specific location, every place has other distinctive characteristics—both natural characteristics and human, or cultural, characteristics.

- **Natural characteristics** of a place include shape, landforms, bodies of water, climate, vegetation, and animal life. Topics related to the earth’s rotation and revolution—such as seasons—are also related to this theme.

- **Cultural characteristics** of a place include airports, shopping centers, roads, bridges, and all other built structures. Also included are the languages, religions, political systems, and area distribution of the inhabitants.

- **Ways of representing places** are part of this theme. Related topics include scale models, linear scale, map symbolism, map projection, and special maps.

**Relationships Within Places**
People interact with their environments in many ways. Not only do we depend on nature to meet our needs, we also adapt to it and even alter it in significant ways. The ways different groups interact with their environments are affected by cultural background and technological resources.

- **People depend on their environments** for their basic needs and for many recreational activities.

- **People adapt to their environments** with their clothing, housing, and land use. Patterns related to climate or land use also are part of the theme.

- **People alter their environments** with their techniques of farming, forestry, and mining. Modern transportation systems deplete resources and pollute the air.

**Movement**
People, products, information, and ideas move in patterns. The theme of movement concerns human interactions: The ways we are linked with regions, cultures, and people beyond our immediate environment.

- **We are linked with other places** by birth, country of origin, and travel. Transportation and communication also create links.

- **Interdependence** is evident in foods, raw materials, and manufactured goods that come to us from other places. Even our water supply may come from a distant source.

- **Patterns of movement** can be seen in exploration, trade, settlement, migration, and invasion. Routes, travel times, and schedules show these patterns.

**Regions**
Geographers divide the world into manageable units of study called regions. Some regions are defined in terms of a single characteristic, while others meet a complex set of criteria. The criteria for defining a region can be either natural or cultural and may change over time.

- **Natural regions** can be defined by landforms, bodies of water, vegetation, climate, soil, or the presence of certain resources.

- **Cultural regions** can be defined by political alliances, land-use patterns, economics, race, language, religion, or combinations of several such factors.

- **Regional changes** can result from such changes as boundaries, alliances, population, land use, and climate.

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*The themes were first described in Guidelines for Geographic Education: Elementary and Secondary Schools (1984), which was jointly prepared by the National Council for Geographic Education (NCGE) and the Association of American Geographers (AAG).*
This chart shows the connections between Map and Globe Skills and the Five Themes of Geography. Because the themes overlap so frequently, the chart shows only the most dominant themes for each lesson.

### THE FIVE THEMES OF GEOGRAPHY

<table>
<thead>
<tr>
<th>Lessons</th>
<th>Location</th>
<th>Place</th>
<th>Relationships</th>
<th>Movement</th>
<th>Regions</th>
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<td><strong>Unit 1</strong> Getting Started With Maps and Globes</td>
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<td>2 Comparing Maps and Globes</td>
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<td>4 Continents and Oceans</td>
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<td>5 North and South</td>
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<td>6 East, West, and Intermediate Directions</td>
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<td>10 Bodies of Water</td>
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<td>Alaska and Hawaii:</td>
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<td>41 Land and Water</td>
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Introducing the Atlas, Maps, and Globe

Teaching

Identify each program component.

1. Introduce the program components.
   a. Hold up and name the following components one by one.
      - The Nystrom Junior Geographer Atlas
      - Activity Globe
      - Raised Relief Map
      - Political and Physical Desk Maps
   b. Describe each component only long enough to make sure students will recognize it. (See pages viii–ix for descriptions of the components.)

Using the Atlas

Locate sections of the Atlas.
Use maps, graphs, photos, and text to gather information.

2. Hold up a copy of The Nystrom Junior Geographer Atlas. Explain:
   a. An atlas is a book you can use to find information about people and places.
   b. This atlas has maps, graphs, photos, and words.
   c. This atlas is a reference book. Do not write in it.

3. Help students explore the Atlas.
   a. Hand out Atlases.
   b. Guide students through the following sections of the Atlas.
      - Facts About the United States—inside front cover
      - Table of Contents—page 3
      - Reference Maps—pages 68–75
      - Glossary—pages 76–77
      - State Facts—pages 78–81
      - Index—pages 82–88

4. Have students work with the Atlas.
   a. Hand out Activity Sheets 1a–1b.
   b. As a class, complete steps 1–2 on Activity Sheet 1a.
   c. Give students time to complete Activity Sheets 1a–1b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Identify each program component.
- Locate sections of the Atlas.
- Use maps, graphs, photos, and text to gather information.
- Label the Activity Globe and maps.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 1a–1d, Introducing the Atlas, Maps, and Globe
- Activity Globes
- Raised Relief Maps
- Physical Desk Maps
- Political Desk Maps
- Map Markers

Here’s a Tip!
Teach the lesson in two parts.
Day 1: Using the Atlas
Day 2: Using the Globe and Maps

Here’s Another Tip!
Make sure every student has a chance to look at and mark each hands-on component.
Lesson 1

Using the Globe and Maps

1. Divide the class into groups. Hand out Activity Sheets 1c–1d, Activity Globes, Raised Relief Maps, Political Desk Maps, Physical Desk Maps, and Map Markers.
   a. Ask students to hold up each component as you say its name.
   b. As a class, complete step 1 on Activity Sheet 1c. Have students hold up their globes so you can check their markings.
   c. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

2. Establish a clean-up routine.
   a. Have students clean their Activity Globes, Raised Relief Maps, and Desk Maps. (See page xi for cleaning instructions.)
   b. Explain your procedure for collecting the activity sheets, and returning Atlases, Activity Globes, maps, and markers to the cart.

Answers

Activity Sheets 1a–1b
1a. Mississippi River 5a. oceans, lakes, rivers 7a. one of the seven largest land areas on earth
1b. Mt. McKinley 5b. What bodies of water do maps show? 7b. a map that uses color to show natural features
2a. 8 5c. blue 8b. Houston
2b. 30 6a. Political Map 8c. MN
3a. Answers will vary. 6b. world 9a. 54
3b. Looking at Regions 6d. bays 9b. state in U.S., 40˚N, 83˚W
4a. World 5d. bays 8b. Houston
4b. Continents, 6a. Political Map 8c. MN
Surface of the Earth 6b. world 9b. state in U.S., 40˚N, 83˚W

Activity Sheets 1c–1d
1b. water 2b. left
1c. Answers will vary. 2d. bumpy
1h. land 2f. smooth

Entire World: Activity Globe, Political Map, Population, Continents and Oceans, Wealth of Countries, Physical Map, Rainfall, Temperature, Major Land Use

United States only: Raised Relief Map, Political Map, Growth of the United States, Time Zones, Population, Physical Map, Rainfall, Temperature, Major Land Use

Junior Geographer Name Tags
Create name tags for the Junior Geographers in your classroom. Copy the name tags on page 10 on different colors of paper.

Here’s Another Tip!
To make clean-up easier, give students specific tasks. Have one student collect Atlases, one collect globes, another make sure markers are tightly capped, and so on. You may want to set aside a class period to rehearse your cleaning and collection procedures.
Introducing the Atlas, Maps, and Globe

In this lesson, you’ll learn how to use the Atlas, Activity Globe, Raised Relief Map, and Desk Maps to find information. Use The Nystrom Junior Geographer Atlas to fill in the blanks below.

Using the Atlas

1. The inside front cover of the Atlas lists Facts About the United States.
   a. Turn to the inside front cover. What is the longest river in the United States? ________________________________
   b. The highest place is ________________________________.

2. The Table of Contents helps you find sections of the Atlas.
   a. Turn to page 2. Where would you look for information on continents and oceans? page ________
   b. Which page in the Atlas answers the question How do you use a road map? page ________

3. This Atlas is divided into sections. The first four sections will help you learn how to use maps and globes.
   a. In the Table of Contents, read the titles of the first four sections. Write the title of one section below.
      ______________________________________________
   b. The fifth section contains information about the regions of the United States. Write its title below.
      ______________________________________________

4. This Atlas uses maps and graphs to show information.
   a. Turn to pages 8–9. What is the title of the largest map on these pages? ________________________________
   b. What are the titles of the two graphs on these pages? ________________________________

5. This Atlas also uses photos and words to give information.
   a. Turn to pages 18–19. Name three bodies of water shown in the photos on page 18.
      ________________________________________________

b. Atlas pages always begin with a **title question**. What is the title question on these pages?

____________________________________________________

c. The introduction in the upper left corner gives you a little background information. Read the introduction. What color is a symbol for water? ______________

d. Important words are in bold type. On page 19, read the caption under the top left photo. Which word is bold?

________________

6. This Atlas has **Reference Maps** of the United States and the world.

   a. Turn to pages 68–69. In the box in the lower right corner of the page, find the title of this map. Also write it below.

   ______________________________________________________

   b. Turn to pages 74–75. Does this map show the United States or the world? ____________________________

7. The **Glossary** includes definitions of many words in the Atlas.
   
   a. Turn to pages 76–77. What is a **continent**?

   ______________________________________________________

   b. A **physical map** is ______________________________________
   
   ______________________________________________________

8. This Atlas includes a section on **State Facts**.

   a. Turn to pages 78–81. Point to the column that lists state names. Find Texas.

   b. Move your finger across the page and find the column **Largest City**. What is the largest city in Texas?____________________

   c. Now find the column **Postal Abbrev**. What is the postal abbreviation for Minnesota? ______________

9. The **Index** is a list of places and the main page numbers on which they appear. It also describes where or what the places are.

   a. Turn to pages 82–88. Which Atlas page shows information about Alabama? ______________

   b. What description does the index give for Ohio?

   ______________________________________________________
Introducing the Atlas, Maps, and Globe

Using the Globe and Maps

1. The Activity Globe shows information about the world. This globe uses color to show some of that information.
   a. Across the Activity Globe, write ACTIVITY GLOBE.
   b. Many areas of the globe are colored blue. What does blue show—land or water? ________________
   c. The names of the blue areas are a darker blue. Find two of these names and write them below.
      ___________________  ___________________
   d. On this globe, Africa is colored yellow. Find Africa and underline its name.
   e. Outline Africa.
   f. Underline the name of the purple area.
   g. Outline the purple area.
   h. Do yellow and purple show land or water? ________________

2. The Raised Relief Map shows the United States. It can help you understand the earth’s surface.
   a. Put aside the Activity Globe. Take out the Raised Relief Map. Across the top of the map, write RAISED RELIEF MAP.
   b. Close your eyes and feel the map. Which side of the map is bumpier—the left side or the right side?
      __________________
   c. Find and underline the words Rocky Mountains on the map.
   d. Do these mountains feel smooth or bumpy? ______________
   e. Find and underline the words Great Plains on the map.
   f. Do the plains feel smooth or bumpy? ______________
3. The **Desk Maps** show two kinds of information about the United States and the world: political and physical. Each Desk Map has a **main map** and three smaller maps.

   a. Put aside the **Raised Relief Map**. Take out your Desk Maps. The title of each map is printed in an orange box. Find the map with **United States and Political Map** in its title. Underline the words **United States**.

   b. Above the main map, circle the words **POLITICAL Desk Map**.

   c. There are three smaller maps on a folding flap at the top of the map. These are **thematic maps**. (The Atlas also has thematic maps.) Each map focuses on a different theme. Below these maps, write **THEMATIC MAPS**.

   d. Circle the title of each thematic map.

   e. Turn your Desk Map to the world side. Find the title of this map and underline the word **World**.

   f. Now find the desk map with the words **World and Physical Map** in the title box. Above the main map, circle the words **PHYSICAL Desk Map**.

**Pulling It Together**

4. Use Activity Sheets 1a–1d, the Atlas, Activity Globe, Raised Relief Map, and Desk Maps to complete the chart. Put a check ✓ in the box if the component matches the description.

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Components</th>
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<tbody>
<tr>
<td></td>
<td>Atlas</td>
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<tr>
<td>Uses color to show information</td>
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<tr>
<td>Has thematic maps</td>
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<tr>
<td>Has a folding flap</td>
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<tr>
<td>Has parts that are bumpy and parts that are smooth</td>
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<tr>
<td>Is markable</td>
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> Look at the Activity Globe and all the markable maps. Make a list of the titles that show the entire world. Make a second list that shows only the United States. Include thematic maps in your lists.
Comparing Maps and Globes

Objectives
Students will be able to:
- Identify characteristics of a globe.
- Identify characteristics of a map.
- Identify similarities and differences between maps and globes.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 2a–2d, Comparing Maps and Globes
- Activity Globes
- Political Desk Maps
- 5”x 8” envelopes
- 9”x 12” or larger envelopes
- glue
- scissors

Here’s a Tip!
Teach the lesson in two parts.
Day 1: Using the Atlas and Using the Globe and Map
Day 2: Comparing the Globe and Map

Here’s Another Tip!
Make a sample Junior Geographer pack to show the class. See Activity Sheet 2b for an illustration and instructions.

Teaching

Using the Atlas
- Identify characteristics of a globe.
- Identify characteristics of a map.

1. Introduce the lesson by holding up an Activity Globe and a World Desk Map. Say to students:
   - Today you’ll look at how globes and maps show the world.
   - You’ll also find ways globes and maps are alike and different.

2. Have students turn to pages 4–5 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the photos and maps.

3. Then ask the class:
   - Which is a model of the earth—a map or a globe? (a globe)
   - Which can show the entire world? (both maps and globes)

Using the Globe and Map
- Identify characteristics of a globe.
- Identify characteristics of a map.

4. Discuss the shapes of globes and maps.
   a. Write the word SPHERE on the board. Hold up a globe and say:
      - The globe and the earth are both spheres. They are shaped like a ball.
      - What are some other objects that are spheres? (orange, bubble, marble)
      - Because it has the same shape as the earth, a globe can show the correct shape of places and their correct locations.
   b. Have students look at their Political Desk Maps.
      - Unlike a globe, a map is flat.
      - Because it is flat, a map can show the entire world at once.
Understanding Spheres
Reinforce the distinction between round and spherical objects. Draw two columns on the board; one labeled Circle, the other labeled Sphere. Hold up different objects such as a penny, a CD, a basketball, and an orange. Have students decide where to list each item.

Here’s Another Tip!
Have students save their activity sheets in their Junior Geographer packs. The activity sheets can be used as study guides for the unit review.

Comparing the Globe and Map
Identify similarities and differences between maps and globes.

1. Hold up an Activity Globe and a World Political Desk Map. Say:
   - How are these two objects different? (the globe is round and the map is flat)
   - How are they the same? (they both show the whole world)
   - Today you’ll compare maps and globes.

2. Divide the class into groups. Hand out Activity Sheets 2c–2d, Activity Globes, Political Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 2c. Have students hold up their globes and maps so you can check their outlines.
   b. Give students time to complete Activity Sheets 2c–2d. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 2a–2d. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers
Activity Sheets 2a–2b
2e. Any two: purple, yellow, green, orange, pink, white, gold
3c. Pacific Ocean
4e. seven

Activity Sheets 2c–2d
1c. globe 2g. about the same size
2c. Greenland looks shorter 2h. Activity Globe and wider on the map 3e. on the map
2f. larger

Pulling It Together
4. Activity Globe: sphere, model of earth, true size comparisons, true shape, shows half the world at once
   Desk Map: flat, distorts shapes, shows whole world at once
   Both: shows world, shows land, blue water

Answers will vary. Students should list two ways maps and globes are alike and two ways they are different.
Comparing Maps and Globes

In this lesson, you’ll learn how maps and globes show information about the world. Use pages 4–5 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Globe and Map**

1. A globe is a **model** of the earth, our world. It shows the true **shape** of places.
   - a. On page 4 of the Atlas, point to the photo of the earth at the bottom of the page.
   - b. Use your finger to trace around Africa, the largest tan area.
   - c. On your Activity Globe, find Africa and outline it.

2. A globe shows areas of **land** and areas of **water**.
   - a. Blue areas show water. In your Atlas, in the photos of the earth, point to the blue areas.
   - b. On your globe, write **WATER** in two blue areas.
   - c. Different colors are used to show land. In the Atlas, in each photo, point to land.
   - d. On your globe, in three of those areas, write **LAND**.
   - e. Name two colors that are used to show land on the globe.

3. Like the earth, a globe is a **sphere**—meaning it is shaped like a ball.
   - a. On your Activity Globe, mark an **X** in the center of Africa.
   - b. Turn the globe slowly to the right. Keep turning until you reach the X on Africa.
   - c. Cover the X with your left hand and place your right hand on the opposite side of the globe. What does your right hand cover?
   - d. Mark an **X** over the word *Pacific*. Try to turn the globe so you can see both Xs at the same time.
   - e. Find one of the buttons on the globe. Mark it with a dot.

---

You can see only half of a sphere at a time.
f. Find the button on the other side of the globe. Mark it with a dot.

g. Try to turn the globe so you can see both dots at the same time.

4. A map is flat. A map can show the entire world at once.
   a. Take out your Political Desk Map. Turn to the World side. This map shows the entire world. Above the main map, write WORLD.
   b. Label one of the blue areas on the map WATER.
   c. Find an area of the map that shows land and label it LAND.
   d. Use the Activity Globe to help you outline Africa on the map.
   e. On the globe, Africa is colored yellow. How many different colors are used to show land in Africa on this map? ________

Pulling It Together

5. Make a Junior Geographer pack. Use it to store your activity sheets and other souvenirs of your travels.
   a. Glue the front of the smaller envelope to the back of the larger one.
   b. Write your name on the nametag below. Cut it out and glue it onto your pack.
Comparing Maps and Globes

1. Because a globe is the same shape as the earth, it is more accurate than a map.
   a. On your Activity Globe, find the white area labeled Antarctica. With your Map Marker, outline this area.
   b. Take out your World Political Desk Map. Find Antarctica and outline it.
   c. Which shows the true shape of Antarctica? _________________

2. Maps distort, or change, the shapes and sizes of places.
   a. Greenland is colored purple on your Desk Map. Find and outline Greenland.
   b. Greenland is colored green on your Activity Globe. Find, outline, and label GREENLAND.
   c. Compare the shapes of Greenland on the map and globe. How are they different? ____________________________________

   d. Mexico is also colored green on your globe. Find and outline Mexico.
   e. Mexico is colored orange on your map. Find and outline Mexico.
   f. On your Desk Map, does Greenland look larger, smaller, or about the same size as Mexico?____________________
   g. On your Activity Globe, does Greenland look larger, smaller, or about the same size as Mexico? ________________
   h. Greenland and Mexico are about the same size. Which shows their size more accurately—the Desk Map or the Activity Globe? __________________________

3. A globe is more accurate than a map, but a world map shows the whole world at once.
   a. Hold your Activity Globe so you can see all of Antarctica.
   b. Try to turn the globe so you can also see Greenland.
   c. Now turn the globe so you can see all of Greenland. Try to turn the globe so you can also see Antarctica.
d. On your Desk Map, underline the names of Antarctica and Greenland.

e. Where could you see both places at the same time? (Circle one.)

- on the map
- on the globe
- neither

Pulling It Together

4. Use the Atlas, your Activity Globe, your Desk Map, and Activity Sheets 2a–2d to help you complete the chart below.

a. Choose a word or phrase from the Word Bank below. Decide if it describes the Activity Globe, the Desk Map, or both.

b. Write the term in the correct space in the chart. Continue until you’ve used all the words and phrases in the Word Bank.

<table>
<thead>
<tr>
<th>Word Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>sphere</td>
</tr>
<tr>
<td>model of earth</td>
</tr>
<tr>
<td>flat</td>
</tr>
<tr>
<td>shows world</td>
</tr>
</tbody>
</table>

Using the completed chart, list two ways maps and globes are the same and two ways they are different.
Decoding Maps and Globes

Teaching

Using the Atlas

- **Identify the elements of maps and globes.**

1. Introduce the lesson by holding up an Activity Globe and a Desk Map. Say to the class:
   - Maps and globes have several different parts, or elements.
   - Today you’ll learn how to identify those elements and decode symbols on maps and globes.

2. Have students turn to pages 6–7 of the *Junior Geographer Atlas*.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the maps and illustrations.

3. Then ask the class:
   - What are five elements of a map or globe? (Hint: Look for large blue words. Two are shown on the Fifty States and Their Neighbors map.) (title, symbols, scale, compass rose, grid lines) List them on the board as they are mentioned.
   - Which of these elements are usually found in a legend? (title, symbols, scale)

Using the Activity Globe

- **Identify the elements of globes.**
- **Identify several types of symbols.**

4. Divide the class into groups. Hand out Activity Sheets 3a–3b, Activity Globes, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 3a. Have students hold up their globes so you can check their labels.
   b. Give students time to complete Activity Sheets 3a–3b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Identify the elements of maps and globes.
- Identify several types of symbols.

Materials

- *The Nystrom Junior Geographer Atlases*
- Activity Sheets 3a–3d, *Decoding Maps and Globes*
- Activity Globes
- Physical Desk Maps
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts.

Day 1: Using the Atlas and Using the Activity Globe
Day 2: Using the Maps
Using the Maps

**Identify the elements of maps.**

**Identify several types of symbols.**

   a. As a class, complete step 1 on Activity Sheet 3c. Have students hold up their maps so you can check their labels.
   b. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

2. When students have finished their charts, survey the class. Ask them to answer the following questions by holding up 0–4 fingers.
   - How many of your maps had a title? a legend?
   - How many of your maps used symbols?
   - How many of your maps had a scale? a compass rose? grid lines?

Collect and review Activity Sheets 3a–3d.

Clean and collect materials, using your own procedure or one suggested on page xi.

---

**Answers**

Activity Sheets 3a–3b
1c. Continents and Oceans 2g.
1f. 880 3b. red
2c. blue 3d. Congo, Zambia, Namibia

Make Symbols Flashcards
Have students make symbols flash cards. Have them draw a symbol on one side of an index card and write what the symbol represents on the other side. Then have students quiz each other using their flashcards.

Pulling It Together

4. Charts will vary, depending on the maps chosen.
   Answers will vary. Students may mention that almost all have a title, legend, and symbols and some have grid lines and compass roses.
Decoding Maps and Globes

Maps and globes have several elements that help you use them. In this lesson, you’ll identify and decode those elements. Use pages 6–7 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Activity Globe**

1. Important information about maps and globes is usually found in the legend. A **legend** helps unlock the globe’s meaning.
   - a. On your Activity Globe, find and outline the legend box. Above it write **LEGEND**.
   - b. The title tells you what the globe shows. Underline the title of the globe. To the left, write **TITLE**.
   - c. What is the title of your globe?

   ____________________________________________________________________________

   d. Find the part of the legend that shows symbols and draw a box around it. To the left, write **SYMBOLS**.
   - e. The scale helps you estimate distance on a globe. Circle the scale. To the left, write **SCALE**.
   - f. How many miles does 1 inch stand for? ____________

2. Maps and globes use different kinds of **symbols**.
   - a. On page 6 of your Atlas, read the descriptions of the symbols shown in the legend. Point to each element in the legend.
   - b. Oceans are large bodies of water. On your globe, in the legend, find and underline the symbol for ocean.
   - c. What color does your globe use for oceans? ____________

   d. On your globe, find and underline the names of two oceans with this symbol ☪☪.
   - e. Continents are the largest areas of land. In the legend, find and draw a box around the symbol for continent.
   - f. On your globe, find and draw a box around the names of three continents.
   - g. In the legend, find the symbol that shows a city. Draw it here. _________________
   - h. On your globe, find five cities and outline their city symbols.
3. **Lines** also can be symbols on a map or globe.
   
   a. **An international boundary line** shows where one country ends and another begins. On your Activity Globe, in the legend, put an X next to the symbol for international boundary.
   
   b. What color is this boundary line? ________________
   
   c. In Africa, find Angola and trace its boundary lines.
   
   d. What other countries does Angola share a boundary with?
      __________________________________________________________________________
      __________________________________________________________________________
      __________________________________________________________________________

   e. On the globe, find four other countries and trace their international boundary lines.

4. A globe uses other elements that are not shown in the legend.
   
   a. The **compass rose** is a set of arrows that show directions. In the Atlas, on the map at the bottom of page 7, point to the compass rose.
   
   b. On your globe, find and circle one compass rose. Label it COMPASS ROSE.
   
   c. **Grid lines** cover the globe. Trace one of these grid lines all the way around the globe.
   
   d. Along the line you traced, write GRID LINE.

**Pulling It Together**

5. Use the Atlas, your marked Activity Globe, and Activity Sheets 3a–3b to complete this chart.
   
   a. If the element is pictured, write its name on the line.
   
   b. If the element is named, draw a picture of it in the square.
Decoding Maps and Globes

Using the Maps

1. Many maps have the same elements as globes.
   a. On your World Physical Map, find and outline the legend box. Above it write **LEGEND**.
   b. Underline the title of the map. To the left, write **TITLE**.
   c. What is the title of this map?
      __________________________________________________
   d. Find the part of the legend that shows symbols and draw a box around it. To the left, write **SYMBOLS**.
   e. Circle the scale. To the left, write **SCALE**.
   f. On your map, find and circle one compass rose. Label it **COMPASS ROSE**.
   g. Grid lines cover the map. Trace one of these grid lines all the way across the map.
   h. Along the line you traced, write **GRID LINE**.

2. Maps often use **shapes** as symbols.
   a. In the legend, outline the symbol for city.
   b. On the main map, find three cities and outline their symbols.
   c. In the legend, find the symbol for mountain peak. Draw it here. ______________
   d. On the main map, find three mountain peaks and outline their symbols.

3. Maps use **colors** as symbols.
   a. In the legend, under Natural Regions, outline the orange box.
   b. What does orange stand for on the main map?
      ______________________________________
   c. On the main map, in an area colored orange, write **ORANGE = SHRUB OR DESERT**.
   d. On the Temperature map, orange stands for something different. In the legend, underline what orange stands for.
e. On the Temperature map, what does orange show?

f. On the Temperature Map, in an orange area, write ORANGE = WARM/HOT.

Pulling It Together

4. Complete the Map Elements Checklist.
   b. Fill in the first two columns to tell where you found each map and what its title is.
   c. In the next four columns, put a check ✓ in the column if the map has that element.

<table>
<thead>
<tr>
<th>Source</th>
<th>Map Title</th>
<th>Legend</th>
<th>Symbols</th>
<th>Scale</th>
<th>Compass Rose</th>
<th>Grid Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk Map</td>
<td>Atlas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>page ____</td>
<td>page ____</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Look at your chart. Which elements appear on all four maps? Which elements appear on only a few maps? Finish the following sentences:

Almost all maps have . . .

Only some maps have . . .
North and South

Teaching

Using the Atlas

- **Identify north and south as cardinal directions.**

1. Introduce the lesson by writing DIRECTIONS on the board. Say:
   - **Why do we use directions?** (to find places and things, to know which way to go)
   - Directions help us find places on maps and globes. They also help us find places in the real world.

2. Have students turn to page 10 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read captions A and B and the Junior Geographer speech balloon.
   d. Review the illustrations for captions A and B.

3. Ask students:
   - **What does cardinal direction mean?** (main direction)
   - **When you are moving toward the North Pole, which direction are you moving?** (north)
   - **When you are moving toward the South Pole, which direction are you moving?** (south)

Using the Activity Globe

- **Identify north and south as cardinal directions.**
- **Use north and south to locate places.**

4. Divide the class into groups. Hand out Activity Sheets 5a–5b, Activity Globes, and Map Markers.
   a. Hold up an Activity Globe. Tell students:
      - Because a globe is a model of the earth, it is the best tool for learning about directions.
      - Today you will use a globe to learn about the directions north and south.
   b. As a class, complete steps 1–2 on Activity Sheet 5a. Have students hold up their globes so you can check their labels.
   c. Give students time to complete Activity Sheets 5a–5b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

- Identify north and south as cardinal directions.
- Use north and south to locate places.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 5a–5d, North and South
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts.
Day 1: Using the Atlas and Using the Activity Globe
Day 2: Using the Map

Here’s an Interesting Fact!

Remind students that north is not up. Up is away from the earth. North is toward the North Pole. Also remind them that down is back to the earth and south is toward the South Pole.
Lesson 5

Finding Directions in the Classroom

Use a compass to locate north in your classroom. With masking tape, create a compass rose on the floor of your classroom. Have students help you label north and south on the compass rose. Ask students to walk toward the North Pole, and then toward the South Pole.

Using the Map

- **Identify north and south as cardinal directions.**
- **Use north and south to locate places.**

1. Hand out Activity Sheets 5c–5d, Political Desk Maps, and Map Markers.
   - a. Review north and south. Ask the class:
     - If you are traveling north, what are you moving toward? (the North Pole) What if you are traveling south? (the South Pole)
     - Because maps are flat, most do not show the North Pole accurately. What can we use to find north on a map? (compass rose)
   - b. As a class, complete steps 1–2 on Activity Sheet 5c. Have students hold up their maps so you can check their labels.
   - c. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 5a–5d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

**Activity Sheets 5a–5b**
- 2b. Antarctica
- 6d. north
- 5e. Europe

**Pulling It Together**

**Activity Sheets 5c–5d**
- 2b. north
- 4d. Sudan
- 3d. Brazil

**Pulling It Together**
- 5. Russia to India south
- Australia to Japan north
- Antarctica to Algeria north
- Colombia to Peru south
- Indian Ocean to Arctic Ocean north

Answers will vary, depending on the two places chosen.
North and South

Directions help us find places. In this lesson, you’ll learn how to find places by using the directions north and south. Use pages 10–11 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Activity Globe

1. The North Pole is the point farthest north on the earth.
   a. Turn the Activity Globe so you can see the Arctic Ocean. The button marks the location of the North Pole.
   b. With your Map Marker, label the button NP for North Pole.

2. The South Pole is the point farthest south on the earth. It is opposite the North Pole.
   a. Turn the globe to the button opposite the North Pole. This button marks the South Pole. Label it SP.
   b. Which continent surrounds the South Pole?

3. A compass rose helps you find directions.
   a. On your globe, find a compass rose. N stands for north. Circle the N.
   b. Wherever you are on the earth, north is always toward the North Pole. Draw an arrow from the N to the North Pole.
   c. Write NORTH along the arrow.

4. North is a cardinal, or main, direction. South is also a cardinal direction. South is opposite north.
   a. On the same compass rose, find the arrow opposite the north arrow. Label it S for south.
   b. Wherever you are on the earth, south is always toward the South Pole. Draw an arrow from the S to the South Pole.
   c. Write SOUTH along the arrow.
   d. On your globe, find the three other compass roses. Label the arrows opposite the north arrows S.
   e. Now draw two more arrows pointing north and two more pointing south on your globe. Label the arrows N and S.
5. You can go north from anywhere in the world except the North Pole.
   a. Find the compass rose in the Indian Ocean. Following the blue line, draw an arrow from the N to the North Pole. Label your arrow **NORTH**.
   
   b. In North America, find the United States. Draw an arrow from the center of the United States to Canada. Label your arrow **NORTH**.
   
   c. Find the South Pole. Draw an arrow from the South Pole to Australia. Label your arrow **NORTH**.
   
   d. Circle the letter I in the word *AFRICA*. From the letter I, draw an arrow north to the next continent. Label your arrow **NORTH**.
   
   e. Which continent is north of Africa?  

6. You can go south from anywhere in the world except the South Pole.
   
   a. Find the compass rose in the Pacific Ocean, near Japan. Following the blue line, draw an arrow from the S to the South Pole. Label your arrow **SOUTH**.
   
   b. In North America, find the United States. Draw an arrow from the center of the United States to the South Pole. Label your arrow **SOUTH**.
   
   c. Find the North Pole. Draw an arrow south from the North Pole to Asia. Label your arrow **SOUTH**.
   
   d. Hold the globe so you can see Antarctica. Put your finger on the South Pole. When you move your finger, which direction are you moving?  

**Pulling It Together**

7. Use your Atlas and marked Activity Globe to help you label the following compass roses with an **N** for north or an **S** for south.
North and South

Using the Map

1. The polar view maps show the true location of the North and South Poles.
   a. Give the World Political Desk Map a title. Above the main map, write NORTH AND SOUTH.
   b. In the lower left corner of the map, find the North Polar View. Draw a large dot at the North Pole.
   c. Now draw arrows pointing north along all the blue lines that meet at the North Pole.
   d. In the lower right corner of the map, find the South Polar View. Draw a large dot at the South Pole.
   e. Also draw arrows pointing south along all the blue lines that meet at the South Pole.

2. Like globes, maps use a compass rose to show direction.
   a. Find the two compass roses on the main map. Circle the N on each compass rose.
   b. What direction does N stand for? ______________
   c. Following the blue lines on the map, extend the north arrows on each compass rose. Label the arrows NORTH. (Try not to cover any other labels.)
   d. South is opposite north. On each compass rose, find the arrow opposite the north arrow. Label each S.
   e. Following the blue lines, extend the south arrows on each compass rose. Label the arrows SOUTH.

3. You can go north from anywhere in the world except the North Pole.
   a. Label the continents on the main map. Use the Continents and Oceans thematic map for help.
   b. In Europe, find Sweden. Following the blue line, draw an arrow from Sweden to the Arctic Ocean. Label your arrow NORTH.
c. In South America, find Bolivia. Following the blue line, draw an arrow from Bolivia pointing north. Label the arrow NORTH.

d. What country is directly north of Bolivia? ________________

4. You can go south from anywhere in the world except the South Pole.

a. Following a blue line, draw an arrow from Australia to Antarctica. Label your arrow SOUTH.

b. In North America, find Alaska. Following a blue line, draw an arrow from Alaska to Antarctica. Label your arrow SOUTH.

c. In Africa, find Egypt. Following the blue line, draw an arrow from Egypt to South Africa. Label the arrow SOUTH.

d. What country is directly south of Egypt? ________________

Pulling It Together

5. Use your Desk Map to help you complete the chart below.

a. Find each pair of places on your Desk Map. Move your finger from the first place to the second. Are you moving north or south? Write the direction in the chart.

b. If a place is missing, start at the first place and move in the direction listed. What is the first country or ocean you reach? Write the name of that place on the chart.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Direction Moved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia, Asia</td>
<td>India, Asia</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Japan, Asia</td>
<td></td>
</tr>
<tr>
<td>Antarctica</td>
<td>Algeria, Africa</td>
<td></td>
</tr>
<tr>
<td>Colombia, South America</td>
<td>Peru, South America</td>
<td></td>
</tr>
<tr>
<td>Indian Ocean</td>
<td>_____________________</td>
<td>north</td>
</tr>
</tbody>
</table>

Pick a place on the map. Write three sentences about a journey north from that place to another place. Be sure to mention the continents, countries, and any bodies of water along your way.
East, West, and Intermediate Directions

Teaching

Using the Atlas

1. Review north and south. Say:
   - **Which direction is north?** (toward the North Pole) **Which direction is south?** (toward the South Pole)
   - North and south are cardinal directions.

2. Have students turn to pages 10–11 of the Junior Geographer Atlas.
   a. Read the title question to the class again.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the illustrations and maps.

3. Ask the class:
   - **What are the four cardinal, or main, directions?** (north, south, east, west)
   - **When facing north, is east to the right or the left?** (the right) **Which way is west?** (the left)
   - **Which direction is opposite east?** (west)

4. Draw a compass rose on the board and label the north arrow N.
   a. Say to the class:
      - On the compass rose, what does the N stand for? (north)
      - If you know which way is north, you can locate the other directions.
      - Let’s fill in the missing directions on the compass rose.
   b. As a class, label the cardinal directions on the compass rose.

Using the Activity Globe

- **Identify east and west as cardinal directions.**
- **Identify intermediate directions.**
- **Use directions to locate places.**

5. Divide the class into groups. Hand out Activity Sheets 6a–6b, Activity Globes, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 6a. Have students hold up their globes so you can check their labels.

Objectives

Students will be able to:
- **Identify east and west as cardinal directions.**
- **Identify intermediate directions.**
- **Use directions to locate places.**

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 6a–6d, East, West, and Intermediate Directions
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts.
**Day 1:** Using the Atlas and Using the Activity Globe
**Day 2:** Using the Map
Finish a Classroom Compass Rose
Complete the compass rose that you started in Lesson 5. Have students label east, west, and the intermediate directions on the floor.

Using Directions
Using the classroom compass rose, have students find objects and describe locations by using directions. Some examples:
- Who is sitting west of you?
- Is the reading area northwest or northeast of the chalkboard?
- Point to the south window.

Answers

Activity Sheets 6a–6b
4b. Australia 5c. southeast 4d. Asia 5f. west

Pulling It Together

Activity Sheets 6c–6d
3d. Montana 4b. northwest 4c. west

Pulling It Together
5. Directions are the way to go!
   The compass rose should have all eight directions labeled. There are four pairs of opposite directions: north and south, east and west, northeast and southwest, northwest and southeast.
East, West, and Intermediate Directions

In this lesson, you’ll learn how to locate east, west, and intermediate directions on maps and globes. Use pages 10–11 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Activity Globe

1. North, south, east, and west are the four cardinal, or main, directions. Like north and south, east and west are opposite directions.
   a. The Activity Globe has four compass roses. Find one of the compass roses and label the arrow pointing south S.
   b. East is to the right of north. Label the arrow pointing east E.
   c. East and west are opposite directions. Label the arrow pointing west W.

2. You can circle the entire globe going only east or only west.
   a. On the compass rose you labeled, find the arrow pointing east. Extend the arrow all the way around the globe until you reach your starting point.
   b. Along the arrow, write EAST.
   c. Choose another compass rose and add the S, E, and W labels.
   d. Find the arrow pointing west. Starting from the compass rose, extend the arrow all the way around the globe until you reach your starting point.
   e. Along the arrow, write WEST.
   f. Label the other compass roses.

3. Intermediate, or in-between, directions are located halfway between two cardinal directions. The four intermediate directions are northeast, southeast, southwest, and northwest.
   a. Find the compass rose on the bottom of page 11 in the Atlas. Point to each intermediate direction.
   b. The direction between north and east is northeast, or NE. On your globe, find a compass rose and draw an arrow between north and east. Label it NE.
c. On each compass rose on the globe, add arrows and labels for the intermediate directions.

   a. Circle the compass rose in the Indian Ocean.
   b. Extend or follow the east arrow until it reaches land. Which continent is east of the Indian Ocean? ______________
   c. Extend or follow the west arrow until it reaches land. Circle the name of the continent that is west of the Indian Ocean.
   d. Extend the northeast arrow. Which continent is northeast of the Indian Ocean? ______________
   e. Extend the south arrow. Draw a box around the name of the continent that is south of the Indian Ocean.

5. Directions can be used to describe location.
   a. Outline North America and circle its name.
   b. Draw an arrow from the words North America to the words South America.
   c. Which direction is South America from North America? ______________
   d. Draw arrows to two continents east of North America. Label each arrow with its direction.
   e. Draw an arrow to the continent southwest of North America. Label the arrow with its direction.
   f. Draw an arrow from North America to Asia. Asia is __________ of North America.

Pulling It Together

6. Fill in the missing directions on each compass rose.
Exploring Where & Why
Map and Globe Skills

East, West, and Intermediate Directions

Using the Map

1. The **cardinal directions** are north, south, east, and west. They are the same on a map as on a globe.
   a. Give the World Political Desk Map a title. Above the main map, write **DIRECTIONS**.
   b. Locate the compass rose in the Pacific Ocean. Label its arrows **S**, **E**, and **W**.
   c. Starting from the compass rose, extend the east arrow to the right edge of the map. Along the arrow, write **EAST**.
   d. Locate the compass rose in the Indian Ocean. Label its arrows.
   e. Starting from the compass rose, extend the west arrow to the left edge of the map. Along the arrow, write **WEST**.

2. The **intermediate directions** are halfway between north, south, east, and west.
   a. On one of the compass roses, draw arrows for the intermediate directions. If you need help, use the compass rose on page 11 of the Atlas.
   b. Label the arrows **NE**, **SE**, **SW**, and **NW**.
   c. Label the other compass rose with intermediate directions.

3. Directions can help you find places on a map.
   a. Turn to the United States Political Desk Map.
   b. Draw and label a compass rose in South Dakota.
   c. On the state south of South Dakota, write an **S**.
   d. Which state is northwest of South Dakota?
      ______________________

4. Directions can be used to describe location.
   a. Draw an arrow from the center of Florida to the center of Alabama.
   b. Alabama is _____________ of Florida.
   c. Outline California. California is on the _____________ side of the United States.
Pulling It Together

5. Use cardinal and intermediate directions to find the secret message.

   a. Follow the clues below each blank to find the correct letter.

   b. Start at the D in the center. Draw an arrow one square in the direction of the clue. (This arrow has been drawn for you.)

   c. Write the letter from that square in the blank above the clue.

   d. Draw arrows and write letters until you complete the message.

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<td>R</td>
<td>A</td>
<td>W</td>
</tr>
</tbody>
</table>
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Draw a compass rose. Then make a list of all the opposite pairs of directions. How many pairs did you find?
Map Scale

Teaching

Using the Atlas

Define distance and scale.

1. Introduce the lesson by writing DISTANCE on the board.
   a. Say to the class:
      • Maps and globes show distance. What is distance? (the space between two places or things)
      • Because maps and globes are smaller than the places they show, distances on them are also smaller than they are in the real world.
      • Today you'll learn to use the scale on maps and globes to find real distances.
   b. Below distance, write SCALE.

2. Have students turn to pages 12–13 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the maps, illustrations, and photo.

3. Ask students:
   • What is a map scale? (the distance on the earth shown by a measurement on a map)
   • What are two ways that maps or globes explain scale? (as a sentence or as a divided bar or line)

Using the Maps

Measure distance by using a map scale.

Compare scales on maps.

4. Divide the class into groups. Hand out Activity Sheets 7a–7b, Political Desk Maps, and Map Markers.

5. Hold up the World Desk Map and point to its scale.
   a. On their maps, have students point to the scale in the legend.
   b. Point to the bar scale.
   c. Read aloud the sentence describing the scale. Explain that this describes how the scale uses inches to stand for miles.

Objectives

Students will be able to:
• Define distance and scale.
• Measure distance by using a map scale.
• Compare scales on maps.

Materials

• The Nystrom Junior Geographer Atlases
• Activity Sheets 7a–7d, Map Scale
• Activity Globes
• Political Desk Maps
• Map Markers
• ruler

Here’s a Tip!
The lesson can be taught in two parts.
Day 1: Using the Atlas and Using the Maps
Day 2: Using the Activity Globe

Here’s an Interesting Fact!
Distances on a world map are only accurate at the Equator.
Comparing Distances
Have students look for the shortest distance between paired cities—first on the world map, then on the globe. Start students with the following examples:
- Tokyo, Japan, to Montreal, Canada
- Melbourne, Australia, to Sao Paolo, Brazil
- Moscow, Russia, to Anchorage, United States

Measure Distance
Give students different kinds of maps with scales. Have them use each scale to measure the distance shown by its map, from top to bottom and from left to right. Some suggestions:
- floor plan
- campground map
- highway map
- city or state map

6. Have students work on their maps.
   a. As a class, complete step 1 on Activity Sheet 7a. Have students hold up their maps so you can check their labels.
   b. Give students time to complete Activity Sheets 7a–7b. Walk around the room to answer questions and keep students on task.

Using the Activity Globe

Measure distance by using a map scale.

1. Hand out Activity Sheets 7c–7d, Activity Globes, Political Desk Maps, and Map Markers.
   a. Briefly review scale with the class.
   b. As a class, complete step 1 on Activity Sheet 7c. Have students hold up their globes so you can check their labels.
   c. Demonstrate how to make a ruler along the edge of a sheet of paper.
   d. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 7a–7d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 7a–7b

1c. 1,380 3f. 200
2a. 942

Pulling It Together

5. Political Map, United States 177 miles 2
   Political Map, World 1,380 miles 1
   City Map of Washington, D.C. 942 feet 4
   Answers will vary. 3

Activity Sheets 7c–7d

1b. 880 3d. 800
1g. 1,000 4d. north
3b. 350

Pulling It Together

5. Brasilia to Lima 2,000 3
   Rome to Cairo 1,500 4
   Moscow to Washington, D.C. 5,000 1
   Lagos to Tehran 3,750 2
   Answers will vary, depending on the cities chosen.
In this lesson, you will learn how to use different scales to measure the distance between places. Use pages 12–13 of the *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Using the Maps

1. Maps show distance, or the space between two places. The **scale** explains how real distance on the earth is shown on the map.
   
   a. Give the World Political Desk Map a title. Above the main map, write **MAP SCALE**.
   
   b. In the legend, underline the sentence that describes the scale.
   
   c. On this map, one inch stands for __________ miles.
   
   d. In Africa, draw a line from Kinshasa, Congo, to Nairobi, Kenya. This line is about 1 inch long.
   
   e. Below your line, write **1,380 MILES**.
   
   f. Use a ruler to draw a 1-inch line in the following places:
      - In South America, from Quito, Ecuador, east
      - In Asia, from Kuala Lumpur, Malaysia, west
   
   g. Below each line, write **1,380 MILES**.

2. Different maps may have **different scales**. The scale of a map depends on the size of the area it shows.
   
   a. In the Atlas, look at the map on page 12. On this map, one inch stands for __________ feet.
   
   b. Turn to the United States Desk Map. In the legend, underline the sentence that describes the map scale.
   
   c. In Florida, draw a line from Orlando to Fort Lauderdale. This line is about 1 inch long. Label this line **177 MILES**.
   
   d. Draw 1-inch lines between the cities in each pair. Label each line **177 MILES**.
      - In Texas, from Austin to Corpus Christi
      - From Springfield, Illinois, to Indianapolis, Indiana
      - From San Francisco, California, to Carson City, Nevada

Which would you use to measure the distance between two cities—feet or miles? ___________
3. The legend also shows scale as a divided line. It is called a **bar scale**.
   
   a. Look at the two maps on the bottom of page 13 in the Atlas. Read the Junior Geographer instructions about how to use a bar scale to measure distances.
   
   b. On the United States Desk Map, in the legend, find the bar scale. Next to it, write **BAR SCALE**.
   
   c. In the northeastern United States, draw a line from Trenton, New Jersey, to Providence, Rhode Island.
   
   d. Line up the edge of a sheet of paper with this line. With a pen or pencil, mark the endpoints of the line on your paper. Label the endpoints **Trenton** and **Providence**.
   
   e. Line up the edge of the paper below the bar scale. Place Trenton at 0 on the bar scale.
   
   f. The second mark shows the distance between the two cities. About how far apart are Trenton and Providence? _____ miles
   
   g. On your map, label the line with this distance.

4. Bar scales can be used to measure distance.

   a. Draw a line between each the cities in each pair.
      • Olympia, Washington, to Portland, Oregon
      • Detroit, Michigan, to Cleveland, Ohio
   
   b. Use the bar scale to find the distance between the paired cities. Label the lines on the map with their distance in miles.

**Pulling It Together**

5. Use the Atlas and your Desk Map to complete the chart.

   a. Complete the first column. From pages 50–67 of the Atlas, choose any map that includes a map scale. Write it in the fourth box.
   
   b. Fill in the **1 inch stands for** column for each map.
   
   c. Number the maps from the longest to the shortest distances shown by an inch. Use 1 for the longest distance and 4 for the shortest.
Map Scale

Using the Activity Globe

1. Like maps, globes have a **scale** that shows distance on the earth. You can use the globe and its scale to measure distances between places.
   - a. In the Activity Globe legend, underline the sentence that describes the scale.
   - b. On this globe, one inch stands for _________ miles.
   - c. In northwest Europe, draw a line from London, United Kingdom, to Rome, Italy. This line is about 1 inch long.
   - d. Below your line write **880 MILES**.
   - e. On page 13 of the Atlas, review how to use a bar scale.
   - f. On the globe, in Asia, find India. Draw a line from Bombay northeast to Calcutta.
   - g. Use a piece of paper to measure this distance on the bar scale. How far is it from Bombay to Calcutta? _________ miles

2. To measure longer distances, you can add to the bar scale.
   - a. Line up the edge of a sheet of paper with the edge of the bar scale on the globe.
   - b. Mark 0, 500, and 1,000 miles on your paper and label each point.
   - c. Line up your 1,000-mile mark with 0 on the bar scale. Add tick marks for 500 and 1,000 miles, but label them 1,500 and 2,000.
   - d. Repeat these steps to extend your bar scale to 5,000 miles.
   - e. On the globe, draw a line between the cities in each pair:
     - Bogota, Colombia, to Miami, Florida
     - Moscow, Russia, to Paris, France
     - Kinshasa, Congo, to Algiers, Algeria
     - Perth, Australia, to Sydney, Australia
   - f. Using the scale you drew, measure the approximate distance between the cities in each pair. Label each line with its distance in miles.
3. Distances are often between the divisions on the bar scale.
   a. On the scale, add marks halfway between 0 and 500 and between 500 and 1,000. Label these marks **250** and **750**.
   b. In North America, in Canada, draw a line from Toronto to Montreal. About how far apart are these cities? _______ miles
   c. In Asia, draw a line from Almaty, Kazakhstan, to Omsk, Russia.
   d. About how far apart are these two cities? _______ miles

4. Like the earth, a globe is a sphere. It is the best tool for finding the shortest global route.
   a. On the World Political Desk Map, draw a line from Anchorage, Alaska, in the United States east to St. Petersburg, Russia.
   b. On the globe, draw exactly the same route.
   c. Now draw a line between Anchorage and St. Petersburg, going north over the North Pole.
   d. Which route is shorter—east or north? ____________________

Pulling It Together

5. Use your Activity Globe to complete the chart below.
   a. Measure the distance between the cities in each pair. Write it on the chart below.
   b. Then number the distances from longest to shortest. Use 1 for the longest distance and 4 for the shortest.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Distance (miles)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brasilia, Brazil in South America</td>
<td>Lima, Peru in South America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rome, Italy in Europe</td>
<td>Cairo, Egypt in Africa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moscow, Russia in Europe</td>
<td>Washington, D.C., United States, in North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagos, Nigeria in Africa</td>
<td>Tehran, Iran in Asia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose two new cities—each on a different continent. Measure the distance between the cities on the Activity Globe.
Getting Started With Maps and Globes

Continents and Oceans

Teaching

Using the Atlas

- Identify and locate continents.
- Identify and locate oceans.

1. Introduce the lesson by writing LAND and WATER on the board.
   a. Say to students:
      - The earth includes areas of land and areas of water.
      - The largest areas of land are called continents.
      - The largest areas of water are called oceans.
      - Today you will learn the names of the earth’s continents and oceans.
   b. On the board, write CONTINENTS under LAND and OCEANS under WATER.

2. Have students turn to pages 8–9 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the maps and graphs.
   e. Answer the questions on these pages as a class.

3. Then ask the class:
   - How many continents are there? (7) What are their names? (North America, South America, Africa, Europe, Asia, Australia, Antarctica)
   - How many oceans are there? (5) What are their names? (Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean, Southern Ocean)

Using the Activity Globe

- Identify and locate continents.
- Identify and locate oceans.

4. Briefly review what students have learned about globes.
   - How do globes show water? (with a blue color, with labels)
   - How do they show land? (with different colors, with labels)
   - How is a globe a model of the earth? (It has the same shape. It shows the true shape of places. It shows true size in comparison with other places.)

Objectives

Students will be able to:
- Identify and locate continents.
- Identify and locate oceans.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 4a–4d, Continents and Oceans
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!
Teach the lesson in two parts.
Day 1: Using the Atlas and Using the Activity Globe
Day 2: Using the Map

Here’s an Interesting Fact!
Some people call the ocean area that surrounds Antarctica the Antarctic Ocean rather than the Southern Ocean.

Here’s Another Interesting Fact!
Europe and Asia share the same land mass. This land mass is sometimes called Eurasia.
Create a Puzzle
Have students use the names of the continents and oceans to create word search puzzles. Then have students exchange puzzles and solve them.

Compare Continents
Have students locate and outline Europe and Australia on both the World Political Desk Map and the Activity Globe. Then have students compare the sizes of the two continents on both the map and the globe. Which continent appears larger? Then have students check the Continents graph on page 9 of the Atlas.

Continents and Oceans ABCs
Have students list the names of continents alphabetically. Have them do the same for oceans.

Using the Map

Identify and locate continents.
Identify and locate oceans.

1. Hand out Activity Sheets 4c–4d, Activity Globes, Political Desk Maps, and Map Markers.
   a. Briefly review what students have learned about maps:
      • Like globes, world maps show areas of land and areas of water.
      • Maps are not as accurate as globes. Because they are not the same shape as the earth, they distort, or change, the shapes and sizes of places.
   b. As a class, complete step 1 on Activity Sheet 4c. Have students hold up their maps so you can check their outlines.
   c. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 4a–4d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 4a–4b
1e. 7
2f. Answers will vary.
2g. Antarctica
3d. They are all connected.
3f. water
4c. 5
4e. North America, South America, Africa, Europe, Antarctica

Activity Sheets 4c–4d
2e. Answers will vary.
3b. one ocean
Continents and Oceans

In this lesson, you’ll learn how maps and globes show the world’s continents and oceans. Use pages 8–9 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Activity Globe

1. The largest areas of land in the world are called continents.
   a. On the Activity Globe, find the legend. Circle the symbol for continent.
   b. Find the continent of Africa and underline its name.
   c. Outline Africa and number it 1.
   d. Now outline each of the other continents, underline its name, and number it. (Your outlines do not need to be exact.)
   e. How many continents are there? ________
   f. Some areas of land are not part of any continent. They are colored gray. Find one of these land areas and circle it.

2. Six continents are made up of countries.
   a. In the legend, underline the symbol for country.
   b. Find a country in North America and underline its name.
   c. International boundaries separate countries. In the legend, draw a box around the symbol for international boundary.
   d. Trace the boundary of the country whose name you underlined.
   e. Trace the boundaries of one labeled country on each of the other continents. Also, underline the name of each country.
   f. Which countries did you outline?
      ____________________________, North America
      ____________________________, South America
      ____________________________, Africa
      ____________________________, Europe
      ____________________________, Asia
      ____________________________, Australia
   g. Which continent has no countries? ____________________________
3. The largest bodies of water on earth are called oceans.
   a. In the legend, put an X in front of the symbol for oceans.
   b. On the globe, find the oceans. Underline their names with ocean symbols 🌊.
   c. Put your finger on the Pacific Ocean. Move your finger around the globe, trying to touch all the oceans without crossing land.
   d. Why, do you think, are the oceans sometimes called the world ocean? ________________________________
   e. Rotate the globe and compare the amount of land and water in the world.
   f. Is there more land or more water? __________________
   g. On page 9 of your Atlas, find the Surface of the Earth graph. With your finger, trace the part of the graph showing water. Then trace the part showing land.
   h. On your globe, above the words PACIFIC OCEAN, write WORLD = MORE WATER, LESS LAND.

4. The place where land and water meet is called a coastline.
   a. On page 18 of the Atlas, find the photo of an ocean. Read the caption.
   b. On your globe, find a continent that borders the Pacific Ocean. Trace its Pacific coastline.
   c. How many continents have coastlines along the Pacific Ocean? ______
   d. Find a continent that borders the Atlantic Ocean. Trace its Atlantic coastline.
   e. Which continents have coastlines along the Atlantic Ocean?
      ____________________________________________
      ____________________________________________
      ____________________________________________
      ____________________________________________
      ____________________________________________
      ____________________________________________
Continents and Oceans

Using the Map

1. Some world maps show **continents** by using **colors**. Other maps may use different symbols.

   a. Give the World Political Desk Map a title. Above the main map, write **CONTINENTS AND OCEANS**.

   b. Find the Continents and Oceans thematic map. Outline the continent of South America and underline its name.

   c. A **continental boundary** shows where one continent ends and another begins. On the main map, in the legend, circle the symbol for continental boundary.

   d. On the main map, find and trace the continental boundaries between North America and South America.

   e. Then outline the continent of South America and label it **SOUTH AMERICA**.

   f. Also outline and label the other six continents.

2. Six continents are made up of **countries**.

   a. **International boundaries** separate countries. In the legend, draw a box around the symbol for international boundary.

   b. On the main map, find a country in South America and trace its boundary.

   c. Now underline the name of the country you outlined.

   d. Trace the boundaries of three more countries and underline their names. Choose one in Africa, one in Europe, and one in Asia.

   e. Which countries did you outline?

      __________________________, South America
      __________________________, Africa
      __________________________, Europe
      __________________________, Asia

The main map uses colors to show countries.
3. Because maps are flat, oceans on them look different from oceans on globes.
   a. On the main map, find the Pacific Ocean. Underline with ocean symbols its name each time it appears.
   b. Take out your Activity Globe. Find the Pacific Ocean. Is it one ocean or two separate oceans?
   c. On the main map, find the remaining oceans and underline their names with ocean symbols.

Pulling It Together

4. Use the Atlas, your marked Desk Map, and Activity Sheets 4a–4d to complete the map below.
   a. Label each continent with its name.
   b. Number the continents from 1–7, with 1 for the largest and 7 the smallest.
   c. Label the oceans. Some oceans may need more than one label.

Clean your World Political Desk Map and fold back the flap with thematic maps. Close your eyes and point to a spot on the map. Open your eyes and then name the continent. Take turns with a partner or with other members of your group.
Getting Started With Maps and Globes

Map Scale

Teaching

Using the Atlas

Define distance and scale.

1. Introduce the lesson by writing DISTANCE on the board.
   a. Say to the class:
      - Maps and globes show distance. What is distance? (the space between two places or things)
      - Because maps and globes are smaller than the places they show, distances on them are also smaller than they are in the real world.
      - Today you’ll learn to use the scale on maps and globes to find real distances.
   b. Below distance, write SCALE.

2. Have students turn to pages 12–13 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the maps, illustrations, and photo.

3. Ask students:
   - What is a map scale? (the distance on the earth shown by a measurement on a map)
   - What are two ways that maps or globes explain scale? (as a sentence or as a divided bar or line)

Using the Maps

Measure distance by using a map scale.

Compare scales on maps.

4. Divide the class into groups. Hand out Activity Sheets 7a–7b, Political Desk Maps, and Map Markers.

5. Hold up the World Desk Map and point to its scale.
   a. On their maps, have students point to the scale in the legend.
   b. Point to the bar scale.
   c. Read aloud the sentence describing the scale. Explain that this describes how the scale uses inches to stand for miles.

Objectives

Students will be able to:

- Define distance and scale.
- Measure distance by using a map scale.
- Compare scales on maps.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 7a–7d, Map Scale
- Activity Globes
- Political Desk Maps
- Map Markers
- ruler

Here’s a Tip!

Teach the lesson in two parts.

Day 1: Using the Atlas and Using the Maps

Day 2: Using the Activity Globe

Here’s an Interesting Fact!

Distances on a world map are only accurate at the Equator.
Exploring Where & Why
Map and Globe Skills

Comparing Distances
Have students look for the shortest distance between paired cities—first on the world map, then on the globe. Start students with the following examples:
- Tokyo, Japan, to Montreal, Canada
- Melbourne, Australia, to Sao Paolo, Brazil
- Moscow, Russia, to Anchorage, United States

Measure Distance
Give students different kinds of maps with scales. Have them use each scale to measure the distance shown by its map, from top to bottom and from left to right. Some suggestions:
- floor plan
- campground map
- highway map
- city or state map

6. Have students work on their maps.
   - As a class, complete step 1 on Activity Sheet 7a. Have students hold up their maps so you can check their labels.
   - Give students time to complete Activity Sheets 7a–7b. Walk around the room to answer questions and keep students on task.

Using the Activity Globe

Measure distance by using a map scale.

1. Hand out Activity Sheets 7c–7d, Activity Globes, Political Desk Maps, and Map Markers.
   - Briefly review scale with the class.
   - As a class, complete step 1 on Activity Sheet 7c. Have students hold up their globes so you can check their labels.
   - Demonstrate how to make a ruler along the edge of a sheet of paper.
   - Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Answers

Activity Sheets 7a–7b
1c. 1,380
2a. 942
   - 1,380
3f. 200
   - 200

Pulling It Together
5. Political Map, United States 177 miles
   - 177
Political Map, World 1,380 miles
   - 1,380
City Map of Washington, D.C. 942 feet
   - 942
   - Answers will vary.

Activity Sheets 7c–7d
1b. 880
   - 880
1g. 1,000
   - 1,000
3b. 350
   - 350
3d. 800
   - 800
4d. north
   - north

Pulling It Together
5. Brasilia to Lima 2,000
   - 2,000
Rome to Cairo 1,500
   - 1,500
Moscow to Washington, D.C. 5,000
   - 5,000
Lagos to Tehran 3,750
   - 3,750
   - Answers will vary, depending on the cities chosen.
Map Scale

In this lesson, you will learn how to use different scales to measure the distance between places. Use pages 12–13 of the *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Maps**

1. Maps show **distance**, or the space between two places. The **scale** explains how real distance on the earth is shown on the map.
   a. Give the World Political Desk Map a title. Above the main map, write **MAP SCALE**.
   b. In the legend, underline the sentence that describes the scale.
   c. On this map, one inch stands for __________ miles.
   d. In Africa, draw a line from Kinshasa, Congo, to Nairobi, Kenya. This line is about 1 inch long.
   e. Below your line, write **1,380 MILES**.
   f. Use a ruler to draw a 1-inch line in the following places:
      • In South America, from Quito, Ecuador, east
      • In Asia, from Kuala Lumpur, Malaysia, west
   g. Below each line, write **1,380 MILES**.

2. Different maps may have **different scales**. The scale of a map depends on the size of the area it shows.
   a. In the Atlas, look at the map on page 12. On this map, one inch stands for __________ feet.
   b. Turn to the United States Desk Map. In the legend, underline the sentence that describes the map scale.
   c. In Florida, draw a line from Orlando to Fort Lauderdale. This line is about 1 inch long. Label this line **177 MILES**.
   d. Draw 1-inch lines between the cities in each pair. Label each line **177 MILES**.
      • In Texas, from Austin to Corpus Christi
      • From Springfield, Illinois, to Indianapolis, Indiana
      • From San Francisco, California, to Carson City, Nevada

Which would you use to measure the distance between two cities—feet or miles? __________
3. The legend also shows scale as a divided line. It is called a bar scale.
   a. Look at the two maps on the bottom of page 13 in the Atlas. Read the Junior Geographer instructions about how to use a bar scale to measure distances.
   b. On the United States Desk Map, in the legend, find the bar scale. Next to it, write BAR SCALE.
   c. In the northeastern United States, draw a line from Trenton, New Jersey, to Providence, Rhode Island.
   d. Line up the edge of a sheet of paper with this line. With a pen or pencil, mark the endpoints of the line on your paper. Label the endpoints Trenton and Providence.
   e. Line up the edge of the paper below the bar scale. Place Trenton at 0 on the bar scale.
   f. The second mark shows the distance between the two cities. About how far apart are Trenton and Providence? _____ miles
   g. On your map, label the line with this distance.

4. Bar scales can be used to measure distance.
   a. Draw a line between each the cities in each pair.
      • Olympia, Washington, to Portland, Oregon
      • Detroit, Michigan, to Cleveland, Ohio
   b. Use the bar scale to find the distance between the paired cities. Label the lines on the map with their distance in miles.

Pulling It Together

5. Use the Atlas and your Desk Map to complete the chart.
   a. Complete the first column. From pages 50–67 of the Atlas, choose any map that includes a map scale. Write it in the fourth box.
   b. Fill in the 1 inch stands for column for each map.
   c. Number the maps from the longest to the shortest distances shown by an inch. Use 1 for the longest distance and 4 for the shortest.
Map Scale

Using the Activity Globe

1. Like maps, globes have a scale that shows distance on the earth. You can use the globe and its scale to measure distances between places.
   a. In the Activity Globe legend, underline the sentence that describes the scale.
   b. On this globe, one inch stands for __________ miles.
   c. In northwest Europe, draw a line from London, United Kingdom, to Rome, Italy. This line is about 1 inch long.
   d. Below your line write 880 MILES.
   e. On page 13 of the Atlas, review how to use a bar scale.
   f. On the globe, in Asia, find India. Draw a line from Mumbai (Bombay) northeast to Kolkata (Calcutta).
   g. Use a piece of paper to measure this distance on the bar scale. How far is it from Mumbai to Kolkata? ____________ miles

2. To measure longer distances, you can add to the bar scale.
   a. Line up the edge of a sheet of paper with the edge of the bar scale on the globe.
   b. Mark 0, 500, and 1,000 miles on your paper and label each point.
   c. Line up your 1,000-mile mark with 0 on the bar scale. Add tick marks for 500 and 1,000 miles, but label them 1,500 and 2,000.
   d. Repeat these steps to extend your bar scale to 5,000 miles.
   e. On the globe, draw a line between the cities in each pair:
      • Bogota, Colombia, to Miami, Florida
      • Moscow, Russia, to Paris, France
      • Kinshasa, Congo, to Algiers, Algeria
      • Perth, Australia, to Sydney, Australia
   f. Using the scale you drew, measure the approximate distance between the cities in each pair. Label each line with its distance in miles.
3. Distances are often between the divisions on the bar scale.
   a. On the scale, add marks halfway between 0 and 500 and between 500 and 1,000. Label these marks 250 and 750.
   b. In North America, in Canada, draw a line from Toronto to Montreal. About how far apart are these cities? _______ miles
   c. In Asia, draw a line from Almaty, Kazakhstan, to Omsk, Russia.
   d. About how far apart are these two cities? _______ miles

4. Like the earth, a globe is a sphere. It is the best tool for finding the shortest global route.
   a. On the World Political Desk Map, draw a line from Anchorage, Alaska, in the United States east to St. Petersburg, Russia.
   b. On the globe, draw exactly the same route.
   c. Now draw a line between Anchorage and St. Petersburg, going north over the North Pole.
   d. Which route is shorter—east or north? ____________________

Pulling It Together

5. Use your Activity Globe to complete the chart below.
   a. Measure the distance between the cities in each pair. Write it on the chart below.
   b. Then number the distances from longest to shortest. Use 1 for the longest distance and 4 for the shortest.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Distance (miles)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brasilia, Brazil in South America</td>
<td>Lima, Peru in South America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rome, Italy in Europe</td>
<td>Cairo, Egypt in Africa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moscow, Russia in Europe</td>
<td>Washington, D.C., United States, in North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagos, Nigeria in Africa</td>
<td>Tehran, Iran in Asia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose two new cities—each on a different continent. Measure the distance between the cities on the Activity Globe.
Getting Started With Maps and Globes

Unit 1

Reviewing Unit 1

Teaching

Before you begin this review, decide whether you will use the paper-and-pencil Unit Review, the Hands-on Assessment, or both.

Using the Atlas

Review the unit.

1. Discuss the unit.
   b. Remind students of the lessons they completed in this unit.
   c. Have students describe any related student work or bulletin boards around the classroom.
   d. Have students define key terms from the unit, such as globe, map, legend, continent, ocean, cardinal directions, intermediate directions, compass rose, and scale.

2. Answer any questions students may have about the unit. Then have students put away their Atlases.

Using the Unit Review

Demonstrate ability to meet unit objectives.

3. Hand out Unit Review 1a–1b. Read the instructions to the class. Then give students time to complete their unit reviews.

Answers

1. b
2. c
3. a
4. d
5. d
6. 
7. c

Answers will vary. Students may mention: direction, location, shape of places, size of places, distance between places, continents, countries, oceans, cities.

Objectives

Students will be able to:
- Review the unit.
- Demonstrate ability to meet unit objectives.

Materials

- The Nystrom Junior Geographer Atlases
- Unit Review 1a–1b, Reviewing Unit 1
- Activity Globes
- Map Markers
- Junior Geographer patches (see page 44)

Here’s a Tip!

Help students study for their unit reviews. Suggest that they:
- Review pages 4–13 of the Junior Geographer Atlas and write down any questions they have.
- Look at completed Activity Sheets 1a–7d in their Junior Geographer packs. Have them review the charts.
Here’s a Tip!
For students who do not meet the unit objectives, have them review pages 4–13 of the Atlas again. If they took the written Unit Review the first time, have them take the Hands-on Assessment (or vice versa).

- Underline the names of all seven continents.
- Underline with ocean symbols the names of all four oceans.
- Outline five city symbols.
- Label cardinal and intermediate directions on a compass rose.
- Outline the continent along the west coast of the Indian Ocean.
- Draw a line from Seattle to Miami. Use the scale to find the distance between the two cities.

Collect and review Unit Review 1a–1b or the marked globe.

Photocopy this page so you have patches for students who have successfully completed the unit. Have them glue their patches on their Junior Geographer packs.
Reviewing Unit 1

In the last seven lessons, you used maps and globes to find information. How much did you learn?

Circle the letter of the correct answer.

1. What does the graph at the right show about land and water on the earth?
   a. There is more land than water.
   b. There is more water than land.
   c. There are equal parts of land and water.
   d. The earth is 71% land.

2. Which is true about world maps?
   a. They are models of the earth.
   b. They are spheres.
   c. They show the whole world at once.
   d. They show the true size and shape of places.

3. Which of these identifies the symbols on a map?
   a. legend
   b. map scale
   c. compass rose
   d. grid lines

4. On the map to the right, 1 inch stands for
   a. 50 feet.
   b. 100 miles.
   c. 177 miles.
   d. 78 miles.

5. The distance from Charlottesville, VA, to Washington, D.C., is
   a. 1 inch.
   b. 50 miles.
   c. 75 miles.
   d. 100 miles.
6. Add cardinal and intermediate directions to the compass rose below.

7. On a compass rose, the direction between S and E is
   a. northeast.  
   b. northwest.  
   c. southeast.  
   d. southwest.

8. Add the following information to the map below.
   a. Label the seven continents:
      • Africa
      • Antarctica
      • Asia
      • Australia
      • Europe
      • North America
      • South America
   b. Label the oceans:
      • Arctic Ocean
      • Atlantic Ocean
      • Southern Ocean
      • Indian Ocean
      • Pacific Ocean

List five types of information you can find on maps and globes.
Political Maps

Teaching

Using the Atlas

Define political maps.

1. Introduce the lesson by writing POLITICAL MAP on the board. Say:
   - Political maps are maps that make it easy to see cultural features.
   - Cultural features are features decided by or made by people, such as country or state boundaries and city names and locations.
   - Today you’ll find out how a political map shows those features.

   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map and photos.

3. Ask the class:
   - What is the title of the political map on pages 14–15? (North America)
   - Which cultural features are shown in the photos on pages 14–15? (boundaries, cities, capitol building, signs, buildings, roads)
   - In the three photos of boundaries, how are boundaries marked? (by signs, by fences or checkpoints, by rivers)
   - How does the political map show boundaries? (with lines)

Using the Maps

Locate cultural features on a map.

4. Divide the class into groups. Hand out Activity Sheets 8a–8b, Political Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 8a.
   b. Then give your students time to complete steps 3–6. Walk around the room to answer questions and keep students on task.
Lesson 8

Using the United States Map

- Locate cultural features on a map.
- Identify states by location and cultural features.

1. Hand out the marked Political Desk Maps and Map Markers. Have the class turn to the United States side. Go around the room, asking each student to name a state. As the states are named, have students underline each name on their maps. If time allows, keep going until all 50 states are named.

2. Hand out Activity Sheet 8c. Give students time to complete their activity sheet.

3. Hand out Activity Sheet 8d.
   a. Have students write with a pen the names of any 24 states in the squares on their State Bingo sheets.
   b. Then explain State Bingo:
      - I will describe a state. If you have a state on your sheet that fits that description, use a pencil to write a key word from the description in the square.
      - You may have several states that fit the description. If you do, pick just one.
      - The first student to write key words in five squares in a row—across, down, or diagonally—and call out BINGO wins.
      - You can use your Desk Map to help you play the game.
   c. Read the descriptions in the sidebar, in random order, until a student has Bingo.

Collect and review Activity Sheets 8a–8d.

Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 8a–8b
1b. countries                          4e. Canada
2a. pink                               5c. Lake Erie
2c. Russia                             5g. Answers will vary.
3d. Libya                              5h. straight

Activity Sheet 8c

Answers will vary. Students should list four cities with populations over 500,000 and Atlas pages with photos of those cities.
Political Maps

In this lesson, you’ll learn how political maps make it easy to see cultural features. Use pages 14–15 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Maps**

1. **Political maps** focus on cultural features—things made by people.
   
   a. Give the World Political Desk Map a title. Above the main map, write **POLITICAL MAP**.
   
   b. Political maps usually use colors to show countries or states. On the main map, what do the colors show? ______________

2. Political maps use colors to make it easy to compare sizes, shapes, and locations of places.
   
   a. Outline China. What color shows China? ______________
   
   b. Now outline Russia.
   
   c. Which country is larger, Russia or China? ______________
   
   d. Which of these two countries is farther south? On that country, write 5.

3. Political maps clearly show countries.
   
   a. **International boundaries** separate countries. In the legend, draw a box around the symbol for international boundary.
   
   b. On your map, in Africa, trace the international boundaries of the country of Chad.
   
   c. Political maps use bold letters to make the names of cultural features stand out. Underline the name Chad.
   
   d. Which country borders Chad to the north? ______________
   
   e. Trace the international boundaries of the United States. (Don’t forget Alaska and Hawaii.)
   
   f. Circle the name of the country that borders the United States to the north.
   
   g. Draw a box around the name of the country that borders the United States to the south.
4. Political maps of countries also use colors and lines.
   a. Turn to the United States Desk Map. Give this map a title. Above the main map, write **POLITICAL MAP**.
   b. In the legend, draw a box around the symbol for international boundary.
   c. On your map, trace the international boundaries of the United States.
   d. On the Alaska inset map, trace the international boundaries.
   e. Which country shares a boundary with Alaska and many other states? ______________________
   f. On the Hawaii inset map, circle Hawaii.

5. Some **boundaries** follow natural features.
   a. In the legend, find and underline the symbol for **state boundary**.
   b. Some state boundaries are formed by **oceans**. On your map, find and outline four states that have an ocean boundary.
   c. **Lakes** also form state boundaries. Trace Ohio’s boundaries. What is the name of the large lake that borders Ohio? ______________________
   d. **Rivers** form state boundaries too. In the Atlas, point to the photo of the river. Read the caption.
   e. The Rio Grande forms the boundary between Texas and Mexico. On your map, outline Texas.
   f. The Mississippi River forms part of the boundaries of 10 states. Outline two states that border the Mississippi River.
   g. Which two states did you outline? ______________________  ______________________
   h. **Mountains** also form state boundaries. The Appalachian Mountains form the boundary between Tennessee and North Carolina. Trace this boundary.

6. Some boundaries do not follow natural boundaries.
   a. Trace the boundaries of Colorado and Wyoming.
   b. Are these boundaries straight or wiggly? ______________________
**Political Maps**

**Using the United States Map**

1. The **national capital** of the United States has its own symbol.
   - a. On pages 14–15 in the Atlas, read the description of a **capital city**. Then point to the photo of the capitol building and read the caption.
   - b. On your United States Political Desk Map, in the legend, find the symbol for national capital and outline it.
   - c. On the map, find and label our national capital **U.S. CAPITAL**.
   - d. What is the name of our national capital?

2. Each state has a **state capital** where the state government meets.
   - a. In the legend, outline the symbol for state capital.
   - b. On your map, outline your own state. Also outline its state capital symbol. What is the capital of your state?
   - c. Outline the symbols for 10 other state capitals.

3. Political maps usually show **cities**.
   - a. On pages 14–15 in the Atlas, find the photo of a city and read its caption.
   - b. On your map, in the legend under Symbols, find and outline the symbol for cities that are not capitals.
   - c. This map uses letters of different sizes to show **city sizes**.
      - Underline with a solid line the name that shows cities with over 500,000 people.
      - Underline with a dashed line the name that shows cities with 100,000 to 500,000 people.
      - Underline with dots the name that shows cities with under 100,000 people.
   - d. On the map, underline with a solid line the names of four cities with over 500,000 people.
   - e. Underline with a dashed line the names of three cities with 100,000 to 500,000 people.
   - f. Underline with dots the names of two cities with under 100,000 people.
Pulling It Together

4. Use Activity Sheets 8a–8c and your Political Desk Map to help you play State Bingo.

Look through the Atlas. Find photos of four cities with populations of over 500,000. (Use the legend and map on pages 68–69 of the Atlas to make sure these cities have over 500,000 people.) List the page each photo is on and the name of the city.
**Bodies of Water**

**Teaching**

**Using the Atlas**

- **Define oceans, lakes, and rivers.**
  
  1. Introduce the lesson by writing **BODIES OF WATER** on the board. Say:
     - Bodies of water—such as lakes, rivers, and oceans—are natural features.
     - Today you’ll find out how maps show bodies of water.
  
  2. Have students turn to pages 18–19 of the *Junior Geographer Atlas*.
     a. Read the title question to the class.
     b. Ask a student to read the introduction aloud.
     c. Have other students read the captions and the Junior Geographer speech balloon.
     d. Review the photos and graph.
     e. Say to the class:
        - **What bodies of water are shown on pages 18–19?** (oceans, lakes, reservoirs, rivers, bays, canals, river mouths)
        - Today we’re going to take a closer look at three of these bodies of water: oceans, lakes, and rivers.
  
  3. Compare the three bodies of water. Ask:
     - **How many of you have seen an ocean? a lake? a river?**
     - **What makes an ocean different from other bodies of water?** (Students may mention: oceans are the largest bodies of water; oceans surround continents.)
     - **What makes a lake different from an ocean?** (Students may mention: lakes are smaller; they are surrounded by land.)
     - **What makes a river different from an ocean or a lake?** (Students may mention: they are long and narrow, the water in rivers flows downhill.)

**Using the Map**

- **Locate major bodies of water in the United States**
  
  4. Divide the class into groups. Hand out Activity Sheets 10a–10b, Physical Desk Maps, and Map Markers.
     a. Point out that the Junior Geographers have been traveling. Have a student read aloud the first story box.
     b. As a class, complete step 1 on Activity Sheet 10a.
     c. Then give the groups time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

**Objectives**

Students will be able to:
- **Define oceans, lakes, and rivers.**
- **Locate major bodies of water in the United States.**
- **Make a glossary of bodies of water.**

**Materials**

- *The Nystrom Junior Geographer Atlases*
- Activity Sheets 10a–10d, *Bodies of Water*
- Physical Desk Maps
- Map Markers
- colored pencils
- scissors
- stapler or hole punch
- and yarn

**Here’s a Tip!**

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.

**Day 1:** Using the Atlas and Using the Map

**Day 2:** Making a Glossary

**Here’s an Interesting Fact!**

Some seas and gulfs are parts of oceans. For example, the Gulf of Mexico is part of the Atlantic Ocean. Other seas are lakes. In fact, the Caspian Sea is the world’s largest lake.
Making a Glossary

Make a glossary of bodies of water.

   a. As a class, fill out the Oceans glossary page on Activity Sheet 10c. Show students how to draw a symbol and list examples.
   b. Also, discuss what a drawing of an ocean might look like. Refer them to the photo of an ocean on pages 18–19 of the Atlas.
   c. Give students time to complete their activity sheets.

2. Then help students assemble their glossaries.
   a. Have them cut Activity Sheets 10c–10d along the dashed lines.
   b. Show them how to stack the sheets from longest to shortest.
   c. Staple their glossaries along the top edge. Or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 10a–10b and the glossaries. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 10a–10b
1f. Indian Ocean, Arctic Ocean, or Southern Ocean
3a. Utah
4b. Answers will vary.
6c. Answers will vary.
* Students should mark and list one of each of the following: ocean, lake, river, bay, river mouth, canal, and reservoir.

Activity Sheets 10c–10d
Drawings in the glossary will vary, but should depict the body of water.

Ocean Symbol: Pacific, Atlantic, Indian, Arctic, Southern
River Symbol: Examples will vary.
Lake Symbol: Examples will vary.

Add Words to the Glossary
Have students add more pages to their glossaries. Include bodies of water that are important in your state or region, such as bays, canals, or reservoirs.

Go Global
Have students outline five lakes and trace five rivers on the World Physical Desk Map.

Picture Bodies of Water
Have students look through the Atlas and list pages that have photos of bodies of water. Have them name the type of body of water in each photo.
Bodies of Water

In this lesson, you’ll identify three types of bodies water found in and around the United States. Use pages 18–19 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. Oceans are the largest bodies of water in the world. They surround the continents. Ocean water is salty.
   a. Give the United States Physical Desk Map a title. Above the main map, write BODIES OF WATER.
   b. Turn to page 18 of the Atlas. Point to the photo of an ocean. Read the caption.
   c. On your Desk Map, above the legend, write = OCEAN.
   d. The Pacific Ocean is along the West Coast of the United States. Underline its name with ocean symbols .
   e. The Atlantic Ocean is along the East Coast. Underline its name with ocean symbols .
   f. Turn to the World Desk Map. What are the names of two other oceans?

2. Lakes are bodies of water surrounded by land. Most lakes have fresh water—not salty water.
   a. On page 18 of the Atlas, point to the photo of a lake. Then read the caption.
   b. On your map, above the legend, write = LAKE.
   c. The Great Lakes are the five largest lakes in the United States. Find and outline the following lakes and label them L for lake:
      • Lake Superior
      • Lake Erie
      • Lake Michigan
      • Lake Ontario
      • Lake Huron
   d. Above the five lakes, write GREAT LAKES.
3. The Great Salt Lake is the largest saltwater lake in North America. It is saltier than the four oceans.
   a. The Great Salt Lake is in the western United States. What state is it in? __________________
   b. Outline the Great Salt Lake and label it L.

4. There are thousands of lakes in the United States. Your map shows only the largest lakes.
   a. Outline two other lakes and label them L.
   b. List those two lakes below.
      ___________________ ___________________

5. Rivers are long, narrow bodies of fresh water. They flow downhill to larger bodies of water—such as other rivers, lakes, bays, gulfs, or oceans.
   a. On page 18 of the Atlas, point to the photo of a river. Read the caption.
   b. On your map, above the legend, write = = RIVER.
   c. The Ohio River is one of the busiest rivers in the United States. Starting in Pittsburgh, Pennsylvania, to where it flows into the Mississippi River, draw an arrow along the Ohio River. Label the river R.

6. The Rio Grande is another major river. Río means “river” in Spanish.
   a. Starting in Colorado and ending at the Gulf of Mexico, draw an arrow along the Rio Grande. Label the river R.
   b. Draw arrows along four other rivers and label them R.
   c. List those four rivers below.
      ___________________ ___________________

Review the photos and captions on pages 18–19 of the Atlas. On your Desk Map, find an example of each body of water described in the Atlas and underline its name. List each on the back of this page.
Using Political and Physical Maps

Making a Glossary

Pulling It Together

Use the Atlas and your marked Desk Map to help you add symbols, drawings, and examples of the bodies of water to the spaces below.

The Junior Geographer

Glossary

Bodies of Water

Ocean

A large body of salt water that surrounds continents. Oceans cover much of the earth.

Symbol:

Examples:

__________________________
__________________________
__________________________
__________________________
__________________________

Ocean
**River**
A long, narrow body of water. Rivers flow downhill.
Symbol:

Examples:
____________________________
____________________________
____________________________
____________________________

**Lake**
A body of water surrounded by land. Most lakes have fresh water.
Symbol:

Examples:
____________________________
____________________________
____________________________
____________________________
____________________________
____________________________

Landforms

Teaching

Using the Atlas

1. Introduce the lesson by writing LANDFORMS on the board. Say:
   - Landforms—such as mountains and plains—are natural features.
   - Today you’ll find out how maps show landforms.

2. Have students turn to pages 20–21 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloon.
   d. Review the photos. Say to the class:
      - Which landforms are shown on pages 20–21? (plains, hills, mountains, plateaus, canyons, peninsulas, islands)
      - Today we’re going to take a closer look at four of these landforms: mountains, hills, plateaus, and plains.

3. Compare the four landforms. Ask:
   - How many of you have seen mountains? hills? plateaus? plains?
   - What makes mountains different from other landforms? (Students may mention: mountains have sharp peaks or rounded tops; mountains are higher than hills.)
   - What makes hills different from mountains? (Students may mention: hills are higher than the land around them, but they are not as high as mountains.)
   - What makes plateaus different from mountains or hills? (Students may mention: plateaus are high areas that were once mostly level, many plateaus are cut by deep canyons.)
   - What makes plains different from mountains, hills or plateaus? (Students may mention: plains are gently rolling or almost flat.)

Using the Maps

1. Divide the class into groups. Hand out Activity Sheets 11a–11b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. Point out that the Junior Geographers have been traveling. Have a student read aloud the first story box.

Objectives

Students will be able to:
- Define mountains, hills, plateaus, and plains.
- Locate major landforms in the United States.
- Make a glossary of landforms.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 11a–11d, Landforms
- Raised Relief Maps
- Physical Desk Maps
- Map Markers
- colored pencils
- scissors
- stapler or hole punch and yarn

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Maps
Day 2: Making a Glossary
b. As a class, complete step 1 on Activity Sheet 11a.

c. Then give the groups time to complete steps 2–5. Walk around the room to answer questions and keep students on task.

### Making a Glossary

#### Make a glossary of landforms.

   a. As a class, fill out the hill glossary page on Activity Sheet 11c. Show students how to draw a symbol and list examples.
   b. Also, discuss what a drawing of a hill might look like. Refer students to the photo of the hill on pages 20–21 of the Atlas.
   c. Give students time to complete their activity sheets.

2. Then help students assemble their glossaries.
   a. Have them cut Activity Sheets 11c–11d along the dashed lines.
   b. Show them how to stack the sheets from longest to shortest.
   c. Staple their glossaries along the top edge. Or punch two holes in the top and have students tie with yarn.

**Answers**

**Activity Sheets 11a–11b**

1f. Rocky Mountains
4e. Colorado Plateau

**Activity Sheets 11c–11d**

- **Hill**
  - Symbol: ▲▲▲
  - Examples will vary.

- **Mountain**
  - Symbol: ≧ ≧ ≧ ≧
  - Examples will vary.

- **Plain**
  - Symbol: — — — —
  - Examples will vary.

- **Plateau**
  - Symbol: ▲ ▲ ▲ ▲
  - Examples will vary.

*Answers will vary. Students should list the names of three peninsulas and four islands.*

---

**Add Words to the Glossary**

Have students add more pages to their glossaries. Include landforms that are important in your state or region, such as canyons, islands, or peninsulas.

**Go Global**

Have students outline five mountain peak symbols and five islands on the World Physical Desk Map.

**Picture Landforms**

Have students look through the Atlas for five photos of landforms. Then have them list the pages that have those photos and name the type of landform in each photo.
Landforms

In this lesson, you’ll identify four types of landforms found in the United States. Use pages 20–21 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

Using the Maps

1. **Mountains** are the highest landforms on the earth. Most are thousands of feet high. They have steep slopes and sharp or rounded peaks.
   a. Give the United States Physical Desk Map a title. Above the main map, write **LANDFORMS**.
   b. Turn to page 20 of the Atlas. Point to the photo of mountains. Read the caption.
   c. On your Desk Map, above the legend, write \( ^{\wedge}\wedge\wedge\wedge = MOUNTAINS \).
   d. The **Rocky Mountains** are located in the western United States. On the main map, draw mountain symbols \( ^{\wedge}\wedge\wedge\wedge \) along these mountains.
   e. The **Appalachian Mountains** are in the east.
      Draw mountain symbols along these mountains.
   f. Feel both mountain systems on the Raised Relief Map. Which is higher?

2. **Mountain peaks** are the tops of mountains.
   a. On your Desk Map, in the legend, find and outline the symbol for mountain peak.
   b. **Mt. McKinley** is the highest mountain peak in the United States. On the Raised Relief Map, on the Alaska inset map, locate the peak and feel it with your finger.
   c. On your Desk Map, outline Mt. McKinley’s symbol.
   d. On the main map, find four more mountain peaks and outline their symbols.
3. **Hills** are also higher than the surrounding land. But they are usually not as high as mountains.
   a. On page 20 of the Atlas, point to the photo of the hills.
   b. On your Desk Map, above the legend, write  
      ![Hills Symbol]
      = **HILLS**.
   c. On the main map, find the following hills and underline their names with hill symbols:
      - Flint Hills
      - Sand Hills
      - Black Hills

4. **Plateaus** are high areas of land that were once level. Over time many canyons have been cut into plateaus by flowing rivers.
   a. On page 21 of the Atlas, point to the photo of the plateau.
   b. On the Desk Map, above the legend, write  
      ![Plateau Symbol]
      = **PLATEAU**.
   c. On the main map, find the following plateaus and draw plateau symbols across them:
      - Columbia Plateau
      - Colorado Plateau
   d. On the Raised Relief Map, feel both plateaus.
   e. On the Raised Relief Map, feel the Grand Canyon. Which plateau does it cut?

5. **Plains** are wide areas of flat or gently rolling land.
   a. On page 20 of the Atlas, point to the photo of the plains.
   b. On your Desk Map, above the legend, write  
      ![Plains Symbol]
      = **PLAINS**.
   c. On the main map, find the names of the following plains and draw plains symbols across these areas:
      - Great Plains
      - Gulf Coastal Plain
Making a Glossary

**Pulling It Together**

Use the Atlas and your marked Physical Desk Map to help you add symbols, drawings, and examples of the landforms to the spaces below.

**Hill**

Land that is higher than the land around it. Some hills are almost as high as mountains.

Symbol:

Examples:

____________________________
____________________________
____________________________

**Mountain**

Land that is higher than the land around it. A mountain can have a sharp peak or a rounded top.

Symbol:

Examples:

____________________________
____________________________
____________________________
____________________________
____________________________
On your Desk Map, find three peninsulas and four islands and underline their names. List them on a separate sheet of paper.

The Junior Geographer

Glossary

Landforms

Plain
Broad area of land that is gently rolling or almost flat.
Symbol:
Examples:
________________________________________
________________________________________

Plateau
Vast, high area of land that was once mostly level. Many plateaus are cut deeply by canyons.
Symbol:
Examples:
________________________________________
________________________________________

Plain

Plateau
Elevation

Teaching

Using the Atlas

1. Introduce the lesson by writing ELEVATION on the board. Say:
   - How many of you have heard the term elevation?
   - Elevation is height above or below sea level.
   - Today you'll take a closer look at how maps show elevation.

2. Have students turn to pages 22–23 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the photo, illustrations, map, cross section, and graph.

3. Then ask the class:
   - What kind of map is shown in the photograph? (a raised relief map)
   - How does the map on page 23 show elevation? (shading, colors)
   - What color is used to show an elevation between 5,000 and 10,000 feet? (orange)
   - What does dark green stand for? (below sea level)
   - How is a cross section different from a map? (The cross section shows the land from an angle, and a map shows the land from directly above.)

Using the Map: Elevation

4. Divide the class into groups. Hand out Activity Sheets 12a–12b, Raised Relief Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 12a. Have students hold up their maps so you can check their markings.
   b. Then give students time to complete steps 3–7. Walk around the room to answer questions and keep students on task.

Objective

Students will be able to:
- Define elevation.
- Locate places with high and low elevation on a map.
- Trace rivers from higher to lower elevations.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 12a–12d, Elevation
- Raised Relief Maps
- Map Markers
- colored pencils

Here's a Tip!

Teach this lesson in two parts.
Day 1: Using the Atlas and Using the Map: Elevation
Day 2: Using the Map: River Flow

Here's Another Tip!

To help your students visualize the term sea level, describe it as the line where the ocean and sand meet on a beach.
Lesson 12

Using the Map: River Flow

1. Show students the photo of a river on pages 18–19 of the Atlas. Say:
   - Rivers flow from higher ground to lower ground. They flow downhill, or downstream.
   - Going against the flow is upstream.

2. Divide the class into groups. Hand out Activity Sheets 12c–12d, Raised Relief Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 12c.
   b. Then give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 12a–12d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 12a–12b
2d. green 4a. below sea level 6b. 5,000 to 10,000
2e. 0 to 500 4d. 0 to 500 6c. downhill
3b. western half 6a. 0 to 500

Activity Sheet 12c–12d
1c. orange 3c. source 4d. 1,000 to 2,000
3a. 5,000 to 10,000 3e. downhill 4e. 0 to 500
3b. 0 to 500 4c. Gulf of Mexico 4f. higher to lower elevation

Pulling It Together
5. Rio Grande 5,000–10,000 ft. 0–500 ft.
   Arkansas River over 10,000 ft. 0–500 ft.
   Answers will vary for last two rows, depending on the river.

Answers will vary. Students should mention any mountains, plateaus, plains, hills, canyons, reservoirs, or oceans along the river’s route.
Elevation

In this lesson, you’ll learn about elevation and river flow. Use pages 22–23 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Map: Elevation**

1. **Elevation** is height above or below sea level.
   
   a. Give the Raised Relief Map a title. Above the map, write ELEVATION.
   
   b. In the Atlas, on page 22, point to the photo of the raised relief map. Read the caption.
   
   c. On the Raised Relief Map, feel the shape of the land.

2. The Raised Relief Map also uses colors to show elevation.
   
   a. The map shows elevation in feet. In the legend, underline the label ELEVATION IN FEET.
   
   b. The colors in the color key stand for different elevations. Outline the key.
   
   c. In the key, draw an arrow from dark green to brown.
   
   d. To see how these colors show elevation, hold the Raised Relief map at eye level. From the Pacific Ocean, look at the Sierra Nevada. Which elevation color is at the base of the Sierra Nevada? __________
   
   e. What elevation range does the color show? _______________ feet

3. The Raised Relief Map makes it easy to find places with high elevation.
   
   a. Trace the blue north-south line labeled 95°W.
   
   b. Based on the elevation colors in the legend, which half of the country has more places with higher elevation—the eastern or the western half? __________

4. The Raised Relief Map makes it easy to find places with low elevation.
   
   a. On the map, in California, locate the Imperial Valley. Is its lowest elevation range above or below sea level? ________________
   
   b. Below the label for the Imperial Valley, write LOW.
c. The eastern United States has broad areas of low elevation. Locate the Gulf Coastal Plain. Above its label write LOW.

d. What is the elevation range of this area? ______________feet

5. Major landforms often have several elevation ranges.

a. The Great Plains extend from 95°W to the Rocky Mountains. Trace the general boundary of each elevation range on the Great Plains.

b. Label each area with its elevation range in feet.

6. The map makes it easy to see the changes in elevation too.

a. On the map, find Little Rock Arkansas. Outline its city symbol. In which elevation range is Little Rock? ___________ feet

b. Now find Denver, Colorado, and outline its symbol. In which elevation range is Denver? __________________ feet

c. Draw an arrow from Denver to Little Rock. If you were driving from Denver to Little Rock, would you be traveling uphill or downhill?

Pulling It Together

7. Use the Atlas and Raised Relief Map to help you complete the chart.

a. Use colored pencils to fill in the elevation colors.

b. Fill in the missing elevation ranges.

c. Find an example of a landform in each elevation range and write it in the chart.

<table>
<thead>
<tr>
<th>Elevation Color</th>
<th>Elevation in Feet</th>
<th>Major Landform at that Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>brown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,000 to 5,000</td>
<td></td>
</tr>
<tr>
<td>yellow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>500 to 1,000</td>
<td>Atlantic Coastal Plain</td>
</tr>
</tbody>
</table>
Exploring Where & Why
Map and Globe Skills

75

Using Political and Physical Maps

Elevation

Using the Map: River Flow

1. Rivers flow **downhill** from higher elevations to lower elevations.
   a. Give the Raised Relief Map a title. Above the map, write **RIVER FLOW**.
   b. The elevation colors show which way is downhill. In the legend, outline the color key. Starting from the color brown, draw an arrow down to the dark green color.
   c. Which elevation color shows higher elevations—yellow or orange? ________________

2. A river flows from its **source**, where it begins, to its **mouth**, where it ends. At its mouth, a river usually empties into a larger body of water.
   a. In the Atlas, on the map on page 23, find the **Missouri River**. Use your finger to trace the river from its source in Montana to its mouth at the Mississippi River.
   b. On the Raised Relief Map, find the Missouri River and circle its labels.
   c. Find the source of the Missouri River and label it **S**.
   d. Find its mouth and label it **M**.
   e. From its source to its mouth, draw an arrow along the Missouri River.

3. The Missouri River flows through many elevations.
   a. What is the elevation range at the source of the Missouri River? ________________ feet
   b. What is the elevation range at the mouth of the Missouri River? ________________ feet
   c. Which has a higher elevation, the source or the mouth of the Missouri River? ________________
   d. On the map, label the source **HIGHER**. Then label the mouth **LOWER**.
   e. Does the river flow uphill or downhill? ________________
4. The Missouri River flows into the **Mississippi River**.
   a. On the map, circle the labels for the Missouri River.
   b. From its source in Minnesota to its mouth in Louisiana, draw an arrow along the river.
   c. What body of water does the river empty into?

   ____________________________________________________________

   d. What is the elevation range at the source of the Mississippi River? ________________ feet
   e. What is the elevation range at the mouth of the river?

   ____________________________________feet
   f. Does the river flow from higher to lower or lower to higher elevation? ________________

**Pulling It Together**

5. Use the Atlas and Raised Relief Map to help you complete the chart.
   a. On the map, trace one labeled river that has its source in the Rocky Mountains. Also trace a labeled river that has its source in the Appalachian Mountains.
   b. Write the names of the two rivers you traced in the last two rows of the chart below.
   c. For each river, fill in the elevation ranges of its source and mouth.

<table>
<thead>
<tr>
<th>River</th>
<th>Elevation in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Mouth</td>
</tr>
<tr>
<td>Rio Grande</td>
<td></td>
</tr>
<tr>
<td>Arkansas River</td>
<td></td>
</tr>
</tbody>
</table>

Choose a river that you traced on your map. List the landforms and bodies of water the river flows through from its source to its mouth.
Physical Maps

Teaching

Using the Atlas

Define physical maps.

1. Introduce the lesson by writing PHYSICAL MAP on the board. Say:
   - Physical maps are maps that make it easy to see large natural features, such as oceans, rivers, and mountains.
   - Some physical maps also show natural regions, such as the main kinds of plants that grow naturally across large areas.

   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map and photos.

3. Discuss the physical map. Ask the class:
   - The photos on pages 16–17 show natural regions. Which regions are shown? (tundra and ice, forest, grass, and desert and shrub)
   - What do the colors on the map stand for? (natural regions, main kinds of plants that grow naturally in North America)

Using the United States Map

Locate natural features and natural regions on a map.

4. Divide the class into groups. Hand out Activity Sheets 9a–9b, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 9a.
   b. Then give your students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Making a Diorama

Locate natural features and natural regions on a world map.

Create a natural region diorama.

1. Divide the class into groups. Hand out Activity Sheet 9c, marked Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 9c.
   b. Then give your students time to complete the sheet. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

- Define physical maps.
- Locate natural features and natural regions on a map.
- Create a natural region diorama.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 9a–9d, Physical Maps
- Physical Desk Maps
- Map Markers
- colored pencils or markers
- scissors
- glue
- 5”x 9” and 2”x 8” strips of paper for each student

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the United States Map

Day 2: Making a Diorama

Here’s Another Tip!

Assemble a sample of a natural region diorama to show to your students. Gather library books about natural regions for students to use when making dioramas.
2. Hand out Activity Sheet 9d and 5”x 9” and 2”x 8” strips of paper.

a. Explain to your class:
   - Now you will use your Atlas, Activity Sheets, and Desk Map to make a diorama of a natural region. (Include reference books if you wish.)
   - First, choose a natural region and a place. Then, on Activity Sheet 9d, on the frame, write the name of that region and place.
   - Next, cut out the frame along the dashed lines.
   - On the 2”x 8” strip of paper, draw plants that grow naturally in your region. Or color and cut out trees and plants from Activity Sheet 9d and glue them onto the strip.
   - On the 5”x 9” piece of paper, draw a picture of what you might see in the distance in your region.

b. Give students time to color their strips. Check student progress and assist those who need extra help.

3. Help students assemble their dioramas.
   a. Have students stack their sheets by width—from narrowest to widest
   b. Have students line up and glue the left side of the sheets together.
   c. Then have students line up and glue the right sides of the sheets together.

Collect and review Activity Sheets 9a–9c and the dioramas. Clean and collect materials, using your own procedure or one suggested on page xi.

---

Answers

Activity Sheets 9a–9b
2b. 4  
2d. dark green  
3b. light green  
4b. orange  
5b. purple and white  
6d. western
6e. forest
6f. grass

Activity Sheets 9c–9d

Pulling It Together
4. Each diorama should identify a natural region and place and show only vegetation that grows in that type of region.

Charts will vary. Students should list photos for each natural region.
Physical Maps

In this lesson, you’ll learn how physical maps use colors, labels, and shading to show natural features and natural regions. Use pages 16–17 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Using the United States Map

1. **Physical maps** show natural features, such as bodies of water and landforms.
   - a. Give the United States Physical Desk Map a title. Above the main map, write PHYSICAL MAP.
   - b. The Pacific Ocean, Atlantic Ocean, and Arctic Ocean border the United States. On your map, find their labels and underline them with ocean symbols 🌊.
   - c. The Mississippi River is the longest river in the country. On your map, from Minnesota to Louisiana, draw an arrow along the river.
   - d. The largest mountain system in the United States is the Rocky Mountains. Find its name and draw mountain symbols 🌋️ along these mountains.
   - e. Now find and draw mountain symbols along the Appalachian Mountains.
   - f. Mt. McKinley is the highest U.S. mountain peak. On the inset map of Alaska, find and outline its symbol.
   - g. The Great Plains are located between the Rocky Mountains and the Mississippi River. Across the Great Plains draw several plains symbols 🌵️.

2. Some physical maps use colors to show the main kinds of plants that grow naturally in different areas. These areas are called natural regions.
   - a. On your Desk Map, in the legend, draw a box around the colors and names of the natural regions.
   - b. How many natural regions are shown on this map? ____
   - c. Trees grow naturally in forest regions. On page 17 of the Atlas, point to the photo of a forest. Read the caption.
   - d. On your Desk Map, which color shows forests? ____
   - e. Find two forest regions. On each, draw this symbol 🌳.
3. Grasslands would naturally be covered by different kinds of grass—from very short to very tall.
   a. On page 17 of the Atlas, find the photo of a grassland and read the caption.
   b. On your Desk Map, what color shows grass? __________________________
   c. Find two regions of grass on your map. Across each, draw grass symbols 🌾 🌾.

4. Shrubs and desert plants grow naturally in places with little or no rain.
   a. On page 16 of the Atlas, point to the photo of the desert and shrub. Read the caption.
   b. On your map, what color shows shrub or desert? __________
   c. Find two areas of shrub or desert on your map. On each, draw this symbol 🌶️.

5. Tundra and ice regions are cold, dry areas that are located near the North and South Poles and at high elevations.
   a. On page 16 of the Atlas, point to the photo of tundra and ice. Read the caption.
   b. On your map, what colors are used to show tundra or ice? __________________________
   c. On the Alaska inset map, find a tundra or ice region. On it, draw a this symbol ⛄️.

6. The colors on the map show big natural region patterns.
   a. On your map, trace the blue east-west line labeled 35°N.
   b. There are three natural regions along this line. Draw the following symbols across each region: shrub or desert 🌶️, grass 🌾, or forest 🌳.
   c. Now trace the blue north-south line labeled 95°W.
   d. Which half of the country has shrub or desert regions, the eastern half or the western half? __________________________
   e. The Appalachian Mountains are located in a __________ region.
   f. The Great Plains are located in a ________________ region.
1. **Physical maps** show natural features, such as **bodies of water**.
   a. Give the World Physical Desk Map a title. Above the main map, write **PHYSICAL MAP**.
   b. **Oceans** are the largest bodies of water in the world. On your map, find the oceans and underline their names with ocean symbols 🌊.
   c. Physical maps also show **rivers**. The **Nile River** in Africa is the longest river in the world. On your map, from Lake Victoria to the Mediterranean Sea, draw an arrow along the river.

2. Physical maps also show large **landforms**.
   a. The map uses dark shading to show **mountains**. The **Himalayas** in Asia are the highest mountain range in the world. Find and underline the Himalayas with mountain symbols 🏔️.
   b. Physical maps also show flat or gently rolling land called **plains**. Find the **Northern European Plain** and underline its name with plains symbols 🌾.

3. Some physical maps also show **natural regions**.
   a. On your Desk Map, in the legend, draw a box around the colors and names of the natural regions.
   b. On pages 16–17 of the Atlas, point to the photos and read their captions.
   c. Trees grow naturally in **forest** regions. On your map, find two forest regions. On each, draw forest symbols 🌳.
   d. Grasslands are areas that are naturally covered by different kinds of **grass**. On two grass regions, draw grass symbols 🌾.
   e. Some places receive very little or almost no rain. On two **shrub** or **desert** regions, draw this symbol 🌵.
   f. Some regions are too cold to grow large plants. On two **tundra** or **ice** regions, draw this symbol 🌠.

Look through the Atlas. Find photos of other forest, grass, shrub or desert, and tundra or ice regions. Make a chart listing the four types of natural regions and pages with photos of each natural region.
Pulling It Together

4. Use the Atlas, your Desk Map, and your Activity Sheets to help you make a Natural Region Diorama.

   a. Pick one of the four Natural Regions. Write it below.

   b. On your Desk Map, find a place that has that natural region. Write that place below.

   c. Below, color pictures of only those plants that grow in your natural region. (Look at the photos in the Atlas.)

   d. Cut out the frame and the pictures you colored.

   e. Glue the pictures on a 2”x 8” piece of paper. Draw other plants, trees, and the ground on the paper too.

   f. On a 5”x 9” piece of paper, draw a picture of what you might see in the distance in your region (such as mountains, plains, or a city).

---

Natural Region:

Place:
Reviewing Unit 2

Teaching

Before you begin this review, decide whether you will use the paper-and-pencil Unit Review, the Hands-on Assessment, or both.

Using the Atlas

Review the unit.

1. Discuss the unit.
   b. Remind students of the lessons they completed in this unit.
   c. Have students describe any related student work or bulletin boards around the classroom.
   d. Have students define key terms from the unit, such as political maps, physical maps, bodies of water, landforms, and elevation.

2. Answer any questions students may have about the unit. Then have students put away their Atlases.

Using the Unit Review

Demonstrate ability to meet unit objectives.

3. Hand out Unit Review 2a–2b. Read the instructions to the class. Then give students time to complete their unit reviews.

Answers

1. c  4. b  7. c
2. b  5. b  8. a
3. d  6. a  9. c

Answers will vary. Students should draw a route on the map and list specific natural features, such as the Rocky Mountains, and specific cultural features, such as Washington, D.C.

Objectives

Students will be able to:

- Review the unit.
- Demonstrate ability to meet unit objectives.

Materials

- The Nystrom Junior Geographer Atlases
- Unit Review 2a–2b, Reviewing Unit 2
- Political Desk Maps
- Physical Desk Maps
- Raised Relief Maps
- Map Markers
- Junior Geographer patches (see page 78)

Here’s a Tip!

Help students study for their unit reviews. Suggest that they:
- Review pages 14–23 of the Junior Geographer Atlas and write any questions they have.
- Look at completed Activity Sheets 8a–12d in their Junior Geographer packs. Have them review the glossaries and charts.
Here’s a Tip!
For students who do not meet the unit objectives, have them review pages 14–23 of the Atlas again. If they took the written Unit Review the first time, have them take the Hands-on Assessment (or vice versa).

Using a Hands-on Assessment

Demonstrate ability to meet unit objectives.

4. Test up to nine students at a time. Hand out Political Desk Maps, Physical Desk Maps, Raised Relief Maps, and Map Markers.

a. On the United States Political Desk Map, have students do the following:
   - Trace the international boundaries of the United States.
   - On the map, outline the symbol for our national capital.
   - Underline the name of a city with over 500,000 people.
   - Outline a state that has a river as part of its boundaries.

b. On the United States Physical Desk Map, have students do the following:
   - Label a forest area with forest symbols 🌲.
   - Underline the name of an ocean with ocean symbols 🔊.
   - Label a mountain system with 🏔️.
   - Label a plain with 🌾.

c. On the Raised Relief Map, have students do the following:
   - In the legend, outline the color for the lowest elevation.
   - On the map, mark an X on an area that is 2,000 to 5,000 feet above sea level.
   - Draw an arrow along a river from its source to its mouth.

Collect and review Unit Review 2a–2b or the marked maps.

Photocopy this section of the page so you have patches for students who have successfully completed the unit. Have them glue their patches on their Junior Geographer packs.
Reviewing Unit 2

In the last five lessons, you used political and physical maps to find information. How much did you learn?

Circle the letter of the correct answer.

1. What do political maps show?
   - a. mainly natural features
   - b. natural regions
   - c. mainly cultural features
   - d. elevation

2. On political maps, state and country boundaries are usually shown by
   - a. walls and fences.
   - b. colors and lines.
   - c. cities and capitals.
   - d. forest and grass.

3. Physical maps show natural features such as oceans, rivers, and
   - a. cities.
   - b. states.
   - c. capitals.
   - d. mountains.

4. Which of the following natural regions is found on the Great Plains?
   - a. tundra
   - b. grass
   - c. forest
   - d. desert

5. Lakes
   - a. surround continents.
   - b. are surrounded by land.
   - c. are the largest bodies of water.
   - d. flow downhill.

6. Which of the following is true about plains?
   - a. Some are gently rolling.
   - b. They have sharp peaks.
   - c. They are deep valleys.
   - d. They are surrounded by water.

7. Which of the following landforms is the highest?
   - a. Columbia Plateau
   - b. Flint Hills
   - c. Rocky Mountains
   - d. Appalachian Mountains

8. Which half of the United States has the highest elevations?
   - a. west
   - b. east
   - c. north
   - d. south
9. Look at the graph below. About how long is the Arkansas River?
   a. 2,500 miles   c. 1,500 miles
   b. 2,000 miles   d. 1,000 miles

10. Complete the map below.
   a. Label the following on the map.
      • Washington, D.C.   • Rocky Mountains
      • Dallas, Texas   • Mississippi River
      • Sacramento, California   • Great Lakes
   b. Outline and label your state.

You are flying across the United States. On the map above, draw a line to show your route. List the names of five specific cultural features and five specific natural features that you might see.
Using Grid Systems

Lesson 13

Northern and Southern Hemispheres

Teaching

Using the Atlas

Describe the earth as a sphere.

1. Introduce the lesson by holding up the following objects and asking:
   - Photo of the earth on page 4 of the Junior Geographer Atlas
     What shape is the earth? (sphere, ball)
   - Activity Globe What shape is a globe? (sphere, ball)

2. Write SPHERE on the board.
   a. Say to the class:
      - A sphere is any object that is shaped like a ball.
      - What shape is the earth? (sphere)
      - What shape is a globe? (sphere)
   b. On the board, next to sphere, write = BALL.

3. Have students turn to page 24 of the Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and Junior Geographer speech balloons on page 24.
   d. Also review the illustrations on page 24.

4. Say to the class:
   - What is a hemisphere? (half a sphere)
   - A sphere can be divided into any number of halves.
   - When the Equator divides the globe into halves, what are they called? (Northern Hemisphere, Southern Hemisphere)

Using the Activity Globe

Divide the world into Northern and Southern Hemispheres.
Locate oceans and continents in each hemisphere.

5. Divide the class into groups. Hand out Activity Sheets 13a–13b, Activity Globes, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 13a. Have students hold up their globes so you can check their labels.
   b. Give students time to complete Activity Sheets 13a–13b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Describe the earth as a sphere.
- Divide the world into Northern and Southern Hemispheres.
- Locate oceans, continents, and countries in each hemisphere.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 13a–13d, Northern and Southern Hemispheres
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!
Teach this lesson in two parts.
Day 1: Using the Atlas and Using the Activity Globe
Day 2: Using the Map

Here’s Another Tip!
To help students visualize a hemisphere, cut an orange in half.
Lesson 13

Using the Map

- **Divide the world into Northern and Southern Hemispheres.**
- **Locate oceans and countries in each hemisphere.**


   - a. Ask the class:
     - **How many hemispheres can a globe be divided into?** (2)
     - **Which hemisphere is between the Equator and the North Pole?** (Northern Hemisphere)
     - **Do you think a map can be divided into hemispheres too?**
   - b. Have students point to the map on page 25. Then ask students to use a finger to trace the Equator on the map.
   - c. Have a student read the Junior Geographer speech balloon below the map.

3. Give students time to complete their activity sheets.

**Answers**

**Activity Sheets 13a–13b**
- 1d. Arctic Ocean
- 1h. Antarctica

**Pulling It Together**
- 7. **Northern Hemisphere Only:** North America, Europe
- **Both Hemispheres:** South America, Africa, Asia
- **Southern Hemisphere Only:** Australia, Antarctica

**Activity Sheets 13c–13d**
- 4c. Arctic Ocean
- 5c. Any four: Ecuador, Colombia, Brazil, Gabon, Congo Republic, Congo, Uganda, Kenya, Somalia, Indonesia

**Pulling It Together**
- 6. Answers will vary. Students should list 10 counties that are completely in the Northern Hemisphere and 10 countries that are completely in the Southern Hemisphere.
- **Answers will vary.** Students should mention that their country is in North America in the Northern Hemisphere. They live north of the Equator but south of the North Pole.
Northern and Southern Hemispheres

In this lesson, you will learn one way the earth can be divided into halves. Each half is known as a hemisphere, or half a sphere. Use pages 24–25 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Activity Globe**

1. A globe is a model of the earth. Like the earth, a globe is a sphere.
   a. On your Activity Globe, find a compass rose. Circle the N.
   b. With your finger, extend the arrow north to the North Pole.
   c. Now label the button NP for North Pole.
   d. Which ocean surrounds the North Pole? ________________
   e. On the compass rose, find the arrow pointing the direction opposite north. Label the arrow S for south.
   f. With your finger, extend the arrow south to the South Pole.
   g. Label that button SP for South Pole.
   h. Which continent surrounds the South Pole? ________________

2. The Equator is the imaginary line that is halfway between the North Pole and the South Pole.
   a. The Equator is where the two halves of the Activity Globe are joined together. With your finger, trace the Equator.
   b. With a Map Marker, circle the word Equator each place it appears on the globe.

3. The Equator divides the earth into two hemispheres. The **Northern Hemisphere** is north of the Equator.
   a. In the Atlantic Ocean, halfway between the North Pole and the Equator, write NH for Northern Hemisphere.
   b. In the Pacific Ocean, halfway between the North Pole and the Equator, also write NH.
   c. You see only the Northern Hemisphere if you look at the North Pole. Tilt the globe and look at the North Pole.
4. The Southern Hemisphere is south of the Equator.
   a. In the Atlantic Ocean, halfway between the Equator and the South Pole, write SH for Southern Hemisphere.
   b. In the Pacific Ocean, halfway between the Equator and the South Pole, also write SH.
   c. You see only the Southern Hemisphere if you look at the South Pole. Tilt the globe and look at the South Pole.

5. Hemispheres can be used to describe the location of oceans.
   a. Look at the globe from several directions. Which hemisphere has more water? __________________________
   b. In which hemisphere is the Arctic Ocean? ______________

6. Hemispheres can also describe the location of continents.
   a. Underline the name of each continent.
   b. If a continent is located completely in the Northern Hemisphere, label it NH.
   c. If it is completely in the Southern Hemisphere, label it SH.
   d. Some continents are in both hemispheres. Label those continents NH and SH.

Pulling It Together

7. Use the Atlas and Globe to help you complete the chart.
   a. If a continent is only in the Northern Hemisphere (NH), write its name in that section of the chart.
   b. If a continent is only in the Southern Hemisphere (SH), write its name in that section of the chart.
   c. If a continent is in both hemispheres (NH and SH), write its name in the Both Hemispheres section of the chart.
Northern and Southern Hemispheres

Using the Map

1. A map is not a sphere. It is flat. However, a world map can show hemispheres.
   a. Give the World Political Desk Map a title. Above the main map, write HEMISPHERES.
   b. Find a compass rose. Circle the N for north. North points to the North Pole.
   c. On the compass rose, find the arrow pointing the direction opposite north. Label the arrow $S$ for south. South points to the South Pole.

2. The Equator is halfway between the North Pole and the South Pole.
   a. Find and trace the Equator.
   b. Label it EQUATOR.

3. The Equator divides the earth into two hemispheres. The Northern Hemisphere is north of the Equator. The Southern Hemisphere is south of the Equator.
   a. Along the left edge of the map, north of the Equator, write NORTHERN HEMISPHERE.
   b. Along the left edge of the map, south of the Equator, write SOUTHERN HEMISPHERE.

4. Hemispheres can describe locations of oceans.
   a. Underline the name of each ocean with this symbol $\ldots$.
   b. If an ocean is located completely in the Northern Hemisphere, label it NH.
   c. Which ocean is in the Northern Hemisphere?

   ______________________

   d. If an ocean is located completely in the Southern Hemisphere, label it SH.
   e. Some oceans are in both hemispheres. Label those oceans NH and SH.
5. Hemispheres can also describe the location of **countries**.
   
a. On your map, underline the names of 10 countries that are completely in the Northern Hemisphere. Also label each of those countries **NH**.

b. Now underline the names of 10 countries that are completely in the Southern Hemisphere. Label those countries **SH**.

c. Countries along the Equator are in both Northern and Southern Hemispheres. What are the names of four countries that are in both hemispheres?

   ___________________________  ___________________________
   ___________________________  ___________________________

Pulling It Together

6. Use your Desk Map to help you complete the chart below.

   a. List the 10 countries labeled NH under the Northern Hemisphere section of the chart.

   b. List the 10 countries labeled SH under the Southern Hemisphere section of the chart.

   **Northern Hemisphere only**

   **Southern Hemisphere only**

Write a paragraph to describe the location of your country. Include your continent and hemisphere. Also describe which direction the Equator and North Pole are from your country.
Using Grid Systems

Lesson 14

Eastern and Western Hemispheres

Teaching

Using the Atlas

1. **Describe the earth as a sphere.**

   1. Review hemispheres by writing **SPHERE** on the board.
      a. Ask the class:
         - What is a sphere? (any object that is round like a ball)
         - What are some examples of spheres? (ball, orange)
         - Hold up an Activity Globe. What shape is a globe? (sphere)
      b. On the board, write **HEMI** in front of the word SPHERE.
      c. Explain that:
         - Hemi means “half.”
         - A hemisphere is half of a sphere.
         - The globe can be divided into two hemispheres.

   2. Have students turn to pages 24–25 of the *Junior Geographer Atlas*.
      a. Read the title question to the class.
      b. Ask a student to read the introduction aloud.
      c. Have other students read the captions and Junior Geographer speech balloons.
      d. Also review the illustrations and map.

3. Say to the class:
   - A sphere can be divided into any number of halves.
   - When the Equator divides a globe into halves, what are they called? (Northern Hemisphere, Southern Hemisphere)
   - When the Prime Meridian and the 180° line divide a globe into halves, what are they called? (Eastern Hemisphere, Western Hemisphere)

Objectives

Students will be able to:
- Describe the earth as a sphere.
- Divide the world into Eastern and Western Hemispheres.
- Locate oceans, continents, and countries in each hemisphere.

Materials

- *The Nystrom Junior Geographer Atlases*
- Activity Sheets 14a–14d, *Eastern and Western Hemispheres*
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts.
Day 1: Using the Atlas and Using the Activity Globe
Day 2: Using the Map

Here’s an Interesting Fact!

Although parts of Africa, Europe, and Asia are west of the Prime Meridian, these continents are often called Eastern Hemisphere continents.
Lesson 14

**Using the Activity Globe**

- **Divide the world into Eastern and Western Hemispheres.**
- **Locate oceans and continents in each hemisphere.**

4. Divide the class into groups. Hand out Activity Sheets 14a–14b, Activity Globes, and Map Markers.
   - As a class, complete steps 1–3 on Activity Sheet 14a. Have students hold up their globes so you can check their markings.
   - Give students time to complete Activity Sheet 14b. Walk around the room to answer questions and keep students on task.

**Using the Map**

- **Divide the world into Eastern and Western Hemispheres.**
- **Locate oceans and countries in each hemisphere.**

   - As a class, complete steps 1–2 on Activity Sheet 14c. Have students hold up their maps so you can check their markings.
   - Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

**Collect and review Activity Sheets 14a–14d.**

**Clean and collect materials, using your own procedure or one suggested on page xi.**

**Answers**

**Activity Sheets 14a–14b**

2c. Europe, Africa, Antarctica 6b. Indian Ocean
3c. 2 6c. Eastern Hemisphere

**Pulling It Together**

8. **Western Hemisphere only:** North America, South America
   **Both Hemispheres:** Africa, Europe, Asia, Antarctica
   **Eastern Hemisphere only:** Australia

**Activity Sheets 14c–14d**

4e. Pacific Ocean, Atlantic Ocean, Arctic Ocean, or Southern Ocean

**Pulling It Together**

6. Answers will vary. Students should list 10 countries that are completely in the Western Hemisphere and 10 countries that are completely in the Eastern Hemisphere.

🌟 Any five: United Kingdom, France, Spain, Algeria, Mali, Burkina Faso, Ghana, or Russia.
Eastern and Western Hemispheres

In this lesson, you will learn another way the earth can be divided into halves. Each half is known as a hemisphere. Use pages 24–25 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Activity Globe

1. A globe is a model of the earth. Like the earth, a globe is a sphere.
   a. On your Activity Globe, find a compass rose. Circle the N for north.
   b. With your finger, extend the arrow north to the North Pole.
   c. Now label the button NP for North Pole.
   d. On the compass rose, find the arrow pointing in the direction opposite north. Label the arrow S for south.
   e. With your finger, extend the arrow south to the South Pole.
   f. Label that button SP for South Pole.
   g. On the compass rose, label the remaining arrows E for east and W for west.

2. The Prime Meridian is an imaginary line that extends from the North Pole to the South Pole.
   a. On your Globe, from the North Pole to the South Pole, trace the Prime Meridian.
   b. Circle the words Prime Meridian each place they appear on the globe.
   c. Which continents does the Prime Meridian cross?  ___________________  ___________________

3. The 180° line is another imaginary line that extends from the North Pole to the South Pole. It is the line opposite the Prime Meridian.
   a. From the North Pole to the South Pole, trace the 180° line.
   b. Circle the label 180°.
   c. How many continents does the 180° line cross?  ________

A hemisphere is half a sphere.
4. The Prime Meridian and the 180° line divide the earth into hemispheres. The **Eastern Hemisphere** is east of the Prime Meridian.
   a. In the Indian Ocean, write **EH** for Eastern Hemisphere.
   b. In the Pacific Ocean, halfway between Asia and the 180° line, also write **EH**.

5. The **Western Hemisphere** is west of the Prime Meridian.
   a. In the Atlantic Ocean, halfway between North America and Africa, write **WH** for Western Hemisphere.
   b. In the Pacific Ocean, halfway between the 180° line and North America, write **WH**.

6. Hemispheres can be used to describe the location of oceans.
   a. Several oceans are located in both Eastern and Western Hemispheres. Underline the names of these oceans with ocean symbols 🌊.
   b. Which ocean is in only one of these hemispheres?
      ________________
   c. Which hemisphere is it in? ________________________

7. Hemispheres can also describe locations of continents.
   a. Underline the name of each continent.
   b. If a continent is located completely in the Eastern Hemisphere, label it **EH**.
   c. If a continent is completely in the Western Hemisphere, label it **WH**.
   d. Some continents are in both hemispheres. Label those continents **EH** and **WH**.

**Pulling It Together**

8. Use the Atlas and Activity Globe to help you complete the chart.
   Write the name of each continent in the correct section of the chart.
Eastern and Western Hemispheres

Using the Map

1. A map is not a sphere. It is flat. However, a world map can show hemispheres.
   a. Give the World Political Desk Map a title. Above the main map, write HEMISPHERES.
   b. Find the compass rose in the Pacific Ocean. Circle the N for north. North points to the North Pole.
   c. Find the arrow pointing the direction opposite north. Label it S for south. South points to the South Pole.
   d. Finish labeling the compass rose.

2. The Prime Meridian and the 180° line both extend from the North Pole and the South Pole.
   a. Find and trace the Prime Meridian.
   b. Along it, write PRIME MERIDIAN.
   c. On a globe, there is only one 180° line. However, on this map, the line appears along both sides. Find and trace both 180° lines.
   d. Along each line, write 180°.

3. The Prime Meridian and the 180° line divide the earth into hemispheres. The Eastern Hemisphere is east of the Prime Meridian. The Western Hemisphere is west of the Prime Meridian.
   a. Along the Equator, west of the Prime Meridian, write WESTERN HEMISPHERE.
   b. East of the Prime Meridian, write EASTERN HEMISPHERE.

4. Hemispheres can describe the location of oceans.
   a. On the main map, underline the name of each ocean with an ocean symbol ••••.
   b. If an ocean is located completely in the Eastern Hemisphere, label it EH.
Exploring Where & Why
Map and Globe Skills

14d

Using Grid Systems

Name ______________________________

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c. If an ocean is located completely in the Western Hemisphere, write WH on that area.
d. Several oceans are located in both Eastern and Western Hemispheres. Label those oceans EH and WH.
e. Name three of those oceans. __________________________
   __________________________
   __________________________

5. Hemispheres can describe the location of countries.
   a. On your map, underline the names of 10 countries that are completely in the Eastern Hemisphere. Also label each of those countries EH.
   b. Now underline the names of 10 countries that are completely in the Western Hemisphere. Label those countries WH.

Pulling It Together

6. Use the World Desk Map to help you complete the chart below.
   a. List the 10 countries labeled EH under Eastern Hemisphere.
   b. List the 10 countries labeled WH under Western Hemisphere.

Western Hemisphere only
Eastern Hemisphere only

Using the World Political Desk Map, list five countries that are located in both Eastern and Western Hemispheres.
Using Grid Systems

Lesson 15

Latitude

Teaching

Using the Atlas

1. Introduce the lesson by holding up an Activity Globe. Say:
   - I'd like to tell a friend where in the world the United States is located.
   - How could I describe its location? (Students may mention: in the Northern Hemisphere, in the Western Hemisphere, between the Atlantic and Pacific Oceans, south of the Arctic Ocean, northwest of South America, south of the North Pole)
   - You probably noticed that our globes and maps have lines on them.
   - Today you’ll learn how to use some of those lines to describe the location of the United States.

2. Have students turn to page 26 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the illustration and map.
   e. Then have students use their fingers to trace two lines of latitude on the map on page 26.

3. Ask the class:
   - What does latitude mean? (distance north or south of the Equator)
   - The Equator is a line of latitude. What is the number of the Equator in degrees? (0˚)

Using the Activity Globe

1. Divide the class into groups. Hand out Activity Sheets 15a–15b, Activity Globes, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 15a. Have students hold up their globes. Check their latitude lines.
   b. Give the groups time to complete Activity Sheets 15a–15b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Identify the Equator as a line of latitude.
- Understand that lines of latitude are parallel to the Equator.
- Locate numbered lines of latitude.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 15a–15d, Latitude
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!
Teach this lesson in two parts.
Day 1: Using the Atlas
Day 2: Using the Map
Identify the Equator as a line of latitude.

Understand that lines of latitude are parallel to the Equator.

Locate numbered lines of latitude.

   a. As a class, complete steps 1–2 on Activity Sheet 15c. Have students hold up their maps so you can check their labels.
   b. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 15a–15d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 15a–15b
1d. back at the X  
4c. S  
5d. 60°N

Pulling It Together

Activity Sheets 15c–15d
6b. 45

Pulling it Together

7. **60°N:** Canada, Russia  
**Chile, Argentina, New Zealand:** 45°S

Answers will vary. Students should mention that most of the 48 states are between 30°N and 60°N. Most of Alaska is north of 60°N. Hawaii is between the Equator and 30°N (or near the Tropic of Cancer).
Exploring Where & Why

Map and Globe Skills

95

Latitude

The lines on the globe form a grid system. In this lesson, you’ll learn to use the east-west lines on that grid. Use page 26 of *The Nystrom Junior Geographer Atlas* to help you with this activity.

Using the Activity Globe

1. The **Equator** is a line that circles the world.
   - a. The place where the two halves of the Activity Globe are joined together is the Equator. Trace the Equator with your finger.
   - b. Circle the word *Equator* each time it appears on the globe.
   - c. At the Equator, on the east coast of South America, mark an **X**.
   - d. Put your finger on the X. Move east across the Atlantic Ocean and continue around the globe. Where did you end up?

   ______________________________________________________________________

   e. Put your finger back on the X. Move west around the globe.
   f. The Equator is a line of latitude. On the globe, just below the Equator, in the Pacific Ocean, write **LATITUDE**.
   g. The Equator is an east-west line. After LATITUDE, write **E–W**.

2. There are other lines of **latitude** on a globe.
   - a. Find the first thin blue east-west line north of the Equator. With your marker, trace this line around the globe.
   - b. Like the Equator, this line circles the globe. It is also a line of latitude. In the Pacific Ocean, below the line, write **LATITUDE**.
   - c. Trace another thin blue east-west line north of the Equator and two south of the Equator.
   - d. In the Pacific Ocean, label each line **LATITUDE**.

3. All lines of latitude are parallel lines. They are always the same distance apart. They never cross each other. In fact, lines of latitude are called **parallels**.
   - b. Follow the two lines around the globe.
4. Lines of latitude are labeled with their **direction** from the Equator.
   
a. Look at the lines of latitude north of the Equator. What letter follows their numbers? ________

b. In the Pacific Ocean, on each latitude line north of the Equator, write **N**.

c. Look at the lines of latitude south of the Equator. What letter follows their numbers? ________

d. In the Pacific Ocean, on each latitude line south of the Equator, write **S**.

5. Lines of latitude are also **numbered** in degrees. The degrees measure distance from the Equator. The higher the number, the farther the line is from the Equator.
   
a. The Equator is the starting point. In the Pacific Ocean, below the Equator, write **0°** in front of LATITUDE.

b. From that label, move your finger to the line marked **30°N**. In the Pacific Ocean, below that line of latitude, write **30°N**.

c. Find **60°N**. In the Pacific Ocean, below that line of latitude, write **60°N**.

d. Compare **30°N** and **60°N**. Which is farther from the Equator? ________

6. The Poles are the points farthest from the Equator.
   
a. At the North Pole, write **90°N**.

b. At the South Pole, write **90°S**.

**Pulling It Together**

7. Use your Activity Globe to complete this activity.
   
a. Label the Equator.

b. Label each latitude line to show if it is north or south of the Equator.
Exploring Where & Why
Map and Globe Skills

Latitude

**Using the Map**

1. The **Equator** is a line of latitude. On a map, the Equator looks like it starts at one side of the map and ends at the other side. However, the Equator actually circles the earth.
   
   a. Give the World Political Desk Map a title. Above the main map, write **LATITUDE**.
   
   b. Trace the Equator.
   
   c. Roll your map so that the “ends” of the Equator meet. With your finger, trace the Equator around the world.
   
   d. Unroll the map. Just below the Equator, in the Atlantic Ocean, write **LATITUDE**.
   
   e. The Equator is an east-west line. After LATITUDE, write \( = \text{E–W} \).

2. There are other lines of **latitude** north and south of the Equator.
   
   a. On your map, find the first thin blue east-west line north of the Equator. Trace this line across the map.
   
   b. This line is also a line of latitude. Below the line, in the Atlantic Ocean, write **LATITUDE**.
   
   c. Trace another thin blue east-west line north of the Equator and two south of the Equator. In the Atlantic Ocean, label each line **LATITUDE**.

3. Lines of latitude are **parallel**. They are always the same distance apart. They never cross.
   
   a. Put your fingers on two lines of latitude. Follow them across the map.
   
   b. With the edge of this paper, check the distance between the two lines in several places across the map.

4. Lines of latitude are labeled with their **direction** from the Equator.
   
   a. For each line of latitude traced north of the Equator, circle the N in its label.
   
   b. For each line of latitude traced south of the Equator, circle the S in its label.

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**Using Grid Systems**

**Name ________________________________**
5. Lines of latitude are **numbered** in degrees. The higher the number, the farther the line is from the Equator.
   
   a. The Equator is the starting point. Its number is zero degrees. At the Equator, draw a box around 0°.
   
   b. Trace the 30°S line of latitude.
   
   c. Trace the 60°N line of latitude.

6. Not all lines of latitude are numbered on this map.
   
   a. Find the solid blue line between 0° and 30°S. Label it **15°S**.
   
   b. Find the line between 30°S and 60°S. What number is halfway between 30°S and 60°S? _____°S
   
   c. Label the other unlabeled lines of latitude north and south of the Equator.

**Pulling It Together**

7. Use your Desk Map to help you answer the Junior Geographer’s questions.

   Write a three-sentence paragraph describing the location of the United States by using latitude. Name the lines of latitude that are closest to the north and south boundaries of the 48 states. Do the same for Alaska and Hawaii.
Longitude

Teaching

Using the Atlas

- **Identify the Prime Meridian as a line of longitude.**

1. Introduce the lesson by holding up an Activity Globe. Say:
   - Our globes and maps have lines on them.
   - What are the east-west lines called? (latitude)
   - Who can trace a line of latitude on the globe? Have a student use a Map Marker to trace a line of latitude.
   - Today you’ll learn how to use the north-south lines on the globe to locate places.

2. Have students turn to page 27 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloon.
   d. Review the illustrations and map.
   e. Then, on the map on page 27, have students use their fingers to trace the Prime Meridian.

3. Ask the class:
   - What is the Prime Meridian? (a line of longitude, 0°)
   - What does longitude mean? (distance east or west of the Prime Meridian)
   - What is another name for lines of longitude? (meridians)

Using the Activity Globe

- **Understand that lines of longitude meet at the poles.**
- **Locate numbered lines of longitude.**

4. Divide the class into groups. Hand out Activity Sheets 16a–16b, Activity Globes, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 16a. Have students hold up their globes so you can check their labels.
   b. Give the groups time to complete Activity Sheets 16a–16b. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

- Identify the Prime Meridian as a line of longitude.
- Understand that lines of longitude meet at the poles.
- Locate numbered lines of longitude.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 16a–16d, Longitude
- Activity Globes
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts.

Day 1: Using the Atlas and Using the Activity Globe.

Day 2: Using the Map

Here’s an Interesting Fact!

On a map, longitude lines are curved, not straight, to show the curve of the earth.

Here’s Another Interesting Fact!

If you add together the degrees of opposite lines of longitude, the total is always 180°.
Lesson 16

Using the Map

- Identify the Prime Meridian as a line of longitude.
- Understand that lines of longitude meet at the poles.
- Locate numbered lines of longitude.


   a. As a class, complete steps 1–2 on Activity Sheet 16c. Have students hold up their maps so you can check their labels.

   b. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

   Collect and review Activity Sheets 16a–16d.

   Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 16a–16b

5c. 45°
5d. Prime Meridian, 180°

Pulling It Together

3a. W
3c. E
4b. 180°

Activity Sheets 16c–16d

5c. 45°
5d. Prime Meridian, 180°

Pulling It Together

5. 105°W: Canada, United States, Mexico
   Russia, Saudi Arabia, Madagascar: 45°E
   Antarctica. The South Pole is in Antarctica and all lines of latitude end at the South Pole.
Longitude

The lines on a globe form a grid system. In this lesson, you’ll use the north-south lines on that grid. Use page 27 of *The Nystrom Junior Geographer Atlas* to help you with this activity.

**Using the Activity Globe**

1. The **Prime Meridian** is an imaginary line on the surface of the earth. It extends from the North Pole to the South Pole on one side of the earth.
   - a. On the Activity Globe, circle the words *Prime Meridian* each time they appear.
   - b. The Prime Meridian is a line of longitude. On the globe, along the Prime Meridian, write **LONGITUDE**.
   - c. The Prime Meridian is a north-south line. After **LONGITUDE**, write $= N–S$.

2. Lines of longitude are not parallels. They get closer together toward the poles.
   - a. All lines of longitude meet at the North Pole. On your globe, label the button at the North Pole **NP**.
   - b. All lines of longitude also meet at the South Pole. Label the button at the South Pole **SP**.
   - c. Starting at the North Pole, trace the Prime Meridian to the South Pole.

3. There are other lines of **longitude** on a globe.
   - a. Find the north-south line labeled $180^\circ$. Trace it from the North Pole to the South Pole.
   - b. Just north of the Equator, along this line, write **LONGITUDE**.
   - c. This line, together with the Prime Meridian, circles the world. With your finger, trace these lines around the globe.
   - d. With a Map Marker, trace four other longitude lines—two east and two west of the Prime Meridian.
   - e. North of the Equator, label each of these lines **LONGITUDE**.
4. Lines of longitude are labeled with their **direction** from the Prime Meridian.

   a. On the globe, starting at the Prime Meridian and extending east to 180°, draw an arrow. Label this arrow **EAST**.

   b. On each longitude line that you traced east of the Prime Meridian, write **E**.

   c. Starting at the Prime Meridian and extending west to 180°, draw an arrow. Label this arrow **WEST**.

   d. Along each longitude line that you traced west of the Equator, write **W**.

5. Like latitude, lines of longitude are also **numbered** in degrees. The degrees measure distance from the Prime Meridian. The higher the number, the farther the line is from the Prime Meridian.

   a. The Prime Meridian is the 0° longitude line. Along the Prime Meridian, write **0°** in front of LONGITUDE.

   b. Trace 15°W and 45°W.

   c. Which of these lines is farther from the Prime Meridian? **________ °W**

   d. Which lines of longitude are not labeled east or west? **_________________________**

**Pulling It Together**

6. Use your Activity Globe to complete this activity.

   a. Label the Prime Meridian.

   b. Label each longitude line to show if it is east or west of the Prime Meridian.
Using Grid Systems

Longitude

Using the Map

1. The **Prime Meridian** is a line of longitude. Longitude lines all end at the North Pole and the South Pole.
   a. Give the World Political Desk Map a title. Above the main map, write **LONGITUDE**.
   b. On the North Polar View inset map, trace the Prime Meridian and two other longitude lines to the North Pole.
   c. On the South Polar View inset map, trace the Prime Meridian and two other longitude lines to the South Pole.
   d. On the main map, trace the Prime Meridian.
   e. Along the Prime Meridian, in the Atlantic Ocean, write **LONGITUDE**.

2. Other lines of **longitude** also extend north and south.
   a. Find two thin blue north-south lines west of the Prime Meridian. Trace these lines.
   b. Like the Prime Meridian, these lines are also lines of longitude. Along the lines, write **LONGITUDE**.
   c. Trace two thin blue north-south lines east of the Prime Meridian.
   d. Along these lines, write **LONGITUDE**.

3. Lines of longitude are labeled with their **directions** from the Prime Meridian.
   a. Look at the lines of longitude west of the Prime Meridian. What letter follows their numbers? ________
   b. For each line of longitude you traced west of the Prime Meridian, circle the W in its label.
   c. Look at the lines of longitude east of the Prime Meridian. What letter follows their numbers? ________
   d. For each line of longitude you traced east of the Prime Meridian, circle the E in its label.
4. Lines of longitude are numbered in degrees. The higher the number, the farther the line is from the Prime Meridian.

   a. The Prime Meridian is the 0° longitude line. At the Prime Meridian, draw a box around 0°.

   b. What is the number of the longitude line farthest from the Prime Meridian? __________

   c. On a globe, there is only one 180° line. On this map, the line appears along both sides. Trace both 180° lines of longitude.

   d. Not all lines of longitude are numbered on this map. Find the solid blue line between 0°E and 30°E. Label it 15°E.

   e. Label the following lines of longitude:
      • 75°W
      • 105°W
      • 45°E
      • 135°E

Pulling It Together

5. Use your Desk Map to help you answer the Junior Geographer questions.

Which three countries does this line of longitude pass through?

Which line of longitude passes through Russia, Saudi Arabia, and Madagascar?

There is one continent that every line of longitude crosses. Use the Atlas and your Desk Map to find that continent. Write a sentence explaining why all the lines of longitude cross it.
Global Address

Teaching

Using the Atlas

Define global address.

1. Introduce the lesson by writing GLOBAL ADDRESS on the board. Say:
   - Every place has an address.
   - Your homes have addresses and our school has an address.
   - Addresses help people locate places.
   - Today you’ll find out what a global address is.

2. Review latitude and longitude. Use your wall map or hold up a World Political Desk Map. Say:
   - Who can point to a latitude line? Which directions do latitude lines run? (east-west)
   - Who can point to a longitude line? Which directions do longitude lines run? (north-south)
   - Latitude and longitude lines form a grid system.

3. Have students turn to pages 28–29 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloon.
   d. Review the maps and photos.

4. Ask the class:
   - What is a global address? (the numbers of a point where a latitude line and a longitude line cross)
   - Which global addresses are shown on pages 28–29 of the Atlas? (St. Petersburg, Russia; 60˚N, 30˚E; Chicago, Illinois; 42˚N, 88˚W)

Using the Globe and World Map

Locate places by using latitude and longitude coordinates.

5. Divide the class into groups. Hand out Activity Sheets 17a–17b, Activity Globes, Political Desk Maps, and Map Markers.
   a. As a class, complete steps 1–3. Have students hold up their globes so you can check their lines and labels.
   b. Then give the groups time to complete steps 4–7. Walk around the room to answer questions and keep students on task.
Lesson 17

Go Global
Have students use the index of the Atlas to find five global addresses. Then have them locate those places on the World Political Desk Map.

Using the United States Map

Locate places by using latitude and longitude coordinates.
Locate places by using in-between grid lines.

1. Review global address. Ask the class:
   - How many times can a line of latitude and a line of longitude cross on a map or globe? (once)
   - What is the point where they cross called? (global address)

2. Divide the class into groups. Hand out Activity Sheets 17c–17d, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 17c.
   b. Then give the groups time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 17a–17d. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 17a–17b
2c. W
3a. once
3c. 0
4e. Canada
5d. Mongolia
6c. Cairo, Egypt
2d. 30°N, 30°E
7b. Australia
7d. Argentina
7e. 45°N, 60°E
7g. 15°N, 90°W

Activity Sheets 17c–17d
1c. Denver, Colorado
2b. New Orleans, Louisiana
2e. Memphis, Tennessee
3a. 42°N, 83°W
Pulling It Together
4d. Atlanta, Georgia
4f. 34°N, 81°W
4g. 33°N, 84°W

Exploring Where & Why
Map and Globe Skills
Global Address

In this lesson, you’ll learn how to find global addresses by using a grid system. Use pages 28–29 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Globe and World Map**

1. **Latitude** lines are the east-west lines on a globe or map.
   a. The Equator is a line of latitude. On your Activity Globe, use your finger to trace the Equator.
   b. Lines of latitude are labeled in degrees and direction from the Equator. In the Atlantic Ocean, circle the labels for four lines of latitude.

2. **Longitude** lines are the north-south lines on a globe or map.
   a. The Prime Meridian is a line of longitude. Trace the Prime Meridian.
   b. Lines of longitude are labeled in degrees and direction from the Prime Meridian. In the Pacific Ocean, circle the labels for four lines of longitude.
   c. What letter identifies longitude lines west of the Prime Meridian? __________

3. Latitude and longitude lines intersect, or cross, forming a **grid system**.
   a. How many times does the Equator intersect the Prime Meridian? _______________
   b. Find the spot where the Equator and Prime Meridian cross. Mark it with an X.
   c. The Equator is 0°. What is the label for the Prime Meridian? ________°
   d. The Equator and Prime Meridian intersect at 0° latitude and 0° longitude. Below your X, write 0°, 0°.

4. You can use the latitude and longitude grid system to locate places.
   a. Set aside the Activity Globe and take out the Political Desk Map. Give the World map a title. Above the main map, write GLOBAL ADDRESS.
b. On your map, trace 60°N.
c. Then trace 120°W.
d. Mark the point where the two lines cross with an X.
e. In which country is your X located?__________

5. Not all latitude and longitude lines are labeled on this map.
   a. Trace the line of latitude between 30°N and 60°N. Label this line 45°N.
   b. Trace the line of longitude between 90°E and 120°E. Label it 105°E.
   c. At the point where these lines intersect, mark an X.
   d. In which country is your X located?__________

6. A global address is the numbers of a point where a latitude line and a longitude line intersect.
   a. In a global address, latitude is listed before longitude. The global address of the X you just drew is 45°N, 105°E. Label it with this address.
   b. Find another location by using its global address. On your map, trace 30°N and 30°E.
   c. Which national capital is located at the point where these two lines cross? _________________________________
   d. What is the global address of this capital? ______________
   e. Label it with its address.

7. Global addresses can help you locate specific places on a map.
   a. Mark an X at 30°S, 120°E. Label it 30°S, 120°E
   b. In which country is your X located? _________________.
   c. Mark an X at 30°S, 60°W. Label it 30°S, 60°W.
   d. In which country is your X located?___________________
   e. In the Atlas, look in the index. What is the global address of the Aral Sea? _______________________
   f. On your map, find and label the sea with its global address.
   g. Look in the index again. What is the global address of Guatemala? _______________________
   h. On your map, label this country with its global address.
Using the United States Map

1. You can use the latitude and longitude grid system to find global addresses in the United States.
   a. Give the United States Political Desk Map a title. Above the main map, write **GLOBAL ADDRESS**.
   b. On your map, trace the 40°N latitude line. Also trace the 105°W longitude line.
   c. Which state capital is closest to 40°N, 105°W?
   d. Outline the symbol for this city. Next to it, write its global address.

2. Global addresses can help you find places on a map.
   a. On your map, outline the city symbol at 30°N, 90°W.
   b. Which city is closest to that global address?
   c. Label the city **30°N, 90°W**.
   d. Outline the city symbol at 35°N, 90°W.
   e. Which city is closest to that global address?
   f. Label the city **35°N, 90°W**.

3. Some places are located on grid lines between the lines shown on the map.
   a. In the Atlas, in the index, what is the global address for Detroit, Michigan?
   b. Detroit is on in-between latitude and longitude lines. Along the edge of the map, notice the orange and gold bands. Each band stands for a degree of latitude or longitude. Two bands north of 40°N, draw a tick mark and write **42°N**.
   c. Now draw a latitude line at 42°N.
d. Three bands west of 80°W, draw a tick mark and write 83°W.

e. Draw a longitude line at 83°W.

f. Detroit should be near the point where the two lines cross. Outline Detroit’s symbol and label the city with its global address.

**Pulling It Together**

4. On this map, there are unmarked lines of latitude and longitude. Follow these steps to complete the map.

a. Add lines of latitude and longitude by connecting the tick marks along the edges of the map.

b. Fill in the missing labels for these lines.

c. Circle the name of the city with the global address 32°N, 81°W.

d. Which state capital is near 34°N, 84°W?

   __________________

  e. Write its global address on the map.

  f. What is the global address for Columbia, South Carolina?

   __________________

  g. What is the global address for Macon, Georgia?

   __________________

On your Desk Map, draw a dot where your town or city is located. Then identify the global address of your town or city.
Global Address

Teaching

Using the Atlas

Define global address.

1. Introduce the lesson by writing GLOBAL ADDRESS on the board. Say:
   - Every place has an address.
   - Your homes have addresses and our school has an address.
   - Addresses help people locate places.
   - Today you’ll find out what a global address is.

2. Review latitude and longitude. Use your wall map or hold up a World Political Desk Map. Say:
   - Who can point to a latitude line? Which directions do latitude lines run? (east-west)
   - Who can point to a longitude line? Which directions do longitude lines run? (north-south)
   - Latitude and longitude lines form a grid system.

3. Have students turn to pages 28–29 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloon.
   d. Review the maps and photos.

4. Ask the class:
   - What is a global address? (the numbers of a point where a latitude line and a longitude line cross)
   - Which global addresses are shown on pages 28–29 of the Atlas? (St. Petersburg, Russia; 60˚N, 30˚E; Chicago, Illinois; 42˚N, 88˚W)

Using the Globe and World Map

Locate places by using latitude and longitude coordinates.

5. Divide the class into groups. Hand out Activity Sheets 17a–17b, Activity Globes, Political Desk Maps, and Map Markers.
   a. As a class, complete steps 1–3. Have students hold up their globes so you can check their lines and labels.
   b. Then give the groups time to complete steps 4–7. Walk around the room to answer questions and keep students on task.
Go Global
Have students use the index of the Atlas to find five global addresses. Then have them locate those places on the World Political Desk Map.

Using the United States Map

Locate places by using latitude and longitude coordinates.
Locate places by using in-between grid lines.

1. Review global address. Ask the class:
   - How many times can a line of latitude and a line of longitude cross on a map or globe? (once)
   - What is the point where they cross called? (global address)

2. Divide the class into groups. Hand out Activity Sheets 17c–17d, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 17c.
   b. Then give the groups time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Answers

Activity Sheets 17a–17b
2c. W
3a. once
3c. 0
4e. Canada
5d. Mongolia
6c. Cairo, Egypt

Activity Sheets 17c–17d
1c. Denver, Colorado
2b. New Orleans, Louisiana
2e. Memphis, Tennessee
3a. 42°N, 83°W
Pulling It Together
4d. Atlanta, Georgia
4f. 34°N, 81°W
4g. 33°N, 84°W
6d. 30°N, 30°E
7b. Australia
7d. Argentina
7e. 16°N, 80°E
7g. 15°N, 90°W
Global Address

In this lesson, you’ll learn how to find global addresses by using a grid system. Use pages 28–29 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Globe and World Map**

1. **Latitude** lines are the east-west lines on a globe or map.
   - a. The Equator is a line of latitude. On your Activity Globe, use your finger to trace the Equator.
   - b. Lines of latitude are labeled in degrees and direction from the Equator. In the Atlantic Ocean, circle the labels for four lines of latitude.

2. **Longitude** lines are the north-south lines on a globe or map.
   - a. The Prime Meridian is a line of longitude. Trace the Prime Meridian.
   - b. Lines of longitude are labeled in degrees and direction from the Prime Meridian. In the Pacific Ocean, circle the labels for four lines of longitude.
   - c. What letter identifies longitude lines west of the Prime Meridian? ___________

3. **Latitude and longitude** lines intersect, or cross, forming a **grid system**.
   - a. How many times does the Equator intersect the Prime Meridian? _______________
   - b. Find the spot where the Equator and Prime Meridian cross. Mark it with an X.
   - c. The Equator is 0°. What is the label for the Prime Meridian? _________°
   - d. The Equator and Prime Meridian intersect at 0° latitude and 0° longitude. Below your X, write 0°, 0°.

4. You can use the latitude and longitude grid system to locate places.
   - a. Set aside the Activity Globe and take out the Political Desk Map. Give the World map a title. Above the main map, write **GLOBAL ADDRESS**.

My shirt and pants have a grid system too!
Using Grid Systems

b. On your map, trace 60˚N.
c. Then trace 120˚W.
d. Mark the point where the two lines cross with an X.
e. In which country is your X located? ____________________

5. Not all latitude and longitude lines are labeled on this map.
   a. Trace the line of latitude between 30˚N and 60˚N. Label this line 45˚N.
   b. Trace the line of longitude between 90˚E and 120˚E. Label it 105˚E.
   c. At the point where these lines intersect, mark an X.
   d. In which country is your X located? ____________________

6. A global address is the numbers of a point where a latitude line and a longitude line intersect.
   a. In a global address, latitude is listed before longitude. The global address of the X you just drew is 45˚N, 105˚E. Label it with this address.
   b. Find another location by using its global address. On your map, trace 30˚N and 30˚E.
   c. Which national capital is located at the point where these two lines cross? ____________________
   d. What is the global address of this capital? ____________________
   e. Label it with its address.

7. Global addresses can help you locate specific places on a map.
   a. Mark an X at 30˚S, 120˚E. Label it 30˚S, 120˚E
   b. In which country is your X located? ____________________
   c. Mark an X at 30˚S, 60˚W. Label it 30˚S, 60˚W.
   d. In which country is your X located? ____________________
   e. In the Atlas, look in the index. What is the global address of the Caribbean Sea? ____________________
   f. On your map, find and label the sea with its global address.
   g. Look in the index again. What is the global address of Guatemala? ____________________
   h. On your map, label this country with its global address.
Global Address

Using the United States Map

1. You can use the latitude and longitude grid system to find global addresses in the United States.

   a. Give the United States Political Desk Map a title. Above the main map, write GLOBAL ADDRESS.

   b. On your map, trace the 40°N latitude line. Also trace the 105°W longitude line.

   c. Which state capital is closest to 40°N, 105°W?

   d. Outline the symbol for this city. Next to it, write its global address.

2. Global addresses can help you find places on a map.

   a. On your map, outline the city symbol at 30°N, 90°W.

   b. Which city is closest to that global address?

   c. Label the city 30°N, 90°W.

   d. Outline the city symbol at 35°N, 90°W.

   e. Which city is closest to that global address?

   f. Label the city 35°N, 90°W.

3. Some places are located on grid lines between the lines shown on the map.

   a. In the Atlas, in the index, what is the global address for Detroit, Michigan?

   b. Detroit is on in-between latitude and longitude lines. Along the edge of the map, notice the orange and gold bands. Each band stands for a degree of latitude or longitude. Two bands north of 40°N, draw a tick mark and write 42°N.

   c. Now draw a latitude line at 42°N.
d. Three bands west of 80°W, draw a tick mark and write 83°W.

e. Draw a longitude line at 83°W.

f. Detroit should be near the point where the two lines cross. Outline Detroit’s symbol and label the city with its global address.

Pulling It Together

4. On this map, there are unmarked lines of latitude and longitude. Follow these steps to complete the map.
   a. Add lines of latitude and longitude by connecting the tick marks along the edges of the map.
   b. Fill in the missing labels for these lines.
   c. Circle the name of the city with the global address 32°N, 81°W.
   d. Which state capital is near 34°N, 84°W?
   e. Write its global address on the map.
   f. What is the global address for Columbia, South Carolina?
   g. What is the global address for Macon, Georgia?

On your Desk Map, draw a dot where your town or city is located. Then identify the global address of your town or city.
Using Grid Systems

Lesson 18

Road Maps

Teaching

Using the Atlas

1. Introduce the lesson by writing ROAD MAP on the board. Say:
   - How many of you have seen a road map?
   - Road maps help people find routes from one place to another.
   - Today you’ll learn how to read a road map.

   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have students look at the main map. Then have a student read the captions for the small map. As a class, follow the directions in the captions.
   d. Have another student read caption C. As a class, answer the questions in the caption.
   e. Review the maps and photo.

3. Then ask the class:
   - Look at the road map in your Atlas. Does it have a legend? (yes) symbols? (yes) a map scale? (yes) a compass rose? (yes)
   - Does it have a grid? (yes) What do we call this type of grid? (alphanumeric) Why? (It uses letters and numbers.)

Using the Map: Grid

4. Divide the class into groups. Hand out Activity Sheet 18a–18b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 18a.
   b. Then give the groups time to complete steps 2–4. Walk around the room to answer questions and keep students on task.

Using the Map: Routes

1. Divide the class into groups. Hand out Activity Sheets 18c–18d, Political Desk Maps, Physical Desk Maps, Raised Relief Maps, and Map Markers.

Objectives

Students will be able to:
- Identify elements on a road map.
- Use an alphanumeric grid.
- Draw routes on maps.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 18a–18d, Road Maps
- Political Desk Maps
- Physical Desk Maps
- Raised Relief Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts.
Day 1: Using the Atlas and Using the Map: Grid
Day 2: Using the Map: Routes
Lesson 18

Local Connection
Bring in a road map of your state. Have students look in the map index for your city or town’s alphanumeric grid number. Then have them use the grid number to locate your city.

Using Mileage Charts
On a road map, show students how to read a mileage chart. Ask them to find the distance between cities.

Read More About It
Your students might enjoy these books and others about road trips:
- *Amelia Hits the Road* by Marissa Moss
- *Stringbean’s Trip to the Shining Sea* by Vera B. Williams

Answers

Activity Sheet 18a–18b
1c. A-1
1d. C-2
1e. Freeport
3c. Great Salt Lake

Pulling It Together
4. Boise, ID B-1
   Carson City, NV B-2
   Cheyenne, WY C-1
   Des Moines, IA D-1
   Hartford, CT F-1
   Madison, WI E-1

Activity Sheets 18c–18d
1g. Alabama, Tennessee, Kentucky
3e. 11

Pulling It Together
4. Answers will vary. Students may list: Gulf Coastal Plain, Tennessee River, Ohio River, Lake Michigan, Central Lowland, Mississippi River, Great Plains, Sand Hills, Rocky Mountains, Great Salt Lake, Great Basin, Sierra Nevada, Central Valley, Coast Ranges, or Pacific Ocean.
5. Answers will vary. Students may mention that the land rose gradually higher in elevation across the Central Lowland and Great Plains. In the Rocky Mountains, Great Basin, and Sierra Nevada, elevations were higher and land was more rugged. Elevation dropped quickly after the Sierra Nevada.

About 2,600 miles.
Road Maps

In this lesson, you’ll learn how to read a road map. Use pages 30–31 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Map: Grid**

1. Many road maps have an **alphanumeric grid** instead of a latitude and longitude grid.
   a. Give your United States Political Desk Map a title. Above the main map, write **ROAD MAPS**.
   b. In the Atlas, look at the large road map on pages 30–31. Point to Dubuque, Iowa.
   c. Which alphanumeric grid section is Dubuque in? __________
   d. Galena, Illinois, is southeast of Dubuque. Which grid section is it in? ______________
   e. What is the largest city in section I-3? __________________

2. You can use lines of **latitude** and **longitude** to make an alphanumeric grid.
   a. On your Desk Map, trace the following lines of latitude:
      • 30˚N
      • 40˚N
   b. Trace the following lines of longitude:
      • 70˚W
      • 80˚W
      • 90˚W
      • 100˚W
      • 110˚W
      • 120˚W
   c. Your lines form a grid. Make it an alphanumeric grid by adding letters and numbers. At the top of your map, between 120˚W and 130˚W, write A.
   d. From left to right, continue labeling each 10˚ section at the top of your map with **letters** from B to G.
   e. Along the right side of your map, from top to bottom, label each 10˚ section with **numbers** from 1 to 3.
   f. On your map, point to section A with your left hand and section 3 with your right hand.
   g. Slide your A finger south and your 3 finger west until they meet.
   h. Outline square A-3.
3. An alphanumeric grid can help you locate places.
   a. Spokane, Washington, is in grid section B-1. On the main map, outline grid section B-1. Now label it **B-1**.
   b. Spokane should be inside this grid section. Outline the city symbol for Spokane.
   c. What large lake is also in this grid section?
      __________________________________________
   d. On the main map, outline grid section E-1. Label it **E-1**.
   e. Which Great Lakes are located in this grid section?
      __________________________________________
      __________________________________________
   f. Outline these lakes.
   g. Point to the state of Kentucky. Find and outline the city symbol for Lexington, Kentucky.
   h. Which square is Lexington in?
      __________
   i. Label Lexington with its grid location.

**Pulling It Together**

4. Many road maps have indexes that list places and their locations based on an alphanumeric grid.
   a. Use your grid on the Desk Map to help you write in the grid sections for these state capitals.
   b. Also, find the state capitals in grid sections C-1 and A-2. (Notice that the index is in alphabetical order. If there are several capitals in a grid section, choose the capital that fits alphabetically.)

**Index**

<table>
<thead>
<tr>
<th>Place</th>
<th>Index Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise, ID</td>
<td></td>
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<tr>
<td>Carson City, NV</td>
<td></td>
</tr>
<tr>
<td>Carson City, NV</td>
<td>C-1</td>
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<tr>
<td>Des Moines, IA</td>
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<td>Hartford, CT</td>
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<td>Madison, WI</td>
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<td>Montgomery, AL</td>
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<td>Olympia, WA</td>
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<td>Richmond, VA</td>
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<tr>
<td>Richmond, VA</td>
<td>A-2</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td></td>
</tr>
<tr>
<td>Topeka, KS</td>
<td></td>
</tr>
</tbody>
</table>
1. **Road maps** help people plan journeys.

   a. Give your United States Political Desk Map a title. Above the main map, write **ROAD MAPS**.

   b. On the road map above, find Montgomery, Alabama. Mark an X on Montgomery.

   c. The Junior Geographer spent the night in Louisville, Kentucky. Mark an X on that city.

   d. Now draw a line along I-65 between Montgomery and Louisville.

   e. On your Desk Map, mark an X on Montgomery, Birmingham, Nashville, and Louisville.

   f. Draw a line connecting those cities. Label that line **I-65**.

   g. Which states has the Junior Geographer been in today?

   ____________________  ____________________
2. Road maps help people trace routes.
   a. On Activity Sheet 18c, find the road map. From Louisville to the southern tip of Lake Michigan, trace I-65.
   b. Then trace I-80 to Wyoming.
   c. On your Desk Map, mark an X on both Indianapolis and Chicago.
   d. Draw a line connecting Indianapolis and Chicago. Label that line I-65.
   f. Draw a line connecting Chicago and Laramie. Label that line I-80.

3. I-65 and I-80 are part of the Interstate Highway System—a vast network of highways.
   a. On the road map on Activity Sheet 18c, from Wyoming to San Francisco, trace I-80.
   b. The Junior Geographer swam in the Great Salt Lake. On your Desk Map, mark an X at the southern tip of the Great Salt Lake.
   c. The Junior Geographer reached San Francisco. Mark an X on San Francisco.
   d. Draw a line connecting Laramie, the Great Salt Lake, and San Francisco. Label that line I-80.
   e. How many states did the Junior Geographer travel through from Montgomery to San Francisco? ____________

Pulling It Together

4. On the United States Physical Desk Map, draw the same route from Montgomery to San Francisco that you drew on your political map. List ten natural features you might see along the route.

5. On the Raised Relief Map, draw the same route. Write a four-sentence paragraph describing how the land changed along the route.

Use the scale on a Desk Map to measure the distance the Junior Geographer traveled from Montgomery to San Francisco.
Exploring Where & Why
Map and Globe Skills

Reviewing Unit 3

Teaching

Before you begin this review, decide whether you will use the paper-and-pencil Unit Review, the Hands-on Assessment, or both.

Using the Atlas

Review the unit.

1. Discuss the unit.
   b. Remind students of the lessons they completed in this unit.
   c. Have students describe any related student work or bulletin boards around the classroom.
   d. Have students define key terms from the unit, such as hemisphere, latitude, longitude, grid system, global address, alphanumeric grid.

2. Answer any questions students may have about the unit. Then have students put away their Atlases.

Using the Unit Review

Demonstrate ability to meet unit objectives.

3. Hand out Unit Review 3a–3b. Read the instructions to the class. Then give students time to complete their unit reviews.

Answers

1. a 5. c
2. b 6. c
3. c 7. b
4. b

Answers will vary. Students may mention: Northern Hemisphere, Western Hemisphere, north of the Equator, west of the Prime Meridian, between 10°N and 90°N, between 15°W and 180°W.

Objectives

Students will be able to:

- Review the unit.
- Demonstrate ability to meet unit objectives.

Materials

- The Nystron Junior Geographer Atlases
- Unit Review 3a–3b, Reviewing Unit 3
- Activity Globes
- Map Markers
- Junior Geographer patches (see page 118)

Here’s a Tip!

Help students study for their unit reviews. Suggest that they:

- Review pages 24–31 of the Junior Geographer Atlas and write down any questions they have.
- Look at completed Activity Sheets 13a–18d in their Junior Geographer packs. Have them review the charts and maps.
Here’s a Tip!
For students who do not meet the unit objectives, have them review pages 24–31 of the Atlas again. If they took the written Unit Review the first time, have them take the Hands-on Assessment (or vice versa).

Collect and review Unit Review 3a–3b or the marked globe.

Photocopy this section of the page so you have patches for students who have successfully completed the unit. Have them glue their patches on their Junior Geographer packs.

Demonstrate ability to meet unit objectives.

4. Test up to nine students at a time. Hand out Activity Globes and Map Markers. On the globe, have students do the following:
   - Label the Northern Hemisphere.
   - Label the Southern Hemisphere.
   - Trace the Prime Meridian.
   - Trace the 15°S line of latitude.
   - Trace the 135°W line of longitude.
   - Mark with an X the global address 45°N, 30°E.
In the last five lessons, you completed many activities about grid systems on maps and globes. How much did you learn?

Circle the letter of the correct answer.

1. Which hemisphere is shaded on this globe?
   a. Northern  
   b. Southern  
   c. Eastern  
   d. Western  

2. Which is true about lines of latitude?
   a. They run north and south.
   b. They are parallel.
   c. They meet at the poles.
   d. They are numbered from the Prime Meridian.

3. A city is located at the point where 35˚N latitude crosses 90˚W longitude. What is its global address?
   a. A-3
   b. Memphis, Tennessee
   c. 35˚N, 90˚W
   d. 90˚W, 35˚N

4. Which of the following is between and parallel to 40˚N and 45˚N?
   a. 46˚N
   b. 43˚N
   c. 42˚W
   d. 44˚E

5. Look at the road map. Which town is in grid section J-4?
   a. Bolton
   b. Dakota
   c. German Valley
   d. Scioto Mills

6. Where is Lena located?
   a. I-2
   b. J-4
   c. G-2
   d. H-3
7. Look at the road map on the previous page. Which highway would you take to get from Lena to Pearl City?
   a. 78  
   b. 73  
   c. 36  
   d. 75

8. Mark the following on the map below.
   a. Trace and label the Equator.
   b. Trace and label the Prime Meridian
   c. Add a line of latitude at 45°N.
   d. Add a line of longitude at 75°E.
   e. Mark 60°S, 30°E with an X.
   f. Choose a line of latitude and a line of longitude. At the point where they cross, make an X. Label the X with its global address.

Write a paragraph telling someone where North America is. Include hemispheres, latitude, and longitude in your description.
Rainfall

Teaching

Using the Atlas

Read a rainfall map.

1. Introduce the lesson by writing RAINFALL on the board. Say:
   • Every plant and animal needs water.
   • Some of that water comes from rain.
   • Maps can show how much rain falls in different parts of the world.
   • Today you’ll look at maps that show how much rain falls in parts of the United States.

2. Review thematic maps. Say:
   • The map we will use today is a thematic map.
   • Thematic maps are maps about specific topics, or themes.
   • Many different kinds of information can be mapped.

3. Have students turn to pages 32–33 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map, graphs, and photos.

4. Then ask the class:
   • Look on the map. Which colors show places that get 20 inches or more of rain in a year? (the three shades of blue)
   • Look at the graphs. Which city gets the most rain in a year? (Astoria)
   • Besides rain, what else counts as rainfall? (hail, sleet, snow)

Using the Map

Read a rainfall map.

Identify rainfall patterns on a map.

5. Divide the class into groups. Hand out Activity Sheets 19a–19b, Physical Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 19a. Have students hold up their maps, so you can check their labels.
   b. Then give the groups time to complete steps 3–7. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
• Read a rainfall map.
• Identify rainfall patterns on a map.
• Graph rainfall.

Materials

• The Nystrom Junior Geographer Atlases
• Activity Sheets 19a–19d, Rainfall
• Physical Desk Maps
• Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Graphing Rainfall

Here’s an Interesting Fact!

On Activity Sheet 19d, City 1 is Olympia, located west of the Cascade Range. It receives an average of 50.8 inches of rain a year. City 2 is Yakima, located east of the Cascade Range. It receives an average of 8.3 inches of rain a year. This is an example of the rain shadow effect explained on Activity Sheet 19c.

After finishing the activity, have students find both cities on pages 62–63 of the Atlas.
Go Global
Have students look at the Rainfall map on the World Physical Desk Map. Have them select an area and then research rainfall patterns and the factors that cause it.

Track Rainfall
Have students track precipitation in a daily newspaper or on a weather Web site. Then have them draw a bar graph showing your area’s rainfall for a month.

Illustrate Water Cycle
Have students illustrate the evaporation and condensation process that causes rainfall. Remind students that this process is a recycling of the earth’s water.

Answers

Activity Sheets 19a–19b
2c. east
3a. 460
3f. forest
4c. 0 to 10
4e. shrub or desert
5c. 40 to 80

Activity Sheets 19c–19d
1c. forest
1e. 0 to 10
1g. shrub or desert

Pulling It Together
Answers will vary, depending on your location. Students should give a rainfall range, as well as describe rain in your area.
Rainfall

In this lesson, you’ll learn how to read a rainfall map. Use pages 32–33 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. Plants and animals need water to survive. Much of that water comes from rainfall.
   a. Give your United States Physical Desk Map a title. Above the main map, write RAINFALL.
   b. Find the Rainfall thematic map. Underline its title.

2. Thematic maps show patterns.
   a. On the main map, draw a wavy line along the 100˚W line of longitude.
   b. Now, on the Rainfall map, draw the same line.
   c. Compare the rainfall pattern on both sides of the line. In the United States, does more rain fall east or west of the line? ____________
   d. On the Rainfall map, east of the line, write WET.
   e. West of the line, write DRY.

3. Mt. Waialeale in Hawaii has the highest annual rainfall in the world.
   a. Look at the inside front cover of the Atlas. What is Mt. Waialeale’s annual rainfall? ____________ inches
   b. On the main map, circle Hawaii on the inset map.
   c. On the Rainfall map, circle Hawaii.
   d. Mt. Waialeale is on Kauai. On the Hawaii inset map, on Kauai, draw this symbol ▲.
   e. In the Pacific Ocean, write WETTEST and draw a line from this label to Kauai.
   f. What is the natural region in Kauai? ____________

4. Death Valley in California has the lowest annual rainfall in the United States.
   a. On the main map, in California, circle Death Valley.
b. On the Rainfall map, circle that same area.

c. What is the annual rainfall range for that area? ___________ inches per year.

d. On the main map, label Death Valley DRIEST.

e. What is the natural region in this area? ____________________

5. The southeast United States receives plenty of rain all year long.

a. In the Atlas, on pages 32–33, look at the graph and photo of Atlanta. Read the captions.

b. Atlanta is in Georgia. On the Desk Map, on the main map, outline Georgia. Then outline it on the Rainfall map.

c. What is the rainfall range in Georgia? ___________ inches per year.

d. On the main map, in the southeast, write WET.

e. What is the main natural region in this area? ____________

6. Most of the Great Plains is dry.

a. On the main map, across the Great Plains, draw plains symbols ———.

b. On the Rainfall map, draw plains symbols in that same area of the country.

c. What is the rainfall range across most of the Great Plains? ___________ inches per year.

d. On the main map, across the Great Plains, write DRY.

e. What is the natural region of the Great Plains? ____________

7. Some very cold areas are often very dry.

a. In the Atlas, on pages 32–33, find the photo of a cold place. Read the caption.

b. How many inches of snow equals one inch of rain? ___________ inches

c. On the main map, on the inset map of Alaska, circle the tundra or ice region in northern Alaska.

d. On the Rainfall map, circle that same part of Alaska.

e. Far north in Alaska, what is the rainfall range? ___________ inches per year.

f. On the main map, in northern Alaska, write VERY DRY.
Rainfall

Graphing Rainfall

1. The northwest United States has both very wet and very dry areas.
   a. In the Atlas on pages 32–33, look at the graph of Astoria. Read the caption.
   b. Astoria is located in the northwestern corner of Oregon. On your Desk Map, on the main map, in northwestern Oregon, write VERY WET.
   c. What is the natural region in northwest Oregon? ____________
   d. On the Rainfall map, outline Oregon.
   e. What is the lowest rainfall range in Oregon? ______________
   f. On the main map, in one of the driest areas, write ◊ VERY DRY.
   g. What is the natural region in this area of Oregon? ________________

2. Mountains affect rainfall patterns.
   a. On the main map, above Washington, draw a large mountain symbol ▲.
   b. As warm air moves up the side of a mountain, it cools—forming clouds and rain. On the west side of the mountain symbol, draw an arrow moving up the mountain. At the tip, write WET.
   c. Very little rain is carried to the other side of the mountain. There it is very dry. On the east side of the mountain symbol, draw an arrow moving down the mountain. At the tip, write DRY.
   d. On the main map, draw mountain symbols ▲▲▲ along the Coast Ranges and the Cascade Range.
   e. West of these mountains, write WET.
   f. East of the mountains, write DRY.
Pulling It Together

3. The graphs below show rainfall in two cities in Washington.

   a. First, use the data above the graphs to help you draw the
      missing bars on the graph for each city.

   b. Then decide if the city is on the wet side of the mountains or
      on the dry side. Circle the correct label below the graph.

On the main map and the Rainfall map, outline your state. Then find
the general location of your town or city. What is the rainfall range where
you live? ___________ inches per year. Has too much rainfall
(flooding) ever been a problem in your city? Too little rainfall (drought
or water shortages)? Write a paragraph about rainfall in your area.
Using Thematic Maps

Temperature

Teaching

Using the Atlas

› **Read a temperature map.**

1. Introduce the lesson by writing **TEMPERATURE** on the board. Say:
   - Temperature is how hot or cold something is.
   - Does anyone know what the temperature is outside today?
   - Soon you’ll learn how to read a map about temperature.

2. Have students turn to pages 34–35 of the *Junior Geographer Atlas*.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map, graphs, and photos.
   e. Have students answer the questions below the graphs.

3. Then ask the class:
   - **Look at the legend for the Temperature map in the Atlas.** How many temperature categories are there? (6)
   - What color does this map use to show places that are always hot? (red)
   - **What does blue stand for?** (cold winters, warm summers)
   - **Which cities have graphs in the Atlas?** (Barrow, Alaska; Honolulu, Hawaii; Chicago, Illinois)
   - **Which of these cities is always hot?** (Honolulu)

Using the Map

› **Read a temperature map.**

› **Identify temperature patterns on a map.**

4. Divide the class into groups. Hand out Activity Sheets 20a–20b, Physical Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 20a. Have students hold up their maps so you can check their markings.
   b. Then give the groups time to complete steps 3–7. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

› **Read a temperature map.**

› **Identify temperature patterns on a map.**

› **Graph temperature.**

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 20a–20d, Temperature
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map

Day 2: Graphing Temperature

Here’s an Interesting Fact!

On Activity Sheet 20d, City 1 is Miami, Florida. City 2 is Pittsburgh, Pennsylvania. After finishing the activity, have students find both cities on the Desk Map.
Lesson 20

Go Global
Have students look at the Temperature map on the World Physical Desk Map. Help them understand that temperatures are generally warmer near the Equator and colder near the poles.

Track Temperature
Have students track the high temperature each day using a weather Web site or a daily newspaper. Then have them draw a line graph showing your area’s temperatures for a week.

Show Seasons
Use a lamp and a globe to demonstrate how the earth revolves around the sun. Point out how the tilt of the earth brings different areas of the planet closer to the sun at different times of the year.

Graphing Temperature
- Identify temperature patterns on a map.
- Graph temperature.

1. Divide the class into groups. Hand out Activity Sheets 20c–20d. Students will also need their marked Physical Desk Maps and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 20c. Have students hold up their maps, so you can check their labels.
   b. Then show students how to add a dot to one of the graphs on Activity Sheet 20.
   c. Then give the groups time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Answers

Activity Sheet 20a–20b
1d. green 4c. northern part
2c. tundra or ice 5b. cool
3b. cold winters, warm summers 7d. always hot

Activity Sheets 20c–20d
2c. western side 2f. colder

Pulling It Together
Answers will vary. Students should describe winters and summers and the hottest and coldest days they can remember.
Temperature

In this lesson, you’ll learn how to read a temperature map. Use pages 34–35 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

Using the Map

1. **Temperature** is how hot or cold something is.
   a. Give your United States Physical Desk Map a title. Above the main map, write **TEMPERATURE**.
   b. Find the Temperature thematic map. Underline its title.
   c. Now draw a box around its legend.
   d. Which color shows places with cold winters and hot summers?

2. Some places in the United States rarely get above 50˚F—even in summer.
   a. Turn to pages 34–35 of the Atlas. Point to the photo and graph of Barrow, Alaska. Read their captions. Also find Barrow on the Temperature map.
   b. Turn to the World side of your Desk Map. Find and outline Alaska in northwestern North America.
   c. Now turn to the United States side. What is the natural region in northern Alaska, near Barrow?
   d. On the Temperature map, outline Alaska.
   e. In some parts of Alaska, it is cold in both winter and summer. On the main map, in northern Alaska, write **COLD/COLD**.

3. Most other places in the United States aren’t quite as cold as northern Alaska.
   b. How does the legend describe the temperature pattern in most of Maine?
   c. On the main map, label Maine **COLD/WARM**.
   d. Find another place with the same temperature pattern and label it **COLD/WARM**.
4. Many places in the northern United States have temperature extremes. They have cold winters and hot summers.
   b. On the main map, outline Illinois. Also outline it on the Temperature map.
   c. Which part of Illinois has cold winters and hot summers—the northern or the southern part? _________________
   d. On the main map, label that part of Illinois COLD/HOT.
   e. Find two other places with the same temperature pattern and label them COLD/HOT.

5. Places farther south have milder temperatures.
   a. On the main map, outline Tennessee. Also outline it on the Temperature map.
   b. What are winters like in Tennessee? _________________
   c. On the main map, label Tennessee COOL/HOT.
   d. Find two other places with the same temperature pattern and label them COOL/HOT.

6. Far southern states have warmer temperatures.
   a. On the main map, outline Florida. Also outline it on the Temperature map.
   b. On the main map, label Florida WARM/HOT.
   c. Find two other places with the same temperature pattern and label them WARM/HOT.

7. In some places temperatures are always hot.
   a. Turn to pages 34–35 of the Atlas. Point to the photo and graph of Honolulu, Hawaii. Read their captions.
   b. Now turn to the World side of your Desk Map. Find and circle the Hawaiian Islands in the Pacific Ocean.
   c. Turn to the United States side. Draw a box around the inset map of Hawaii.
   d. On the Temperature map, circle Hawaii. How does the legend describe its temperature pattern?
      ____________________________________________
   e. On the main map, on the Hawaii inset map, write HOT/HOT.
Temperature

Graphing Temperature

1. Temperatures usually get colder as **latitudes** get higher.
   a. On your United States Physical Desk Map, on the main map, from the Rocky Mountains to the eastern edge of the map, trace or draw the following lines of latitude:
      • 32˚N latitude
      • 40˚N latitude
   b. Compare those lines with the Temperature map.
   c. In the United States, south of the 32˚N line, winters are warm. On the main map, below 32˚N and in the Atlantic Ocean, write **WARM WINTERS**.
   d. North of the 40˚N line, winters are cold. On the main map, above 40˚N and in the Atlantic Ocean, write **COLD WINTERS**.
   e. North of the Equator, temperatures usually get colder as you travel north. Draw an arrow north from WARM to COLD.
   f. Along the West Coast, winds from the Pacific Ocean keep the temperatures mild—even at high latitudes. On the Temperature map, circle the yellow areas along the West Coast.
   g. Most of the West Coast has cool winters and hot summers. On the main map, along the coasts of Washington, Oregon, and most of California, write **COOL/HOT**.

2. Temperatures also get colder as **elevation** gets higher.
   a. On the main map, underline the words **Rocky Mountains** with mountain symbols ✂️✂️✂️.
   b. On the main map, outline Montana. Also outline it on the Temperature map.
   c. Which side of Montana has cooler summers—the flatter eastern side or the mountainous western side?
   d. Label this side **COLD**.
   e. On the main map, find the Sierra Nevada and the Cascade Range. On the Temperature map, draw mountain symbols ✂️✂️ along these ranges.
   f. Is the temperature in these mountains colder or warmer than in the areas that surround them?
Pulling It Together

3. The graphs below show temperatures in two cities in the eastern United States. Both cities are along the same line of longitude.

   a. First, use the data above each graph to help you add the missing dots to the graph.

   b. Now connect all the dots to make a line graph.

   c. Compare your graphs with information on pages 34–35 of the Atlas. Decide how to describe their temperature patterns.

   Fill in the blanks for the following two sentences.

   Where I live, temperatures are usually _________ in the winter and _________ in summer. The hottest day that I remember was _________ and the coldest was _________.

   **Data for City 1**
   Latitude 26°N

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<tr>
<td>J</td>
<td>67</td>
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<tr>
<td>F</td>
<td>69</td>
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<td>M</td>
<td>72</td>
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<td>M</td>
<td>79</td>
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   **Data for City 2**
   Latitude 40°N

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<tr>
<td>M</td>
<td>60</td>
</tr>
<tr>
<td>J</td>
<td>68</td>
</tr>
</tbody>
</table>

   **Data for City 1**
   Latitude 26°N

   **Data for City 2**
   Latitude 40°N

   **Months**
   J  F  M  A  M  J  A  S  O  N  D

   **Average Temperature, °F**

   **Winter**

   **Summer**

   **Sample**

   **for Review Only**
Climate

Teaching

Using the Atlas

- **Read a climate map.**

1. Introduce the lesson by writing **CLIMATE** on the board.
   a. Say to students:
      - Climate is the weather in a place season by season, year after year.
      - Today we’ll look at maps that show climate patterns.
      - You’ve learned about rainfall and temperature. These are the main parts of the climate of a place.
   b. On the board, after **CLIMATE**, write \( \text{RAINFALL} + \text{TEMPERATURE} \).

2. Have students turn to pages 36–37 of the *Junior Geographer Atlas*.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map and climographs.

3. Then ask the class:
   - Which color is used to show tropical regions? (orange)
   - How would you describe a tropical climate? (rainy, hot all year)
   - Where are warmer regions located? (near the Equator)
   - Where are colder regions located? (near the North and South Poles)

Using the Globe and Map

- **Read a climate map.**
- **Identify climate patterns on a map.**

4. Divide the class into groups. Hand out Activity Sheet 21a–21b, Activity Globes, Physical Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 21a. Have students hold up their globes so your can check their labels.
   b. Then give the groups time to complete steps 3–8. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- **Read a climate map.**
- **Identify climate patterns on a map.**
- **Graph climate.**

Materials

- *The Nystrom Junior Geographer Atlases*
- Activity Sheets 21a–21d, *Climate*
- Activity Globes
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

**Day 1:** Using the Atlas and Using the Globe and Map

**Day 2:** Graphing Climate

Here’s an Interesting Fact!

On Activity Sheet 21d, City 1 is Toronto, Canada. City 2 is Alice Springs, Australia. Because Alice Springs is south of the Equator, its seasons are reversed.

After finishing the activity, have students find both cities on the Desk Map. Toronto is located at 44°N, 79°W; Alice Springs is at 24°S, 134°E.
Understanding Seasons
Use the globe to illustrate how the tilt of the earth’s axis causes seasonal changes. With a flashlight, show that it is the angle of sunlight hitting the earth, not the earth’s closeness to the sun, that causes the difference between summer and winter weather.

Understanding Elevation
Explain to the class that elevation also affects climate. Have students find areas with a highland climate on the Climate map. Then have them find the same areas on the Physical Desk Map.

Graphing Climate
- Identify climate patterns on a map.
- Graph climate.

1. Divide the class into groups. Hand out Activity Sheets 21c–21d. Students will also need their marked Physical Desk Maps and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 21c.
   b. Then give the groups time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 21a–21d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheet 21a–21b
2c. polar 2g. tropical 4a. dry, mild, continental, highland
7a. always cold 7b. 0 to 10

Activity Sheet 21c–21d
1c. 0 to 10 1d. warm winters, hot summers 2a. 6˚N 2c. Belem, Brazil

Pulling It Together

Answers will vary. Students should name a place, its temperature pattern, rainfall range, and their travel plans to that place.
Climate

In this lesson, you’ll learn how to read a climate map. Use pages 36–37 of The Nystrom Junior Geographer Atlas to help you complete the activity.

**Using the Globe and Map**

1. **Climate** is the type of weather in a place during different seasons, year after year. **Rainfall** and **temperature** are the main parts of climate.
   a. Give the World Physical Desk Map a title. Above the main map, write **CLIMATE**.
   b. Find the Rainfall and Temperature thematic maps. Underline their titles.

2. In general, global climate **patterns** follow lines of latitude. The farther from the Equator, the colder the temperature.
   a. Set aside the Desk Map. On the Activity Globe, find the Arctic Circle near the North Pole. Trace the Arctic Circle with a dashed line.
   b. Find the Antarctic Circle near the South Pole. Trace the Antarctic Circle with a dashed line.
   c. On pages 36–37 of the Atlas, look at the map. What is the climate north of the Arctic Circle and south of the Antarctic Circle? ______________
   d. On the globe, north of the Arctic Circle and south of the Antarctic Circle, write **POLAR**.
   e. Find the Tropic of Cancer. Trace it with a dashed line.
   f. Also trace the Tropic of Capricorn with a dashed line.
   g. On pages 36–37 of the Atlas, look at the map. What is the climate between these two lines? ______________
   h. On the globe, label this area **TROPICAL**.

3. The same climate patterns can be shown on maps.
   a. Set aside the Activity Globe. On your Desk Map, on the main map, trace the Arctic Circle with a dashed line.
   b. Draw the same line on the Temperature map and the Rainfall map.
   c. North of the Arctic Circle, in the Arctic Ocean, write **POLAR**.
4. Between the Arctic Circle and the Tropic of Cancer, temperature and rainfall change with the seasons.
   a. On the map on pages 36–37 of the Atlas, follow the Arctic Circle and the Tropic of Cancer with two fingers. What are the four climates between those lines?
   ___________  ___________  ___________  ___________
   b. On your Desk Map, on the main map, trace the Tropic of Cancer with a dashed line. Also draw it on the Temperature map and Rainfall map.
   c. On the main map, between the Arctic Circle and the Tropic of Cancer, in the Pacific Ocean, write SEASONAL CHANGES.

5. The warmest and rainiest climates are near the Equator.
   a. On the main map, trace the Tropic of Capricorn with a dashed line. Also draw it on the Temperature map and Rainfall map.
   b. On the main map, between the two tropic lines, in the Pacific Ocean, write TROPICAL.

6. Another area with seasonal changes is south of the Tropic of Capricorn and north of the Antarctic Circle.
   a. On the main map, trace the Antarctic Circle with a dashed line. Also draw it on the Temperature map and Rainfall map.
   b. On the main map, between the Tropic of Capricorn and the Antarctic Circle, write SEASONAL CHANGES.

7. Like the North Pole, the area around the South Pole is cold and dry.
   a. Look at the Temperature map. What is the temperature south of the Antarctic Circle? ________________________________
   b. Look at the Rainfall map. What is the rainfall range of most of this region? ___________ inches
   c. On the main map, south of the Antarctic Circle, in the Pacific Ocean, write POLAR.

8. Two climate regions have large dry areas.
   a. Circle the Sahara in Africa on the main map and the Rainfall map. Also circle it with your finger on the map in the Atlas.
   b. On the main map, across the Sahara, write VERY DRY.
   c. Polar regions are also dry. On the main map, on Antarctica and Greenland, write VERY DRY.
Climate

Graphing Climate

1. A **climograph** shows the rainfall and the temperature of a place.
   a. On pages 36–37 of the Atlas, read the climograph for Cairo, Egypt. Point to its location on the Climate map.
   b. On your World Physical Desk Map, on the main map, find Cairo. Label it B.
   c. Find Cairo on the Rainfall map. What is Cairo’s rainfall range? ___________ inches
   d. Find Cairo on the Temperature map. What is Cairo’s temperature pattern? ____________________________
   e. On the Climate map in the Atlas, find the other climograph cities. On your Desk Map, find these cities on the main map and label them with the same letters as in the Atlas.
   f. Now label these cities on the Rainfall and Temperature maps.

2. You can use latitude, rainfall, and temperature to find the climate of a place.
   a. On the main map, along the western coast of Africa, find Lagos and outline its city symbol. What is its latitude? __________ N
   b. On the Rainfall and Temperature maps, mark the location of this city with a dot.
   c. Look at the climographs in the Atlas. Which city has the climate most similar to the climate of Lagos? ____________________________

Pulling It Together

3. Activity Sheet 21d shows climographs for two cities.
   a. Use the data above each climograph to fill in the missing information. Use bars to show rainfall and dots to show temperature.
   b. Connect the dots to complete the temperature line graph.
   c. Look at the climographs in the Atlas. Find a city that has a similar graph. On Activity Sheet 21d, write that climate region on the line below the graph.

Which continent has only one climate region?

________________________
On the main map, locate a place you would like to visit. Use the Temperature and Rainfall maps to get information about its climate. Write three sentences describing how the climate of this place would affect your visit. Include the type of clothes you would take, an activity you would do, and the season you would go.
Exploring Where & Why
Map and Globe Skills

Lesson 22

Using Thematic Maps

Land Use

Teaching

Using the Atlas

Read a land use map.

1. Introduce the lesson by writing LAND USE on the board. Explain:
   - Land use describes how people use the land in an area.
   - There are usually many different land uses in an area.
   - The major land use is the most common land use in a region.

   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map and photos.

3. Then ask the class:
   - The photos on pages 38–39 show different types of land use. What types of land use do they show? (forestry, ranching, urban areas, farming, and no widespread use)
   - Which type of land use means growing crops and raising livestock? (farming)
   - Which type of land use means raising large herds of livestock on open land? (ranching)
   - The colors on the map show different land uses. Which color shows urban areas? (red)
   - Which color shows no widespread use? (yellow)
   - Which type of land use does a log symbol represent? (forestry)

Using the Map: Landforms

Read a land use map.

Identify major land uses.

Compare land use and landform patterns.

4. Divide the class into groups. Hand out Activity Sheets 22a–22b, Physical Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 22a. Have students hold up their maps, so you can check their lines and labels.
   b. Then give your students time to complete steps 3–5. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Read a land use map.
- Identify major land uses.
- Compare land use, landform, and natural region patterns.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 22a–22d, Land Use
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map: Landforms

Day 2: Using the Map: Natural Regions
Using the Map: Natural Regions

- Identify major land uses.
- Compare land use and natural region patterns.

1. Divide the class into groups. Hand out Activity Sheets 22c–22d. Students will also need their marked Physical Desk Maps and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 22c. Have students hold up their maps, so you can check their labels.
   b. Then give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 22a–22d.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 22a–22b
- 3b. light green
- 4b. orange

Activity Sheets 22c–22d
- 1b. red
- 1g. Answers will vary.
- 2b. yellow

Pulling It Together
- 4. Tundra or ice:
  - Forest:
  - Grass:
  - Shrub or desert:

Answers will vary, depending on your state. Students should mention the types of land use and natural regions in your state.
In this lesson, you’ll learn how maps use colors and symbols to show major land use regions. Use pages 38–39 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Map: Landforms**

1. **Major land use** is the most common way people use the land in an area.
   - a. Give the United States Physical Desk Map a title. Above the main map, write **LAND USE**.
   - b. Find the Major Land Use thematic map. Underline its title.

2. Thematic maps can show **patterns**.
   - a. On the main map, trace with a wavy line the 100˚W line of longitude.
   - b. Now, on the land use map, draw the same line.
   - c. Compare the land use on both sides of the line. On the main map, east of the line, write **FARMING**.
   - d. West of the line, write **RANCHING**.

3. In **farming** areas of the United States, people grow crops and raise livestock.
   - a. In the Atlas, on pages 38–39, look at the farming photo. Read the caption.
   - b. On the Desk Map, on the land use map, which color shows farming? _______________
   - c. Find and outline Missouri on the main map. Then outline it on the thematic map.
   - d. On the main map, in northern Missouri, draw a farming symbol 🌽.
   - e. This farming area is in the Central Lowland. The Central Lowland is plains. Across the Central Lowland, draw plains symbols 🚨.
   - f. Find four other plains states with large farming areas. On the main map, label each 🚨.
4. Much of the land in the western United States is used for **ranching**.
   a. In the Atlas, on pages 38–39, look at the ranching photo. Read the caption.
   b. On the Desk Map, on the land use map, which color shows ranching? ________________
   c. Find and outline South Dakota on the main map. Then outline it on the land use map.
   d. Which part of South Dakota is used for ranching, the east or the west? _____________
   e. On the main map, in a ranching area of South Dakota, draw a ranching symbol 🐄.
   f. This ranching area is on the Great Plains. Across the Great Plains, draw this symbol ——.
   g. Ranching also occurs across the mountains and plateaus of the West. Find six other states with large ranching areas. On the main map, mark each of those states with a ranching symbol and ▲▲▲ or ▲.

5. **Forestry** is also a major land use. Much forestry occurs in mountainous areas.
   a. In the Atlas, on pages 38–39, look at the forestry photo. Read the caption.
   b. On your Desk Map, on the land use map, which color shows forestry? __________________
   c. On the main map, find and outline Oregon. Then outline it on the land use map.
   d. On the main map, in two forestry areas in Oregon, draw forestry symbols ⛺.
   e. In Oregon, forestry takes place in the Coast Ranges and Cascade Range. Mark them with mountain symbols ▲▲▲.
   f. Find four other mountainous states that have large forestry areas. On the main map, mark those states with a forestry symbol ⛺ and ▲▲▲.
Using the Map: Natural Regions

1. **Urban areas** include big cities and their suburbs.
   
a. In the Atlas, on pages 38–39, look at the urban area photos. Read their captions.
   
b. On your United States Physical Desk Map, on the Major Land Use map, which color shows urban areas? ____________
   
c. On the main map, find Chicago, Illinois, and underline its name.
   
d. On the Major Land Use map, find and outline Chicago's urban area symbol.
   
e. On the land use map, circle 10 of the largest urban areas.
   
f. On the main map, find the main city in each of these urban areas and draw a symbol.
   
g. List six of the main cities that you found.
      ____________________  ____________________
      ____________________  ____________________
      ____________________  ____________________

2. **Places that do not have a major land use** are shown as having *no widespread use*.
   
a. In the Atlas, on pages 38–39, look at the photo of no widespread use. Read the caption and the Junior Geographer speech balloon.
   
b. On the land use map, which color is used to show no widespread use? ______________
   
c. On the main map, find and outline Florida. On the land use map, also outline Florida.
   
d. On the main map, in southern Florida, draw this symbol .
   
e. The Everglades has visitors, but it has no major land use. It is too wet for farming, ranching, or building a large urban area. Next to the symbol, write **TOO WET**.
3. Other parts of the country have no widespread use because they are too cold, too dry, or too rugged.
   a. On the land use map, in northern Alaska and in the southwest, circle the large areas of no widespread use.
   b. On the main map, label the same areas ☐.
   c. On the Temperature map, circle northern Alaska. What is the temperature pattern there? ____________________________
   d. On the main map, in Alaska, write TOO COLD.
   e. What is the natural region in the area of the southwest you labeled? ____________________________
   f. On the Rainfall map, circle that area of the southwest. How many inches of rain does it get in a year? __________________
   g. On the main map, in the southwest, write TOO DRY.

Pulling It Together

4. Use the Atlas, your completed Desk Map, and Activity Sheets 22a–22d.
   a. Compare the main map and the land use map. In the boxes below, draw symbols for all the major land uses in each type of region.
   b. Use this symbol for urban areas.

Outline your state on the Major Land Use map and the main map. Then write two sentences describing the major land uses and the natural regions in your state.
Population Density

Teaching

Using the Atlas

1. Introduce the lesson by writing POPULATION DENSITY on the board. Say:
   - How many of you have heard the term population?
   - Population usually means the total number of people in a specific place, such as a city or country.
   - Population density is the number of people in a certain amount of space, such as a square mile.
   - Today we will compare population densities.

2. Have students turn to pages 40–41 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map, photos, and illustrations.

3. Then ask the class:
   - The colors on the map show different population densities. Which color shows 0 to 5 people per square mile? (yellow)
   - Which color shows 50 to 250 people per square mile? (orange)
   - The photos on pages 40–41 show areas with different population densities. Why do some areas have few people? (dry, cold, mountainous)
   - Which areas have the highest population density? (big cities and their suburbs)

Using the United States Map

4. Divide the class into groups. Hand out Activity Sheets 23a–23b, Political Desk Maps, and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 23a. Have students hold up their maps so you can check their markings.
   b. Then give students time to complete steps 3–5. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Define population density.
- Read a population map.
- Locate areas with high and low population densities.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 23a–23d, Population Density
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the United States Map
Day 2: Using the World Map

Here’s Another Tip!

At the beginning of the lesson, establish a color terminology for the Population map:
- 0 to 5: yellow
- 5 to 50: gold
- 50 to 250: orange
- Over 250: red
Exploring Where & Why
Map and Globe Skills

Lesson 23

Using the World Map

- Read a population map.
- Locate areas with high and low population densities.

1. Divide the class into groups. Hand out Activity Sheets 23c–23d. Students will also need their marked Political Desk Maps and Map Markers.
   a. As a class, complete steps 1–2 on Activity Sheet 23c. Have students hold up their map so you can check their markings.
   b. Then give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Comparing Maps
Have students use their Desk Maps and Atlases to compare population density and land use patterns.

Looking for Patterns
Have students look for major mountains and deserts on the United States and World Physical Maps. Then have them look at the population patterns in these areas. Have them do the same for the tundra or ice natural region.

Answers

**Activity Sheets 23a–23b**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2a.</td>
<td>0 to 5</td>
<td>4b. East</td>
</tr>
<tr>
<td>2c.</td>
<td>gold</td>
<td>5a. Florida</td>
</tr>
<tr>
<td>2e.</td>
<td>50 to 250</td>
<td>5b. west side</td>
</tr>
<tr>
<td>2g.</td>
<td>red</td>
<td>5d. Phoenix</td>
</tr>
<tr>
<td>3b.</td>
<td>red</td>
<td>5e. over 500,000</td>
</tr>
<tr>
<td>3c.</td>
<td>yellow</td>
<td></td>
</tr>
</tbody>
</table>

**Activity Sheets 23c–23d**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1b.</td>
<td>red</td>
<td>2e. along the coasts</td>
</tr>
<tr>
<td>1c.</td>
<td>yellow</td>
<td>4b. over 5,000,000</td>
</tr>
<tr>
<td>2c.</td>
<td>Australia</td>
<td>4c. over 100</td>
</tr>
</tbody>
</table>

Pulling It Together

Answers will vary, depending on your state. Students should mention population ranges and large cities. Students should also describe patterns, such as higher densities near big cities.

<table>
<thead>
<tr>
<th>Density Colors</th>
<th>People per Square Mile</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>yellow</td>
<td>0 to 5</td>
<td>answers will vary</td>
</tr>
<tr>
<td>gold</td>
<td>5 to 50</td>
<td></td>
</tr>
<tr>
<td>orange</td>
<td>United States: 50 to 250 World: 50 to 100</td>
<td></td>
</tr>
<tr>
<td>red</td>
<td>United States: over 250 World: over 100</td>
<td></td>
</tr>
</tbody>
</table>

Answers will vary, depending on your state. Students should mention population ranges and large cities. Students should also describe patterns, such as higher densities near big cities.
Population Density

In this lesson, you’ll learn how maps show population density and population patterns. Use pages 40–41 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the United States Map

1. Population density is the number of people in a specific amount of space.
   a. Give the United States Political Desk Map a title. Above the main map, write POPULATION DENSITY.
   b. Point to the Population map. In the legend, underline the title of the map.

2. The colors on the population map show different population densities.
   a. On the Population map, outline a state that is mostly yellow. What is its population density? ________ people per square mile.
   b. On the main map, find the same state. On this state, write = ALMOST NO PEOPLE.
   c. On the Population map, outline a state that has mainly 5 to 50 people per square mile. What color is most of the state? ____________________
   d. On the main map, find the same state. On this state, write = FEW PEOPLE.
   e. On the Population map, outline a state that is mostly orange. What is its population density? ____________________ people per square mile
   f. On the main map, on the same state, write = SOME PEOPLE.
   g. On the Population map, outline a state that mainly has over 250 people per square mile. What color is most of the state? ____________________
   h. On the main map, on that state, write = MANY PEOPLE.

Many farming areas have few people.
3. Places that are very crowded have a **high population density**. Places that have very few people have a **low population density**.
   a. In the Atlas on pages 40–41, look at the population density color chart. Read the first Junior Geographer speech balloon.
   b. Which color shows places with the highest population density (the most people per square mile)? ______________
   c. What color shows places with the lowest population density? ______________

4. The colors on the map make it easy to see **population patterns**.
   a. On your Desk Map, on the main map, draw a wavy line along the 100˚W line of longitude.
   b. On the Population map, draw a wavy line in the same place. Are there more places with high population density in the East or in the West? ______________
   c. On the main map, east of the line, write **HIGHER DENSITY**.
   d. West of the line, write **LOWER DENSITY**.

5. Population densities vary among states and within states.
      • On the Population map, also outline both states.
      • Which is more densely populated, Montana or Florida? ______________
   b. On the main map, outline Washington and Oregon.
      • Outline both states on the population map.
      • In these states, where are there more people—on the east side or the west side? ______________
   c. On the main map, outline Arizona.
      • Then outline it on the Population map.
      • Circle the area of highest population density in Arizona.
      • Big cities and their suburbs have the highest population density. On the main map, outline the symbol for the largest city in Arizona.
   d. What is the largest city in the state? ______________
   e. Look in the legend. What is the population range for this city? ________________ people
Population Density

Using the World Map

1. Some **population maps** show population density.
   a. Give the World Political Desk Map a title. Above the main map, write **POPULATION DENSITY**.
   b. Look at the Population map. Which color shows the highest population density? ____________
   c. Which color shows lowest population density? ____________

2. World population maps make it easy to see global **population patterns**.
   a. Use the Continents and Oceans thematic map to help you label each continent on the main map.
   b. Antarctica is very cold. It has no permanent population. Scientists and explorers visit the continent, but no one lives there all the time.
      • On the Population map, outline Antarctica.
      • On the main map, on Antarctica, write **NO PERM. POP.** and **COLD**.
   c. After Antarctica, which continent has the fewest people? ____________
      • On the Population map, outline this continent.
      • Much of this continent is desert. On the main map, on this continent, write **= ALMOST NO PEOPLE** and **DRY**.
   d. Europe is the most densely populated continent.
      • On the Population map, outline Europe.
      • On the main map, write **= MANY PEOPLE**.
   e. On the main map, find South America and Africa.
      • On the Population map, outline them.
      • Do most people in South America and Africa live inland or along the coasts? ____________

3. Population maps also show population patterns for countries.
   a. On the main map, in North America, outline Canada. Now, on the Population map, outline Canada.
b. On the main map, on Canada, write $\text{\# = ALMOST NO PEOPLE.}$

c. On the main map, outline India. Also outline India on the Population map.

d. On the main map, below India, write $\text{\#\#\#\# = MANY PEOPLE.}$

4. The area around major cities is usually very densely populated.

a. Tokyo, Japan, is in the largest urban area in the world. On the main map, find Tokyo. Outline its symbol.

b. Look in the legend. What is the population range for Tokyo?

$\text{_______________ people}$

c. On the Population map, draw a dot near Tokyo. What is the population density of this urban area?

$\text{_______________ people per square mile}$

Pulling It Together

5. Use the Atlas and your United States and World Desk Maps to help you complete the chart below.

a. Fill in the missing information in the first two columns.

b. For each population density range, find a state and a country that are mainly in that range. Write them on the chart.

<table>
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<tr>
<td>United States:</td>
<td>50 to 250</td>
<td></td>
</tr>
<tr>
<td>World:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>red</td>
<td>United States:</td>
<td></td>
</tr>
<tr>
<td>World:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Outline your state on both the United States Population map and the main map. Write a paragraph at least three-sentences long about your state. Describe its population ranges, patterns of population, and largest cities.
Using Thematic Maps

Time Zones

Teaching

Using the Atlas

› Read a time zone map.

1. Introduce the lesson by writing TIME ZONES on the board. Say:
   - How many of you have heard the term time zone?
   - Sometimes you'll hear that a television program is on at 9 Eastern, 8 Central (or use an example from your time zone). Eastern and Central are the names of two time zones.
   - Today you'll learn how a map shows time zones.

2. Have students turn to pages 42–43 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map and photos.

3. Then ask the class:
   - How many time zones are shown on the map? (six)
   - The map uses colors and labels to show different time zones. Which color is used to show the Eastern Time zone? (blue)
   - Which time zone is shown in orange? (Pacific Time)
   - The photos show events that happened at the same time—even though the clocks are different. Which time zones are shown? (Hawaii-Aleutian Time, Mountain Time, Eastern Time)
   - When it is almost time for lunch in the Eastern Time zone, what are students doing in the Mountain Time zone? (arriving at school)
   - What are students doing in the Hawaii-Aleutian Time zone? (Most are still sleeping.)

Using the Map: Time Zones

› Read a time zone map.
› Identify time zones.

4. Divide the class into groups. Hand out Activity Sheets 24a–24b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 24a. Have students hold up their maps so you can check their markings.
   b. Then give students time to complete steps 2–4. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
› Read a time zone map.
› Identify time zones.
› Calculate time in different time zones.

Materials

☐ The Nystrom Junior Geographer Atlases
☐ Activity Sheets 24a–24d, Time Zones
☐ Political Desk Maps
☐ Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map: Time Zones
Day 2: Using the Map: Time
Lesson 24

Using the Map: Time

1. Divide the class into groups. Hand out Activity Sheets 24c–24d. Students will also need their marked Political Desk Maps and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 24c.
   b. Then give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 24a–24d. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 24a–24b
1c. Eastern Time 4a. Mountain Time
1g. Alaska Time, Hawaii-Aleutian Time 4b. Mountain Time
3b. Pacific Time 4c. Central Time
3c. Mountain Time 4e. Great Falls, Flagstaff

Activity Sheets 24c–24d
1b. 8:00 a.m. 4d. p.m.
1d. 9:00 a.m. 4e. a.m.
2e. 5:00
3c. 8:00

Pulling It Together

<table>
<thead>
<tr>
<th>Hawaii-Aleutian Time</th>
<th>Alaska Time</th>
<th>Pacific Time</th>
<th>Mountain Time</th>
<th>Central Time</th>
<th>Eastern Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>2:00</td>
<td>4:00</td>
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<td>6:00</td>
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<td>12:00</td>
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<tr>
<td>9:00</td>
<td>11:00</td>
<td>12:00</td>
<td>1:00</td>
<td>2:00</td>
<td></td>
</tr>
</tbody>
</table>

Answers will vary. Students should mention the name of their time zone, a time, and describe something they would be doing if they were in another time zone.

Go Global
Find a world time zone map and have students determine different times around the world.

Think About It
The Eastern Time zone is the zone farthest to the east in the United States—therefore, it is named Eastern. Have your students think about why the other time zones have the names that they do.

Night and Day
Demonstrate the earth’s rotation. In a darkened room, use a flashlight to represent the sun. Shine it on the Activity Globe. Rotate the globe eastward to show what causes night and day.
In this lesson, you’ll learn how maps show time zones. Use pages 42–43 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Using the Map: Time Zones

1. The United States is divided into six **time zones**.
   
   **a.** Give the United States Political Desk Map a title. Above the main map, write **TIME ZONES**.
   
   **b.** Point to the Time Zones thematic map. Underline its name.
   
   **c.** On the main map, outline the state of New York.
      
      • On the Time Zones map, also find and outline New York.
      
      • In which time zone is New York? ________________________
      
      • Underline the name of the time zone.
   
   **d.** On the main map, outline Arkansas.
      
      • On the Time Zones map, find and outline Arkansas.
      
      • Underline the name of Arkansas’s time zone.
   
   **e.** On the main map, outline New Mexico.
      
      • On the Time Zones map, find and outline New Mexico.
      
      • Underline the name of New Mexico’s time zone.
   
   **f.** On the main map, outline California.
      
      • On the Time Zones map, also find and outline California.
      
      • Underline the name of California’s time zone.
   
   **g.** Look at the Time Zones map. What are the names of Alaska’s two time zones?
      
      ________________________  _______________________

2. Time zones often follow state **boundaries**.
   
   **a.** On the Time Zones map, find the Eastern Time zone and trace its western boundary.
      
      • On the main map, draw the western boundary of the Eastern Time zone.
      
      • Above the zone, write **EASTERN TIME**.
   
   **b.** Now, on the Time Zones map, find the Central Time zone and trace its western boundary.
      
      • On the main map, draw the western boundary of the Central Time zone.
• Above the zone, write CENTRAL TIME.

c. On the Time Zones map, find the Mountain Time zone and trace its western boundary.
• On the main map, draw the western boundary of the Mountain Time zone.
• Above the zone, write MOUNTAIN TIME.

d. On the Time Zones map, point to the Pacific Time zone.
• On the main map, above the zone, write PACIFIC TIME.

e. Alaska is in two time zones. On the main map, find the Alaska inset map.
• Above Alaska, write ALASKA TIME.
• Below the words Bering Sea and above the Aleutian Islands, write HAWAII-ALEUTIAN TIME.

f. Hawaii is also in the Hawaii-Aleutian time zone. On the Hawaii inset map, in the Pacific Ocean, write H-A TIME.

3. Like Alaska, some other states are also in more than one time zone.


b. In which time zone is northern Idaho? __________________

c. In which time zone is southern Idaho? __________________

d. On the main map, underline the names of six other states that are in two time zones.

4. Time zones are based on location east to west, not north to south.

a. On the main map, find and underline Great Falls, Montana.
• On the Time Zones map, draw a dot for Great Falls.
• In which time zone is Great Falls? __________________

b. On the main map, find and underline Flagstaff, Arizona.
• On the Time Zones map, draw a dot for Flagstaff.
• In which time zone is Flagstaff? __________________

c. On the main map, find and underline Fargo, North Dakota.
• On the Time Zones map, draw a dot for Fargo.
• In which time zone is Fargo? __________________

d. On the Time Zones map, draw an arrow south from Great Falls to Flagstaff and an arrow east from Great Falls to Fargo.

e. Which of these cities are in the same time zone?
Time Zones

Using the Map: Time

1. There is a one hour difference from time zone to time zone.
   a. On your United States Political Desk Map, on the main map, outline Nevada. On the Time Zones thematic map, also find and outline Nevada.
   b. According to the Time Zones map, what time is it in Nevada? __________
   c. On the main map, outline Colorado. On the Time Zones map, draw an arrow from Nevada to Colorado.
   d. Colorado is in a different time zone. What time is it in Colorado? __________

2. It is one hour later in the next time zone to the east.
   a. Along the bottom of the main map, from west to east, draw an arrow. Label it ADD HOURS.
   b. On the Hawaii inset map, write 1:00 across Hawaii.
   c. You add an hour as you move east. On the Alaska inset map, write 2:00 in Alaska. (Look at the world map to see the true location of Hawaii and Alaska.)
   d. In the remaining time zones, write the time.
   e. What time is it in the Central Time zone? __________

3. It is one hour earlier in the next time zone to the west.
   a. Along the top of the map, from east to west, draw an arrow. Label it SUBTRACT HOURS.
   b. In the Eastern Time zone, write 10:00 and underline it.
   c. You subtract an hour as you move west. In the Central Time zone, write 9:00 and underline it.
   d. In the remaining time zones, write the time and underline it.
   e. What time is it in the Mountain Time zone? __________
4. There are 24 hours in each day. The 12 hours before noon are **a.m.** times. The 12 hours after noon are **p.m.** times.

   a. On the main map, in the Mountain Time zone, write **12 NOON** and circle it.
   
   b. From the circle, draw an arrow east. Label the arrow **P.M.**
   
   c. From the circle, draw an arrow west. Label the arrow **A.M.**
   
   d. In Dallas, Texas, is it a.m. or p.m.? __________
   
   e. In Anchorage, Alaska, is it a.m. or p.m.? __________

5. Midnight is 12 hours before or after noon. The hours before midnight are p.m. and the hours after are a.m.

   a. On the main map, in the Eastern Time zone, write **12 MIDNIGHT** and draw a box around it.
   
   b. From the box, draw an arrow west. Label the arrow **P.M.**
   
   c. In St. Paul, Minnesota, is it a.m. or p.m.? __________

**Pulling It Together**

6. Use the Atlas, your marked Desk Map, and Activity Sheets 24a–24d to help you fill in the missing times on the chart below.

<table>
<thead>
<tr>
<th>Hawaii-Aleutian Time</th>
<th>Alaska Time</th>
<th>Pacific Time</th>
<th>Mountain Time</th>
<th>Central Time</th>
<th>Eastern Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td></td>
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<tr>
<td>7:00</td>
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<td>10:00</td>
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<tr>
<td>8:00</td>
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</tbody>
</table>

What time zone do you live in? What time is it now in your time zone? Choose another time zone. What time is it there? Write two sentences describing what you would be doing now if you were in that time zone.
History

Teaching

Using the Atlas

Read a history map.

1. Introduce the lesson by writing HISTORY on the board. Say:
   - History is the story of change over time. When we talk about the history of our country, we look at events that have shaped the United States.
   - Today you’ll learn how to use a history map to see change over time.

2. Have students turn to pages 44–45 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map, photo, graph, and timeline.

3. Then ask the class:
   - Look at the Growth of United States map in your Atlas. What is the theme of the map? (growth of the United States, history)
   - What does the legend tell you? (numbers show dates, two-letter abbreviations stand for state names, scale of map)
   - How else does the map show information? (colors, boundary lines)
   - Which area was the first part of the United States? (Thirteen Colonies)
   - On pages 44–45, where can you find information about what happened in 1803? (Hint: there are two places.) (the map, the timeline)

Using the Maps: 1776–1842

Read a history map.
Read a timeline.
Describe the growth of the United States.

4. Divide the class into groups. Hand out Activity Sheet 25a–25b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 25a. Have students hold up their maps so you can check their outlines.
   b. Then give the groups time to complete steps 2–5. Walk around the room to answer questions and keep students on task.
Lesson 25

Make a Timeline
As a class, prepare a timeline that shows when each state was admitted to the Union. Assign each student two or more states. Have them use the State Facts chart on pages 78–81 of the Atlas to find the year of admission and then add it to the timeline.

Look at Natural Gains
Ask students to choose a territory from the Growth of the United States map. Have them draw the boundaries of that territory on the United States Physical Map. Then have students circle and list any major landforms or bodies of water that were gained with that territory.

Using the Maps: 1845–1898

- Read a history map.
- Read a timeline.
- Describe the growth of the United States.

1. Divide the class into groups. Hand out Activity Sheets 25c–25d. Students will also need their marked Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 25c. Have students hold up their maps so you can check their outlines.
   b. Then give the groups time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Collect and review Activity Sheets 25a–25d. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 25a–25b
1c. Thirteen Colonies
2a. 1783
3a. 1803
4a. 1818, 1819, 1842
4d. Minnesota, North Dakota, South Dakota

Activity Sheets 25c–25d
1a. 1845
2d. Pacific
5a. 1867

Answers will vary. Students may mention that the country grew west of the Rocky Mountains, grew to its present-day size, or grew to almost 2,000,000 square miles.

<table>
<thead>
<tr>
<th>Year</th>
<th>Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1776</td>
<td>Thirteen Colonies</td>
</tr>
<tr>
<td>1842</td>
<td>Northern Maine</td>
</tr>
<tr>
<td>1783</td>
<td>Gained by Treaty</td>
</tr>
<tr>
<td>1819</td>
<td>Florida Cession</td>
</tr>
<tr>
<td>1803</td>
<td>Louisiana Purchase</td>
</tr>
<tr>
<td>1845</td>
<td>Texas Annexation</td>
</tr>
<tr>
<td>1818</td>
<td>Red River Basin</td>
</tr>
<tr>
<td>1848</td>
<td>Mexican Cession</td>
</tr>
<tr>
<td>1853</td>
<td>Gadsden Purchase</td>
</tr>
<tr>
<td>1846</td>
<td>Oregon Country</td>
</tr>
<tr>
<td>1867</td>
<td>Alaska Purchase</td>
</tr>
<tr>
<td>1898</td>
<td>Hawaii Annexation</td>
</tr>
</tbody>
</table>
History

In this lesson, you’ll learn how to read a history map. Use pages 44–45 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps: 1776–1845

1. History maps can show change over time.
   a. Give your United States Political Desk Map a title. Above the main map, write HISTORY.
   c. Which area was the first part of the United States? _________________________
   d. On the thematic map, outline this area.
   e. On the main map, draw the boundaries of this area.
   f. The western boundary roughly followed the Appalachian Mountains. Along the western boundary, draw mountain symbols \(\wedge\wedge\wedge\wedge\) and write APPALACHIAN MOUNTAINS.
   g. This area was once 13 British colonies. East of the Appalachian Mountains, write 13 COLONIES.
   h. The colonies declared their independence in 1776. Below 13 COLONIES, write 1776.

2. As a result of winning the Revolutionary War, the United States gained more land from Great Britain.
   a. Look at the timeline in the Atlas. When did the United States gain this land? _________
   b. On your Desk Map, on the thematic map, draw an arrow from the Thirteen Colonies to the western boundary of Gained by Treaty.
   c. This territory extended the boundaries of the United States to the Mississippi River. On the main map, draw the western and southern boundaries of this territory.
   d. Along the western boundary, write MISSISSIPPI RIVER.
   e. Between the Appalachian Mountains and the Mississippi River, write GAINED BY TREATY 1783.
3. The United States wanted to ship goods along the Mississippi River all the way down to the Gulf of Mexico. However, France controlled the land at the mouth of the river. Instead of selling just this area, France sold the United States the entire Louisiana Territory.
   a. Look at the timeline in the Atlas. When did the Louisiana Purchase take place? ________________
   b. The country expanded farther west. On the Desk Map, on the thematic map, draw an arrow from Gained by Treaty to the western boundary of the Louisiana Purchase.
   c. On the main map, draw the boundaries of the Louisiana Purchase.
   d. The western boundary of this territory roughly followed the Rocky Mountains. Draw mountain symbols ⬆️⬆️⬆️ and write ROCKY MOUNTAINS along the western boundary.
   e. Label the territory LOUISIANA PURCHASE 1803.

4. Smaller land gains helped the United States grow even more.
   a. Look at the timeline in the Atlas. When were the next three territories added to the United States? ________________ ________________ ________________
   b. On the Desk Map, on the thematic map, draw arrows from the Thirteen Colonies to each of the following territories:
      • Red River Basin  • Florida Cession  • Northern Maine
   c. A treaty with Great Britain gave the United States the Red River Basin. On the main map, label this territory RED RIVER BASIN 1818.
   d. Which present-day states were part of this territory? ________________ ________________ ________________
   e. The following year, Spain turned over Florida to the United States. This territory included land along the Gulf of Mexico. Underline the words Gulf of Mexico with this symbol ⬇️⬇️.
   f. Along the Gulf Coast and Florida Peninsula, write FLORIDA CESSION 1819.
   g. A treaty with Great Britain gave the United States Northern Maine. Label this territory N. MAINE 1842.

5. On the Raised Relief Map, draw the same boundaries you drew on the main map.
Using the Maps: 1845–1898

1. **Texas** was once part of Mexico. Americans living in Texas fought for and won their independence. Ten years later, Texas became part of the United States.
   
a. Look at the timeline on pages 44–45 of the Atlas. When did Texas become part of the United States? ________________

b. On your United States Political Desk Map, on the Growth of the United States map, draw an arrow from the Louisiana Purchase to the western boundary of the Texas Annexation.

c. On the main map, trace the western boundary of this territory.

d. Across Texas, write TEXAS ANNEXATION 1845.

2. Americans started settling in **Oregon Country** years before it was officially part of the United States.
   
a. On the timeline, read the caption for 1846 Oregon Country.

b. On your Desk Map, on the thematic map, draw an arrow from the Louisiana Purchase to Oregon Country.

c. On the main map, draw the boundaries of Oregon Country.

d. The boundaries of the United States now extended from the Atlantic Ocean to the ________________ Ocean.

e. Underline the name of the ocean with ###.

f. Label the new territory OREGON COUNTRY 1846.

3. Both the United States and Mexico claimed land west of Texas. They went to war over the land.
   
a. On the timeline in the Atlas, read the caption for the Mexican Cession.

b. On your Desk Map, on the thematic map, draw an arrow from the Louisiana Purchase to the Mexican Cession.

c. On the main map, draw the southern boundary of the Mexican Cession.

d. Between the Rocky Mountains and the Pacific Ocean, write MEXICAN CESSION 1848.

e. The United States later bought land from Mexico. Label the GADSDEN PURCHASE 1853.
4. On the Raised Relief Map, draw the same boundaries you drew on the main map.

5. The United States purchased Alaska from Russia.
   a. In the Atlas, on the timeline, find this purchase. When did it take place? ______________
   b. Turn to the World Desk Map. Outline the United States.
   c. Then draw an arrow to Alaska. Label Alaska ALASKA PURCHASE 1867.

6. The Hawaiian Islands were taken over by the United States in 1898.
   a. On the World map, circle Hawaii and label it HAWAII ANNEXATION 1898.
   b. Hawaii is in a key location. It is between the United States and Asia in the Pacific Ocean. Underline the name of the ocean with this symbol ⚓️.

Pulling It Together

7. Use your Atlas and marked Desk Maps to complete the chart.
   a. List the 12 U.S. territories from east to west. Base your list on how far east the eastern boundary of each territory extends.
   b. Also list the year each territory was gained by the United States.

<table>
<thead>
<tr>
<th>West</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year</td>
</tr>
<tr>
<td></td>
<td>1776</td>
</tr>
</tbody>
</table>

On your chart, circle all years after 1845. Then use the information on your chart and in the Atlas to complete the following sentence:

After 1845, the United States grew ______________________________.
Economics

Teaching

Using the Atlas

- Define economics.
- Read an economic map.

1. Introduce the lesson by writing ECONOMICS on the board. Say:
   - Economics is the study of how goods and services are produced and distributed.
   - Today you’ll learn how a map can show economic strength.
   - One way to determine the strength of a country’s economy is to find out how many people there are per car.

2. Have students turn to pages 46–47 of the Junior Geographer Atlas.
   a. Read the title question to the class.
   b. Ask a student to read the introduction aloud.
   c. Have other students read the captions and the Junior Geographer speech balloons.
   d. Review the map, graph, and photos. Make sure students read the text in the map legend.

3. Then ask the class:
   - What is the title of the thematic map on pages 46–47? (Wealth of Countries)
   - The map uses colors to show number ranges of people per car. This makes it easier to compare all the countries in the world. How many colors does the map use? (four)
   - The graph shows the exact number of people per car in different countries. In Italy, how many people are there per car? (2)
   - The fewer the people per car, the wealthier the country. Do you think Italy is wealthy or poor? (wealthy)

Using the Map

- Read an economic map.
- Compare the economic strengths of countries.

4. Divide the class into groups. Hand out Activity Sheets 26a–26b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 26a. Have students hold up their maps so you can check their outlines.
   b. Then give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Define economics.
- Read an economic map.
- Compare the economic strengths of countries.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 26a–26d, Economics
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach this lesson in two parts. Save the marked Desk Maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Graphing Economic Wealth
Graphing Economic Wealth

Read an economic map.

Compare the economic strengths of countries.

1. Divide the class into groups. Hand out Activity Sheets 26c–26d. Students will also need their marked Political Desk Maps and Map Markers.

   a. As a class, complete step 1 on Activity Sheet 26c. Have students hold up their maps so you can check their labels.

   b. Then give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Go Global

Have students compare the Wealth of Countries thematic map with other thematic maps on their World Desk Maps. Help them see that they cannot make assumptions—for example, all densely populated areas are poor. Have students find out why there are differences in economic strength, such as the possible effects that climate and resources may have. They can begin by looking at the Physical Desk Maps.

Think About It

Your students learned that one way to compare wealth is to show how many people have cars. Have your students think about other expensive goods that could also be used to make this comparison, such as computers and televisions.

Answers

Activity Sheets 26a–26b

1c. car
1e. dark green
1g. dark purple
2b. wealthy
2c. Africa

Activity Sheets 26c–26d

1b. 1 to 5
1g. southern
2c. 25 to 100
2e. over 100

Answers will vary. Students should mention that there are two or 1 to 5 people per car in the United States and the country is in the Wealthy category. They should also compare the United States with another wealthy or less wealthy country.

Collect and review Activity Sheets 26a–26d.

Clean and collect materials, using your own procedure or one suggested on page xi.
Economics

In this lesson, you’ll learn how maps can show economic wealth. Use pages 46–47 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

Using the Map

1. Maps can show **economic strength**. They can compare the wealth of countries throughout the world.
   a. Give the World Political Desk Map a title. Above the main map, write **ECONOMICS**.
   b. On your Desk Map, point to the Wealth of Countries thematic map. Underline its name.
   c. What item does this map use to measure wealth? __________
   d. This map uses colors to show the number of people per car. In the legend, draw a box around the color boxes.
   e. The fewer people per car, the wealthier the country. Which color shows the wealthiest countries? _______________
   f. On the map, outline one of the wealthiest countries.
   g. Which color shows the least wealthy countries? _______________
   h. On the map, outline one of the least wealthy countries.

2. The map makes it easy to see **patterns of wealth** for each continent.
   a. Use the Continents and Oceans map to help you outline Europe on the Wealth of Countries map.
   b. Which does Europe have more of—wealthy countries or poor countries? _______________
   c. Which continent has more poor countries—South America or Africa? _______________

3. Canada is one of the wealthiest countries in the world.
   a. On the main map, in North America, outline Canada and underline its name.
   b. On the Wealth of Countries thematic map, outline Canada. How many people are there per car? ________ to ________
c. Add a legend to the main map. In the Pacific Ocean, draw a large box.
   • At the top of the box, write **LEGEND**.
   • Below **LEGEND**, write:
     - $$ = WEALTHY
     - $ = NOT AS WEALTHY
     - ¢¢ = POOR
     - ¢ = VERY POOR.

d. On the Wealth of Countries map, add these symbols to the legend—from $$ for 1 to 5 people per car to ¢ for over 100 people.

e. On the main map, in Canada, draw this wealth symbol $$.

f. On the thematic map, outline two other dark green countries.

g. On the main map, outline and label these countries $$.

4. Other countries have slightly more people per car than Canada. They are not quite as wealthy.
   a. On the main map, in South America, outline Argentina.
   b. On the thematic map, outline Argentina. How many people are there per car? _________ to _________
   c. On the main map, in Argentina, draw this wealth symbol $.
   d. On the thematic map, outline two other light green countries.
   e. On the main map, outline and label these countries $.

5. Some countries have even more people per car than Argentina.
   a. On the main map, in Africa, outline Algeria.
   b. On the thematic map, outline Algeria. How many people are there per car? _________ to _________
   c. On the main map, in Algeria, draw this wealth symbol ¢¢.
   d. On the thematic map, outline two other light purple countries.
   e. On the main map, outline and label these countries ¢¢.

6. The poorest countries have more than 100 people per car.
   a. On the main map, in Asia, outline India.
   b. On the thematic map, outline India. How many people are there per car? ___________________
   c. On the main map, in India, draw this wealth symbol ¢.
   d. On the thematic map, outline two other dark purple countries.
   e. On the main map, outline and label these countries ¢.
1. Some countries on a continent are wealthier than others.
   a. Use the Continents and Oceans map to help you outline North America on the Wealth of Countries thematic map.
   b. How many people per car are there in most of North America? _______ to _______
   c. On the thematic map, outline a country in North America that has 1 to 5 people per car.
   d. On the main map, outline the country and label it $$. 
   e. On the thematic map in North America, outline a large island in the north that is light purple.
   f. On the main map, find and outline Greenland and label it $$. 
   g. Which part of North America has more poor countries? (Circle one.) northern central southern
   h. Find Africa on the thematic map. In northern Africa, outline the country that is light green.
   i. On the main map, outline the country and label it $.$
   j. On two other countries in Africa that are the same color, draw a $. 

2. A graph can show the exact number of people per car in a country.
   a. On page 46 of the Atlas, point to the People per Car graph. On the Desk Map, on the main map, outline each of the countries on the graph. (Use the index to help you locate them.)
   b. Label each country with the exact number of people per car.
   c. On the thematic map, find Peru. How many people are there per car? __________ to __________
   d. On the main map, label Peru $$. 
   e. On the thematic map, find Mali. How many people are there per car? ________________
   f. On the main map, label Mali $$. 

How many people per car does Brazil have? _______
Pulling It Together

3. Use the Atlas, your marked Desk Maps, and Activity Sheets 26a–26c to help you complete the graph below.

   a. Each country below is marked with the number of people per car. For every five people per car, draw one stick figure in the box. Use half a figure for fewer than 5 people per car.

   b. Then use the key below to determine the category of wealth for each country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Category of Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya, Africa</td>
<td></td>
</tr>
<tr>
<td>Iraq, Asia</td>
<td></td>
</tr>
<tr>
<td>Chile, South America</td>
<td></td>
</tr>
<tr>
<td>Mexico, North America</td>
<td></td>
</tr>
<tr>
<td>France, Europe</td>
<td></td>
</tr>
<tr>
<td>Australia, Australia</td>
<td></td>
</tr>
</tbody>
</table>

People per Car: 1 to 5 = wealthy, 5 to 25 = not as wealthy, 25 to 100 = poor, over 100 = very poor

Write a sentence comparing the economic strength of the United States with that of another country. Include the number of people per car and the category of wealth for each country.
Reviewing Unit 4

Teaching Before you begin this review, decide whether you will use the paper-and-pencil Unit Review, the Hands-on Assessment, or both.

Using the Atlas

Review the unit.

1. Discuss the unit.
   a. Have students review pages 32–47 of the *Junior Geographer Atlas*.
   b. Remind students of the lessons they completed in this unit.
   c. Have students describe any related student work or bulletin boards around the classroom.
   d. Have students define key terms from the unit, such as rainfall, temperature, climate, land use, population density, time zones, history, and economic strength.

2. Answer any questions students may have about the unit. Then have students put away their Atlases.

Using the Unit Review

Demonstrate ability to meet unit objectives.

3. Hand out Unit Review 4a–4b. Read the instructions to the class. Then give students time to complete their unit reviews.

Answers

1. a 5. b 8. d
2. c 6. d 9. c
3. a 7. a 10. a
4. a

Answers will vary. Students may name the rainfall and temperature maps to find the climate, land use to find out how people use the land, population to find out how crowded it is, time zone to see if they will have to change the time on clocks, or the history map to learn when that area became part of the United States.

Objectives

Students will be able to:

- Review the unit.
- Demonstrate ability to meet unit objectives.

Materials

- The Nystrom Junior Geographer Atlases
- Unit Review 4a–4b, Reviewing Unit 4
- Physical Desk Maps
- Political Desk Maps
- Map Markers
- Junior Geographer patches (see page 170)

Here’s a Tip!

Help students study for their unit reviews. Suggest that they:

- Review pages 32–47 of the *Junior Geographer Atlas* and write down any questions they have.
- Look at completed Activity Sheets 19a–26d in their Junior Geographer packs. Have them review the charts and graphs.
Here’s a Tip!
For students who do not meet the unit objectives, have them review pages 32–47 of the Atlas again. If they took the written Unit Review the first time, have them take the Hands-on Assessment (or vice versa).

Using a Hands-on Assessment

Demonstrate ability to meet unit objectives.

4. Test up to 15 students at a time. Hand out Physical Desk Maps, Political Desk Maps, and Map Markers.
   a. On the United States Physical Desk Map, have students do the following:
      - On the Rainfall map, find a state that gets 40–80 inches of rain a year. Label it R.
      - On the Temperature map, find a state that has cold winters and hot summers. Label it C/H.
      - On the Major Land Use map, find a state that is used mainly for farming. Label it F.
   b. On the United States Political Desk Map, have students do the following:
      - On the Growth of the United States map, outline the area that was the United States in 1783.
      - On the Time Zones map, write 6:00 p.m. in the Eastern Time zone. What time would it be in Mountain Time? Write your answer in the Mountain Time zone.
      - On the Population map, find a state that has mainly 50 to 250 people per square mile. Label it P.
   c. On the World Political Desk Map, have students do the following:
      - On the Wealth of Countries map, find a country that has 5 to 25 people per car. Label it W.

Collect and review Unit Review 4a–4b or the marked maps.

Photocopy this section of the page so you have patches for students who have successfully completed the unit. Have them glue their patches on their Junior Geographer packs.
In the last eight lessons, you used a variety of thematic maps to find information. How much did you learn?

1. Which half of the United States receives the most rainfall?
   a. east  
   b. west  
   c. north  
   d. south

2. Temperatures usually get cooler
   a. as elevation gets lower.  
   b. as longitude gets wider.  
   c. as latitude numbers get higher.  
   d. as summers get longer.

3. The climate zone closest to the Equator is called
   a. tropical.  
   b. mild.  
   c. continental.  
   d. polar.

4. Which of the following is a land use?
   a. forestry  
   b. tundra or ice  
   c. desert  
   d. forest

5. Which of the following have the highest population density?
   a. deserts  
   b. big cities and suburbs  
   c. farming areas  
   d. mountainous areas

6. Which of the following is not a time zone in the United States?
   a. Alaska Time  
   b. Hawaii-Aleutian Time  
   c. Pacific Time  
   d. Atlantic Time

7. The United States grew in land area
   a. mainly from east to west.  
   b. in the last 100 years.  
   c. one state at a time.  
   d. from north to south.
8. One measure of economic wealth is cars. Which of the following countries is wealthiest?
   a. Chad with 825 people per car
   b. Oman with 12 people per car
   c. Bosnia with 41 people per car
   d. Bahrain with 4 people per car

9. Look at the climograph. In which month does Paris get the least rain?
   a. February
   b. December
   c. March
   d. June

10. What is the highest average temperature in Paris?
    a. about 70°F
    b. about 90°F
    c. about 2”
    d. about 40°F

11. Mark the following on the map below.
    a. Label the Pacific Time zone and Eastern Time zone.
    b. Add the time in the other three zones.

Your family is thinking of moving to a new state. Name at least two thematic maps that would help you learn about that state. Write a paragraph describing what these thematic maps would show you.
Looking at Regions

Lesson 27

Northeast Region: Land and Water

Teaching

Using the Atlas

- Locate the Northeast Region.

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      • The United States can be divided into many kinds of regions.
      • Today we’re going to look at one of those regions.

2. On the board, add NORTHEAST to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      • Which direction is northeast? Have a student point northeast.
      • Where do you think the Northeast Region might be?
   b. Then say to the class:
      • On page 49 of the Atlas, find the Northeast Region.
      • One characteristic these states have in common is location.
      • Which region is the only neighbor of the Northeast Region? (East Central)

3. Have students turn to pages 50–51. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      • Has anyone been to the Northeast Region? Where?
      • How was it like these photos? How was it different?

Using the Maps

- Identify major landforms in the region.
- Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 27a–27b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 27a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–7. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Locate the Northeast Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 27a–27d, Northeast Region: Land and Water
- Raised Relief Maps
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Maps
Day 2: Making a Region Booklet (The booklets will be completed in Lesson 28.)
Making a Region Booklet

- Locate the Northeast Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

1. Hand out Activity Sheets 27c–27d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.

2. Before giving students time to complete their activity sheets, tell them not to cut the activity sheets.

Collect and review Activity Sheets 27a–27d. Save Activity Sheets 27c–27d to use in the Region Booklet in Lesson 28. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 27a–27b

2b. Appalachian Mountains, Adirondack Mountains, Catskill Mountains, Green Mountains

2d. 6,288

3c. 1,000–5,000

4a. Long Island

4b. approximately 120

5b. Lake Erie, Lake Ontario

5c. Lake Champlain

7a. New York

Activity Sheet 27c

Location of river will vary.

Activity Sheet 27d

Mountain Ranges: Appalachian Mountains, Adirondack Mountains, Catskill Mountains, Green Mountains

Plateau: Allegheny Plateau

Island: Long Island

Peninsula: Cape Cod

Ocean: Atlantic Ocean

Lakes: Lake Erie, Lake Ontario, Lake Champlain

Rivers: Hudson River, St. Lawrence River, Connecticut River

Waterfalls: Niagara Falls

Canal: Erie Canal

Answers will vary. The speech balloon should mention the mountains, lakes, and/or river on the map.

Read More About It

Your students might enjoy reading or listening to these books and others about the Northeast Region:

- A River Ran Wild by Lynne Cherry
- The Amazing Impossible Erie Canal by Cheryl Harness

Tour the Region

Niagara Falls and Cape Cod are two popular destinations in the Northeast Region. Have students use the Atlas and Desk Maps to describe the natural features they would see if they traveled from one destination to the other.

Exploring Where & Why

Map and Globe Skills

Lesson 27
Northeast Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the Northeast Region. Use pages 50–51 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Maps**

1. The **Northeast Region** is in the northeast corner of the country.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write NORTHEAST REGION.
   b. Turn to pages 50–51 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. **Mountains** are a major landform in the Northeast Region.
   a. On the Raised Relief Map, feel the mountains in the region.
   b. Look at the Major Landforms map in the Atlas. What are the names of four mountain ranges in this region?
      __________________________
      __________________________
      __________________________
      __________________________
   c. On your Desk Map or Raised Relief Map, underline the names of each of these ranges with mountain symbols ▲▲▲.
   d. Mt. Washington is the highest mountain in the region. What is its elevation? ______________ feet
   e. Outline the mountain peak symbol ▲ for Mt. Washington.

3. The **Allegheny Plateau**, located in the western part of the region, consists of narrow valleys and broad ridges.
   a. On the Raised Relief Map, west of the Appalachian Mountains, feel the plateau.
   b. On your Desk Map or Raised Relief Map, underline the name of the plateau with a plateau symbol ▲．
   c. Look at the Raised Relief Map. What is the elevation range of the Allegheny Plateau? ______________ feet.
4. There are a number of **islands** and **peninsulas** along the Atlantic coast of the Northeast Region.
   
   a. On your map, along the coast, find and outline the largest island. What is the name of this island? __________________
   
   b. Use the map scale to measure the length of this island. How long is the island? ____________________ miles
   
   c. On pages 50–51 of the Atlas, point to the photo of **Cape Cod**. Read the caption.
   
   d. Cape Cod is a hook-shaped peninsula in Massachusetts. On your map, find and underline the name of the peninsula.

5. Several large bodies of water form the boundaries of the region.
   
   a. The **Atlantic Ocean** forms the eastern boundary of the region. Underline the words *Atlantic Ocean* with ocean symbols 🌊🌊.
   
   b. Two of the **Great Lakes** form part of the western boundary of the region. Outline these lakes. What are their names? ____________________________  __________________________
   
   c. Find and outline the large lake between New York and Vermont. What is its name? ____________________________

6. There are several major **rivers** in the Northeast Region.
   
   a. The **Hudson River** begins high in the Adirondack Mountains. From its source to its mouth at the Atlantic Ocean, draw an arrow along the Hudson River.
   
   b. On the Major Landforms map on page 50, find the **Connecticut River**.
   
   c. On your map, draw an arrow along the Connecticut River.
   
   d. Another major river in this region flows from Lake Ontario into Canada. Draw an arrow along the **St. Lawrence River**.
   
   e. **Niagara Falls** is actually two waterfalls. Find Niagara Falls on your map and circle its name.

7. The **Erie Canal** is a waterway that was built by people. It completes a route from the Great Lakes to the Atlantic Ocean.
   
   a. In the legend, what symbol is used to show a canal? ________
   
   b. On your map, locate the canal and trace it with a canal symbol.
   
   c. What state is the canal in? ____________________________
Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 27a–27b to complete Activity Sheets 27c–27d. Do not cut out the activity sheets.

   a. On the map below, draw the mountain symbols you drew on your Desk Map or Raised Relief Map.

   b. Label the two Great Lakes. Also, add a river to the map.
2. Complete the items below.

   a. On the map, color or shade in the Northeast Region.

   b. Then write the names of landforms and bodies of water in the region.

   On Activity Sheet 27c, fill in the Junior Geographer’s speech balloon. Have him say something about what your map shows.

### Location

#### Major Landforms

- Mountain Ranges:
  - __________________________
  - __________________________
  - __________________________

- Island:
  - __________________________

- Peninsula:
  - __________________________

- Plateau:
  - __________________________

### Major Bodies of Water

- Ocean: __________________________

- Lakes: __________________________
  - __________________________
  - __________________________
  - __________________________

- Rivers: __________________________
  - __________________________
  - __________________________

- Waterfalls: __________________________

- Canal: __________________________
Looking at Regions

Northeast Region: People and Places

Teaching

Using the Atlas

1. **Identify states in the Northeast Region.**
   
   1. Review the previous lesson. Write NORTHEAST REGION on the board and ask the class:
      
      - Where is the Northeast Region? (in the northeast corner of the country)
      - What are some land and water features in the Northeast? (Students should mention the mountains, plateau, Atlantic Ocean, Great Lakes, and rivers.)

   2. Have students turn to pages 50–51 of the *Junior Geographer Atlas*.
      
      a. On the main map, have them use a finger to outline the Northeast Region.
      
      b. Then ask the class:
         
         - How many states are in the Northeast Region? (9)
         - What are their names? (Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania)
         - Which states border Canada? (Maine, New Hampshire, Vermont, New York)
         - Which states border the Atlantic Ocean? (Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey)

      c. Have students read the captions and region facts aloud.

Using the Map

1. **Identify states in the Northeast Region.**
2. **Identify major cities in the region.**
3. **Identify other characteristics of the region.**

3. Divide the class into groups. Hand out Activity Sheets 28a–28b, Political Desk Maps, and Map Markers.
   
   a. As a class, complete step 1 on Activity Sheet 28a. Have students hold up their maps so you can check the outlines of the states.
   
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

- Identify states in the Northeast Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 28a–28d, Northeast Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 27c–27d
- scissors
- stapler or hole punch and yarn

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map

Day 2: Making a Region Booklet
Exploring Where & Why
Map and Globe Skills

Lesson 28

Making a Region Booklet

- Identify states in the Northeast Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 28c–28d. Students will also need their marked Political Desk Maps.

2. Give students time to complete their activity sheets.

3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 27c–27d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 28a–28b and the Region Booklets.
Clean and collect materials, using your own procedure or one suggested on page xi.

Using the Map Scale
Have students use the map scale on the main map to measure distances between cities. For example, have them measure the distance in miles between the two largest cities in the region, New York City, New York, and Philadelphia, Pennsylvania.

Using Time Zones
Have students use the Time Zones map to determine the region’s time zone.

Answers

Activity Sheets 28a–28b
2a. ★
5d. over 250
2c. Augusta, Maine
6b. 9
4c. dark green
6c. 1842
5b. 50 to 250

Activity Sheet 28c
Check pages 50–51 of the Atlas for answers.

Activity Sheet 28d
Major Land Uses: forestry, farming
Population: most of the region: 50–250; along coast: over 250
History: 1787 PA, 1787 NJ, 1788 CT, 1788 MA, 1788 NY, 1789 RI, 1791 VT, 1820 ME

Taking a Closer Look
State: New York
Natural Region: forest
Main Land Use: farming
Rainfall: 20–40 inches, or 2 inches or more of rain a month
Population: over 250 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Syracuse area as moderately rainy, densely populated, and used for farming.
Northeast Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the Northeast Region. Use pages 50–51 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

Using the Map

1. There are nine states in the Northeast Region.
   a. Give your United States Political Desk Map a title. Above the main map, write **NORTHEAST REGION**.
   b. Turn to pages 50–51 of the Atlas. What are the names of the nine states in the region?

   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________

   c. On your map, outline each state. Then underline its name. Try not to cover any labels on the map.

2. Every state has a state capital.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. ______
   b. On the main map, find the capital of each state in the region. Outline its symbol.
   c. Which state capital is near 44˚N, 70˚W?

3. There are several large cities in the Northeast.
   a. On pages 50–51 of the Atlas, find photos of two large cities in the region. Also read their captions.
   b. **New York City** is the largest city in the United States. On your map, outline its city symbol.
   c. **Philadelphia** is the second largest city in the region. Outline its city symbol.
   d. **Boston** is the largest city in Massachusetts and is the state capital. Draw a dot next to its symbol.
4. The Northeast Region has a wide range of land uses.
   a. On pages 50–51 of the Atlas, find the Major Land Use map.
   b. Urban areas include cities and their suburbs. On your Desk Map, next to a large urban area, write $\text{= URBAN AREA}$. 
   c. What color is used to show forestry? ____________________
   d. Forests cover a large part of the region. In an area with forestry, write $\text{= FORESTRY}$. 
   e. Farms in the Northeast Region produce milk, eggs, beef, corn, apples, cranberries, and potatoes. In an area with farming, write $\text{= FARMING}$.

5. Compared with other regions, the Northeast has a high population density. It has many people per square mile.
   a. On your Desk Map, find the Population map and outline the Northeast Region.
   b. What is the population range of most of the region? ____________________ people per square mile.
   c. On the main map, above the region, write $\text{= SOME PEOPLE}$. 
   d. Many people in the region live along the Atlantic Coast. What is the population range along most of the coast? ____________________ people per square mile. 
   e. On the main map, in the Atlantic Ocean, write $\text{= MANY PEOPLE}$.

6. Many of our country’s early colonies were in the Northeast Region.
   a. On your Desk Map, find the Growth of the United States map and outline the Northeast Region. 
   b. How many states in this region once were part of the original Thirteen Colonies? ________
   c. When was the land gained that is in present-day northern Maine? _______________
   d. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union. 
Then, on your Desk Map, on each state in the region, write the year it was admitted to the Union. For smaller states, write the date in the Atlantic Ocean or Canada and draw a line to connect the date to the state.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 28a–28b to complete Activity Sheets 28c–28d.
   a. On the map below, label the nine states.
   b. In the chart, list the capital and another city for each state.

**States, Capitals, and Cities**

- **Vermont**
  - Capital: ______________________
  - Another city: ______________________

- **Massachusetts**
  - Capital: ______________________
  - Another city: ______________________

- **Rhode Island**
  - Capital: ______________________
  - Another city: ______________________

- **Connecticut**
  - Capital: ______________________
  - Another city: ______________________

- **New York**
  - Capital: ______________________
  - Another city: ______________________

- **New Jersey**
  - Capital: ______________________
  - Another city: ______________________

- **Pennsylvania**
  - Capital: ______________________
  - Another city: ______________________

- **Maine**
  - Capital: ______________________
  - Another city: ______________________

- **New Hampshire**
  - Capital: ______________________
  - Another city: ______________________
2. Complete the items below.

   a. Use your Desk Map to help you fill in the lines at the top.

   b. Find Syracuse on the map on pages 50–51 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Syracuse. Write a sentence in her speech balloon.

Cut out Activity Sheets 27c–27d and 28c–28d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**
(Other than urban areas)

________________________________
________________________________

**Population**
Most of the region has ____________ people per square mile.
Along the coast the region has ____________ people per square mile.

**History**
Year each state was admitted to the Union:
Pennsylvania ________ New York
New Jersey ________ Rhode Island
Connecticut ________ Vermont
Massachusetts ________ Maine
New Hampshire

**Taking a Closer Look**
State ____________________________
Natural Region ______________________
Main Land Use ______________________
Rainfall ____________________________
Population __________________________

**Other Characteristics**
East Central Region: Land and Water

Teaching

Using the Atlas

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      • The United States can be divided into many kinds of regions.
      • Today we’re going to look at one of those regions.
2. On the board, add EAST CENTRAL to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      • Which direction is east? Have a student point east.
      • Where do you think the East Central Region might be?
   b. Then say to the class:
      • On page 49 of the Atlas, find the East Central Region.
      • One characteristic these states have in common is location.
      • Which regions are neighbors of the East Central Region? (Northeast, North Central, Central, South Central, Southeast)
3. Have students turn to pages 52–53. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      • Has anyone been to the East Central Region? Where?
      • How was it like these photos? How was it different?

Using the Maps

1. Identify major landforms in the region.
2. Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 29a–29b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 29a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.
Making a Region Booklet

- Locate the East Central Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

1. Hand out Activity Sheets 29c–29d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.

2. Before giving students time to complete their activity sheets, tell them not to cut the activity sheets.

Collect and review Activity Sheets 29a–29d. Save Activity Sheets 29c–29d to use in the Region Booklet in Lesson 30. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 29a–29b
2d. 6,684  
2g. land to the west  
4b. 0 to 500  
4d. approximately 200

Activity Sheet 29c
Location of river will vary.

Activity Sheet 29d

Mountain Ranges: Appalachian Mountains, Blue Ridge Mountains
Plateaus: Cumberland Plateau, Allegheny Plateau
Foothills: Piedmont
Plains: Central Lowland, Atlantic Coastal Plain
Ocean: Atlantic Ocean
Bay: Chesapeake Bay
Lakes: Lake Erie, Lake Michigan
Rivers: Ohio River, Mississippi River

Answers will vary. The speech balloon should mention the mountains, plateaus, and/or rivers in the region.

Explore the Region
For many years the early colonists lived east of the Appalachian Mountains along the Atlantic Coastal Plain. Have students discuss how the major landforms in the region may have made it difficult to settle farther west.

Read More About It
Your students might enjoy reading or listening to these books and others about the East Central Region:
- The Inside-Out Book of Washington, D.C. by Roxie Munro
- Appalachia by Cynthia Rylant
East Central Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the East Central Region. Use pages 52–53 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps

1. The East Central Region is in the center of the eastern United States.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write EAST CENTRAL REGION.
   b. Turn to pages 52–53 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. Mountains cover a large part of the East Central Region.
   a. On the Raised Relief Map, feel the mountains in the region.
   b. On your Desk Map or Raised Relief Map, underline the name Appalachian Mountains with mountain symbols ▲▲▲▲.
   c. The Blue Ridge Mountains are part of the Appalachian Mountain system. Find and underline their name with mountain symbols ▲▲▲▲.
   d. Mt. Mitchell is the highest mountain in the region. What is its elevation? ________________ feet
   e. Outline the mountain peak symbol ▲ on Mt. Mitchell.
   f. The Piedmont refers to foothills of the Appalachian Mountains. Underline Piedmont with hill symbols ▼.
   g. Look at the Raised Relief Map. Which is higher—the Piedmont or land to the west? ________________

3. Hilly and rocky plateaus extend along the mountains. Gently rolling plains extend beyond the plateaus.
   a. On pages 52–53 of the Atlas, use the Major Landforms map to locate two plateaus.
   b. On your Desk Map or Raised Relief Map, underline the names of the plateaus with plateau symbols ▲ 
   c. The Central Lowland covers the north. On your map, draw plains symbols — in Indiana and Ohio.
4. The Atlantic Coastal Plain stretches along much of the eastern coast of the region.
   a. On your map, along the East Coast, underline the name Atlantic Coastal Plain with plains symbols ———.
   b. What is the elevation range of the Atlantic Coastal Plain?
   __________________________ feet
   c. There are several large bays along the Atlantic Coastal Plain. Chesapeake Bay divides the state of Maryland into two parts. On your map, find and outline the bay.
   d. Using the map scale in the legend, about how many miles long is the bay? ____________________ miles
   e. On pages 52–53 of the Atlas, point to the photo of Chesapeake Bay. Read the caption.

5. Several large bodies of water help form boundaries in the region.
   a. The Atlantic Ocean forms the eastern boundary of the region. On your map, underline the words Atlantic Ocean with ocean symbols ▲▲▲▲.
   b. Two of the Great Lakes form part of the northern boundary of the region. Outline these lakes. What are their names?
   __________________________ __________________________
   c. Many other large lakes in the region are formed by dams. In the legend, find the symbol for dam. Draw it here. ________
   d. On your map, find two lakes formed by dams and label them L for lake.

6. Several major rivers flow through this region.
   a. The Ohio River is a key river in the East Central Region. From its source in the Allegheny Plateau to its mouth at the Mississippi River, draw an arrow along the Ohio River.
   b. The Ohio River forms the southern boundary of which states?
   __________________________ __________________________
   c. Which river forms part of the western boundary of this region?
   __________________________
   d. Other rivers flow east from the Appalachian Mountains across the Piedmont and Atlantic Coastal Plain into the Atlantic Ocean. On your map, find a river that follows this route and draw an arrow along it.
Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 29a–29b to complete Activity Sheets 29c–29d. Do not cut the activity sheets.
   
   a. On the map below, draw the mountain and plateau symbols you drew on your Desk Map or Raised Relief Map.
   
   b. Add a river to the map.
2. Complete the items below.
   
a. On the map, color or shade in the East Central Region.

b. Then write the names of landforms and bodies of water in the region.

On Activity Sheet 29c, fill in the Junior Geographer’s speech balloon.
Have him say something about what your map shows.

Location

Major Bodies of Water
Ocean: ____________________________________
Bay: ______________________________________
Lakes: _____________________________________
Rivers: _____________________________________

Major Landforms
Mountain Ranges: _______________________________________
Plateaus: _____________________________________________
Foothills: ____________________________________________
Plains: ______________________________________________

Land and Water
Looking at Regions

Lesson 30

East Central Region: People and Places

Teaching

Using the Atlas

- Identify states in the East Central Region.

1. Review the previous lesson. Write EAST CENTRAL REGION on the board and ask the class:
   - Where is the East Central Region? (in the middle of the eastern part of the country)
   - What are some land and water features in the East Central Region? (Students should mention the mountains, plateaus, bays, Atlantic Ocean, Great Lakes, and rivers.)

2. Have students turn to pages 52–53 of the Junior Geographer Atlas.
   a. On the main map, have them use a finger to outline the East Central Region.
   b. Then ask the class:
      - How many states are in the East Central Region? (9)
      - What are their names? (Indiana, Ohio, West Virginia, Maryland, Delaware, Virginia, North Carolina, Tennessee, Kentucky)
      - Which states border the Great Lakes? (Indiana, Ohio)
      - Which states border the Mississippi River? (Kentucky, Tennessee)
      - Which states border the Atlantic Ocean? (Delaware, Maryland, Virginia, North Carolina)
   c. Have students read the captions and region facts aloud.

Using the Map

- Identify states in the East Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

3. Divide the class into groups. Hand out Activity Sheets 30a–30b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 30a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–7. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Identify states in the East Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 30a–30d, East Central Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 29c–29d
- scissors
- stapler or hole punch
- and yarn

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet
Making a Region Booklet

- Identify states in the East Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 30c–30d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 29c–29d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Answers

Activity Sheets 30a–30b
1b. Indiana, Ohio, Kentucky, Tennessee, West Virginia, Virginia, North Carolina, Maryland, Delaware
2a. 6d. 50–250
3b. Nashville, Tennessee 7b. 5
5b. red 7c. 1783
6b. over 250

Activity Sheet 30c
Check pages 52–53 of the Atlas for answers.

Activity Sheet 30d

- Major Land Uses: farming, forestry
- Population: northern cities: over 250; most of the region: 50–250
- History: 1787 DE, 1788 MD, 1788 VA, 1789 NC, 1792 KY, 1796 TN, 1803 OH, 1816 IN, 1863 WV

Taking a Closer Look
- State: Kentucky
- Natural Region: forest
- Main Land Use: farming
- Rainfall: 40–80 inches, or 2.5 inches or more of rain a month
- Population: over 250 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Lexington area as rainy, densely populated, and used for farming.
East Central Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the East Central Region. Use pages 52–53 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. There are nine states in the East Central Region.
   a. Give your United States Political Desk Map a title. Above the main map, write EAST CENTRAL REGION.
   b. Turn to pages 52–53 of the Atlas. What are the names of the nine states in the region?

   _____________________________  ___________________________
   _____________________________  ___________________________
   _____________________________  ___________________________
   _____________________________  ___________________________
   _____________________________

   c. On your map, outline each state and underline its name.

2. Our national capital is in this region. However, it is not in any state.
   a. In the legend, find the symbol for national capital. Draw it here. ________
   b. On the map, circle the name of our nation’s capital.

3. Every state has a state capital.
   a. On the map, find the capital of each state in the region and outline its symbol ★.
   b. Which state capital is near 36˚N, 87˚W?

   __________________________________

4. This region has several large cities. The two largest cities in the region are also state capitals.
   a. On your map, draw a dot next to the symbols for these state capitals:
      • Indianapolis • Columbus
   b. Outline the symbols for these large cities:
      • Baltimore • Memphis
5. The East Central Region has a wide range of land uses.
   a. On pages 52–53 of the Atlas, find the Major Land Use map.
   b. Urban areas include cities and their suburbs. What color is used to show urban areas? ____________
   c. On your Desk Map, next to an urban area, write \(\text{\#} = \text{URBAN AREA}\).
   d. Farms in the East Central Region produce chicken, milk, beef, soybeans, corn, apples, and tobacco. In an area with farming, write \(\text{\#} = \text{FARMING}\).
   e. Forests cover the mountains and plateaus of the region. In an area with forestry, write \(\text{\#} = \text{FORESTRY}\).

6. Compared with other regions, the East Central Region has a high population density. However, its population is not spread evenly across the region.
   a. On your Desk Map, find the Population map and outline the East Central Region.
   b. Many of the region’s largest cities are in the north. What is their population range? ____________ people per square mile.
   c. On your Desk Map, above the region, write \(\text{\#\#\#} = \text{MANY PEOPLE}\).
   d. In most of the rest of the region, what is the population range? _______________ people per square mile.
   e. Below the region, write \(\text{\#\#} = \text{SOME PEOPLE}\).

7. Much of the land in this region was gained when the United States officially won its independence.
   a. On your Desk Map, find the Growth of the United States map and outline the East Central Region.
   b. How many states in this region were part of the original Thirteen Colonies? _______
   c. The land just west of the Appalachian Mountains was gained by treaty in the year _______________.
   d. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union.
      Then, on your Desk Map, on each state in the region, write the year it was admitted to the Union. For smaller states, draw a line to connect the date to the state.
Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 30a–30b to complete Activity Sheets 30c–30d.
   
   a. On the map below, label the nine states.
   
   b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Virginia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.

   a. Use your Desk Map to help you fill in the lines at the top.

   b. Find Lexington on the map on pages 52–53 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

   Help the Junior Geographer describe Lexington. Write a sentence in her speech balloon.

Cut out Activity Sheets 29c–29d and 30c–30d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**
(Other than urban areas)

________________________________
________________________________

**Population**
The large cities in the north have a population of ____________ people per square mile.
Most of the region has ____________ people per square mile.

**History**
Year each state was admitted to the Union:

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td></td>
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<tr>
<td>Kentucky</td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td></td>
</tr>
<tr>
<td>West Virginia</td>
<td></td>
</tr>
</tbody>
</table>

**Taking a Closer Look**

State ____________________________
Natural Region _______________________
Main Land Use _______________________
Rainfall ____________________________
Population __________________________

Other Characteristics
Looking at Regions

Southeast Region: Land and Water

Teaching

1. Introduce the lesson by writing REGION on the board.
   a. Have students turn to pages 48–49 of the *Junior Geographer Atlas*.
   b. Review the maps and text on those pages. Explain:
      - The United States can be divided into many kinds of regions.
      - Today we’re going to look at one of those regions.

2. On the board, add SOUTHEAST to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      - Which direction is southeast? Have a student point southeast.
      - Where do you think the Southeast Region might be?
   b. Then say to the class:
      - On page 49 of the Atlas, find the Southeast Region.
      - One characteristic these states have in common is location.
      - Which regions are neighbors of the Southeast Region? (East Central, South Central)

3. Have students turn to pages 54–55. Review the maps and photos.
   a. Have students read the photo captions and region facts aloud.
   b. Ask the class:
      - Has anyone been to the Southeast Region? Where?
      - How was it like these photos? How was it different?

Using the Maps

- Identify major landforms in the region.
- Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 31a–31b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 31a. Have students hold up their maps so you can check their outlines of the region.
   b. Give students time to complete steps 2–8. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Locate the Southeast Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 31a–31d, *Southeast Region: Land and Water*
- Raised Relief Maps
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Maps

Day 2: Making a Region Booklet (The booklets will be completed in Lesson 32.)
Making a Region Booklet

- Locate the Southeast Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

1. Hand out Activity Sheets 31c–31d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.

2. Before giving students time to complete their activity sheets, tell them not to cut the activity sheets.

Collect and review Activity Sheets 31a–31d. Save Activity Sheets 31c–31d to use in the Region Booklet in Lesson 32. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 31a–31b
2c. 4,784
3b. mountains
3e. forest
4a. Gulf Coastal Plain, Atlantic Coastal Plain

Activity Sheet 31c

Activity Sheet 31d

Mountain Range: Appalachian Mountains
Plateau: Cumberland Plateau
Foothills: Piedmont
Plains: Gulf Coastal Plain, Atlantic Coastal Plain
Peninsula: Florida
Islands: Florida Keys
Ocean: Atlantic Ocean
Gulf: Gulf of Mexico
Lake: Lake Okeechobee
River: Mississippi River

Answers will vary. The speech balloon should mention the plains, peninsula, ocean, and/or gulf on the map.

Explore the Region
Have your students use the map scale in the legend to measure the distances between land and water features in the Southeast Region.

Expand the Region Booklet
Have students add more pages to their Region Booklets. They might add photos of the region, routes to travel, and/or sites to see.
Southeast Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the Southeast Region. Use pages 54–55 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Using the Maps**

1. The **Southeast Region** is in the southeastern corner of the country.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write **SOUTHEAST REGION**.
   b. Turn to pages 54–55 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. The **Appalachian Mountains** are in the northeast part of the region.
   a. On the Raised Relief Map, feel the mountains.
   b. On your Desk Map or Raised Relief Map, underline the name **Appalachian Mountains** with mountain symbols ▲▲▲▲.
   c. Brasstown Bald is the highest mountain in the region. What is its elevation? __________ feet
   d. Outline the mountain peak symbol ▲ for Brasstown Bald.

3. Hilly and rocky **plateaus** and **foothills** extend along the mountains.
   a. On the Raised Relief Map, on the west side of the mountains, feel the plateau.
   b. Which have higher elevation ranges—the mountains or the plateaus? ________________
   c. On your Desk Map or Raised Relief Map, underline the Cumberland Plateau with this symbol ▯ ▯ ▯ ▯.
   d. The **Piedmont** refers to foothills of the Appalachian Mountains. Underline **Piedmont** with hill symbols □ □ .
   e. Look in the legend of the Desk Map. In which natural region is the Piedmont located?
4. The coastal area has gently rolling **plains**.
   a. On pages 54–55 of the Atlas, use the Major Landforms map to locate two plains. What are the names of the plains?

   __________________________________________________________ ______________

   b. On your map, find and underline the names of the two plains with plains symbols ———.

5. Most of Florida is on a 400-mile-long **peninsula** surrounded by water.
   a. Underline the name **Florida Peninsula** with a dotted line.
   b. Several **capes** are located along the coast of the peninsula. Draw a box around the name of a cape.
   c. Many **islands** are located along Florida’s coast. On your map, find and circle the group of islands at the southern tip of Florida. What is the name of this group of islands?

   __________________________________________________________

6. The **Atlantic Ocean** forms the southern and eastern boundaries of the region.
   a. On your map, underline its name with ocean symbols ———.
   b. The **Gulf of Mexico** is a large body of water that is part of the Atlantic Ocean. Underline its name with ocean symbols ———.
   c. There are several large **bays** along the gulf. On your map, find and underline the names of two bays.

7. **Lake Okeechobee** is the largest natural **lake** in the southeast.
   a. On your map, find and outline Lake Okeechobee.
   b. Some large lakes are formed by **dams**. In the legend, find the symbol for a dam. Draw it here. _______
   c. On your map, find and outline two lakes formed by dams.

8. **Rivers** in the region empty into either the Atlantic Ocean or the Gulf of Mexico.
   a. The **Mississippi River** is the longest river in the United States. Draw an arrow along the river from its source to its mouth.
   b. Find four more rivers and trace them with arrows. Which rivers did you trace?

   __________________________________________________________ ______________
Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 31a–31b to complete Activity Sheets 31c–31d. Do not cut out the activity sheets.

   a. On the map below, draw the plains symbols you drew on your Desk Map or Raised Relief Map. Also, label the peninsula.

   b. Label an ocean and a gulf.
2. Complete the items below.
   
   a. On the map, color or shade in the Southeast Region.
   
   b. Then write the names of landforms and bodies of water in the region.

   On Activity Sheet 31c, fill in the Junior Geographer’s speech balloon. Have her say something about what your map shows.

   **Location**

   **Major Landforms**
   
   Mountain Range: __________________________
   
   Plateau: __________________________
   
   Foothills: __________________________
   
   **Plains:** __________________________
   
   **Major Bodies of Water**
   
   Ocean: __________________________
   
   Gulf: __________________________
   
   Lake: __________________________
   
   River: __________________________
   
   **Land and Water**
Teaching

Using the Atlas

- Identify states in the Southeast Region.
  1. Review the previous lesson. Write SOUTHEAST REGION on the board and ask the class:
     - Where is the Southeast Region? (in the southeastern corner of the country)
     - What are some land and water features in the Southeast Region? (Students should mention the mountains, plateau, plains, peninsula, bays, islands, ocean, lakes, and rivers.)
     a. On the main map, have them use a finger to outline the Southeast Region.
     b. Then ask the class:
        - How many states are in the Southeast Region? (5)
        - What are their names? (Mississippi, Alabama, Georgia, South Carolina, Florida)
        - Which state borders the Mississippi River? (Mississippi)
        - Which states border the Atlantic Ocean? (South Carolina, Georgia, Florida)
        - Which states border the Gulf of Mexico? (Mississippi, Alabama, Florida)
     c. Have students read the captions and region facts aloud.

Using the Map

- Identify states in the Southeast Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

3. Divide the class into groups. Hand out Activity Sheets 32a–32b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 32a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.
Lesson 32

Making a Region Booklet

- Identify states in the Southeast Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 32c–32d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 31c–31d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 32a–32b and the Region Booklets.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 32a–32b
1b. Mississippi, Alabama, Georgia, South Carolina, Florida
2a. ★ 5d. Florida
2c. Jackson, Mississippi 6b. Georgia, South Carolina
2d. Columbia, South Carolina 6c. 1819
4b. red
Activity Sheet 32c
Check pages 54–55 of the Atlas for answers.
Activity Sheet 32d
- Major Land Uses: farming, ranching
- Population: north and south: 50–250; middle: 5–50
- History: 1788 GA, 1788 SC, 1817 MS, 1819 AL, 1845 FL

Taking a Closer Look
- State: Alabama
- Landform: plains
- Main Land Use: ranching
- Rainfall: 40–80 inches, or 3 inches or more of rain a month
- Population: over 250 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Mobile area as rainy, densely populated, and used for ranching.
Southeast Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the Southeast Region. Use pages 54–55 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. There are five states in the Southeast Region.
   a. Give your United States Political Desk Map a title. Above the main map, write SOUTHEAST REGION.
   b. Turn to pages 54–55 of the Atlas. What are the names of the five states in the region?
      ___________________________________  ___________________________________
      ___________________________________
   c. On your map, outline each state and underline its name.

2. Every state has a state capital.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. _______
   b. On the map, find the capital of each state in the region and outline its symbol.
   c. Which capital is near 32˚N, 90˚W?
      ___________________________________
   d. Which capital is near 34˚N, 81˚W?
      ___________________________________

3. Jacksonville and Atlanta are the two largest cities in the Southeast Region.
   a. There are many large cities in Florida. On your map, outline the symbols for these cities:
      • Jacksonville  • Miami  • Tampa
   b. On pages 54–55 of the Atlas, find the photo of Miami and read the caption.
   c. Atlanta is the second largest city in the region and is the capital of Georgia. Draw a dot next to its symbol.
4. The Southeast Region has a wide range of **land uses**.

   
   b. Urban areas include cities and their suburbs. What color is used to show urban areas? __________
   
   c. On your Desk Map, next to a large urban area, write ▲ = **URBAN AREA**.
   
   d. Farms in the Southeast Region produce chicken, beef, eggs, peanuts, tobacco, cotton, and oranges. In an area with farming, write □ = **FARMING**.
   
   e. In the Atlas, point to the photo of cotton. Read the caption.
   
   f. Some of the land along the coasts and inland is used for ranching. On your Desk Map, in an area with ranching, write ▲ = **RANCHING**.

5. Population is spread unevenly throughout the Southeast Region.

   a. On your Desk Map, find the Population map and outline the Southeast Region.
   
   b. The northern and some far southern parts of the region have more people than other parts of the region. On the main map, in northern and southern parts of the region, write ▩ ▩ ▩ = **SOME PEOPLE**.
   
   c. The middle of the region has fewer people. In the middle of the region, write ▩ ▩ ▩ = **FEW PEOPLE**.
   
   d. In this region which state has the largest area with the highest population density? _________________

6. All of the Southeast Region was part of our country by 1819.

   a. On your Desk Map, find the Growth of the United States map and outline the Southeast Region.
   
   b. Which present-day states were part of the original Thirteen Colonies?

   ____________________________  ___________________________

   c. The land in Florida was gained after the Florida Cession of ________________.
   
   d. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union.

   On your Desk Map, on each state in the region, write the year it was admitted to the Union.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 32a–32b to complete Activity Sheets 32c–32d.
   a. On the map below, label the five states.
   b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Carolina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.
   
a. Use your Desk Map to help you fill in the lines at the top.

b. Find Mobile on the map on pages 54–55 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Mobile. Write a sentence in his speech balloon.

Cut out Activity Sheets 31c–31d and 32c–32d. Stack them from longest to shortest. Staple at the top.

Major Land Uses
(Other than urban areas)

________________________________
________________________________

Population
The northern and southern parts of the regions have __________ people per square mile.
The middle part of the region has __________ people per square mile.

History
Year each state was admitted to the Union:

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Georgia</td>
</tr>
<tr>
<td></td>
<td>South Carolina</td>
</tr>
<tr>
<td></td>
<td>Mississippi</td>
</tr>
<tr>
<td></td>
<td>Alabama</td>
</tr>
<tr>
<td></td>
<td>Florida</td>
</tr>
</tbody>
</table>

Taking a Closer Look

State ________________________
Landform ____________________
Main Land Use ____________________
Rainfall ____________________
Population ____________________

Other Characteristics
South Central Region:
Land and Water

Teaching

Using the Atlas

Locate the South Central Region.

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      • The United States can be divided into many kinds of regions.
      • Today we’re going to look at one of those regions.

2. On the board, add SOUTH CENTRAL to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      • Which direction is south? Have a student point south.
      • Where do you think the South Central Region might be?
   b. Then say to the class:
      • On page 49 of the Atlas, find the South Central Region.
      • One characteristic these states have in common is location.
      • Which regions are neighbors of the South Central Region? (Southwest, Central, East Central, Southeast)

3. Have students turn to pages 56–57. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      • Has anyone been to the South Central Region? Where?
      • How was it like these photos? How was it different?

Using the Maps

Identify major landforms in the region.
Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 33a–33b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 33a. Have students hold up their maps so you can check their outlines of the region.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.
Lesson 33

Making a Region Booklet

- Locate the South Central Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

1. Hand out Activity Sheets 33c–33d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.

2. Before giving students time to complete their activity sheets, tell them not to cut the activity sheets.

Collect and review Activity Sheets 33a–33d. Save Activity Sheets 33c–33d to use in the Region Booklet in Lesson 34. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 33a–33b
3c. Ozark Plateau
4b. 2,000 to 5,000
5b. about 1,000

Activity Sheet 33c
Locations of rivers will vary.

Activity Sheet 33d
- Mountain Peak: Guadalupe Peak
- Plateaus: Edwards Plateau, Ozark Plateau
- Plains: Great Plains, Llano Estacado, Gulf Coastal Plain
- Island: Padre Island
- Delta: Delta of the Mississippi River
- Gulf: Gulf of Mexico
- Bays: Galveston Bay, Atchafalaya Bay
- Rivers: Mississippi, Rio Grande, Red, Arkansas, Pecos

Answers will vary. The speech balloon should mention the plains, plateaus, and/or rivers on the map.
Exploring Where & Why
Map and Globe Skills

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South Central Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the South Central Region. Use pages 56–57 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps

1. The South Central Region is located in the southern part of the center of the United States.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write SOUTH CENTRAL REGION.
   b. Turn to pages 56–57 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. Mountains stretch along the western edge of the region.
   a. On your map, in the Davis Mountains in southwestern Texas, draw mountain symbols .
   b. Guadalupe Peak is the highest peak in the South Central Region. Outline its mountain peak symbol ▲.

3. There are two major plateaus in the South Central Region.
   a. On pages 56–57 of the Atlas, use the Major Landforms map to locate these plateaus.
   b. On your Desk Map or Raised Relief Map, underline the names of the plateaus with plateau symbols .
   c. Look at the Raised Relief Map. Which is higher—the Ozark Plateau or the land surrounding it?

4. Gently rolling plains stretch across the South Central Region.
   a. The Great Plains is the largest landform in the South Central Region. On your map, on both sides of the Great Plains label, south to the United States–Mexico boundary, draw plains symbols .
   b. Look at the Raised Relief Map. What is the elevation range of the Great Plains in the South Central Region? __________________ feet
c. The **Llano Estacado** is a high, treeless plain. On your map, underline its name with plains symbols — — —.

d. The **Gulf Coastal Plain** stretches along the coast of the Gulf of Mexico. Underline its name with plains symbols — — —.

5. This region has hundreds of miles of coastline along the **gulf**.
   a. The **Gulf of Mexico** is part of the Atlantic Ocean. Underline the name of this gulf with ocean symbols  △△△.
   b. Use the scale in the legend to measure the width of the gulf. How many miles is it from the southern tip of Texas to the southern tip of Florida? ____________ miles
   c. **Bays** along the coast open into the Gulf of Mexico. What are the names of two bays located along the Gulf of Mexico? _______________  _______________
   d. Padre Island is a large sandy barrier **island** along the coast of Texas. Draw a dotted line along Padre Island.

6. Many major **rivers** flow through the region into the Gulf of Mexico.
   a. The **Rio Grande** forms the boundary between Texas and Mexico. From its source in the Rocky Mountains to its mouth at the Gulf of Mexico, draw an arrow along this river.
   b. The **Mississippi River** is the longest river in the United States. From its source in Minnesota to its mouth at the Gulf of Mexico, draw an arrow along this river.
   c. Silt from the Mississippi River forms a land area known as a **delta**. On pages 56–57 of the Atlas, point to the photo of the Delta of the Mississippi River. Read the caption.
   d. Now, on your map, circle the Mississippi River Delta.
   e. Then draw an arrow along each of the following rivers.
      • Red River
      • Arkansas River
      • Pecos River
   f. Several **lakes** in the region are formed by dams along rivers. In the legend, find the symbol for a dam. Draw it here. ________
   g. On your map, find and outline four lakes formed by dams.
   h. Which lakes did you outline?  _______________  _______________
      _______________  _______________
Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 33a–33b to complete Activity Sheets 33c–33d. Do not cut the activity sheets.
   a. On the map below, draw the plains symbols and plateau symbols you drew on your Desk Map or Raised Relief Map.
   b. Add two rivers to the map.
2. Complete the items below.
   
   a. On the map, color or shade in the South Central Region.
   
   b. Then write the names of landforms and bodies of water in the region.

   On Activity Sheet 33c, fill in the Junior Geographer’s speech balloon. Have him say something about what your map shows.

**Location**

Major Landforms

- Mountain Peak:
  - ______________________

- Plateaus:
  - ______________________
  - ______________________
  - ______________________

- Plains:
  - ______________________
  - ______________________

Major Bodies of Water

- Gulf:
  - ______________________

- Bays:
  - ______________________
  - ______________________
  - ______________________

- Rivers:
  - ______________________
  - ______________________
  - ______________________
  - ______________________
  - ______________________

- Island:
  - ______________________

- Delta:
  - ______________________

**Land and Water**
Exploring Where & Why
Map and Globe Skills

Looking at Regions

Lesson

South Central Region: People and Places

Teaching

Using the Atlas

Identify states in the South Central Region.

1. Review the previous lesson. Write SOUTH CENTRAL REGION on the board and ask the class:
   - Where is the South Central Region? (in the southern part of the center of the country)
   - What are some land and water features in the South Central Region? (Students should mention the plains, plateaus, bays, mountains, Gulf of Mexico, and rivers.)

2. Have students turn to pages 56–57 of the Junior Geographer Atlas.
   a. On the main map, have them use a finger to outline the South Central Region.
   b. Then ask the class:
      - How many states are in the South Central Region? (4)
      - What are their names? (Texas, Oklahoma, Arkansas, Louisiana)
      - Which states border the Mississippi River? (Arkansas, Louisiana)
      - Which states border the Gulf of Mexico? (Texas, Louisiana)
   c. Have students read the captions and region facts aloud.

Using the Map

Identify states in the South Central Region.

Identify major cities in the region.

Identify other characteristics of the region.

3. Divide the class into groups. Hand out Activity Sheets 34a–34b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 34a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives
Students will be able to:
- Identify states in the South Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 34a–34d, South Central Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 33c–33d
- scissors
- stapler or hole punch and yarn

Here’s a Tip!
Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet

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Exploring Where & Why

Map and Globe Skills

Using the Map Scale

Have students use the map scale to measure distances between cities. For example, have them measure the distance between Oklahoma City, Oklahoma, and New Orleans, Louisiana.

Using Time Zones

Have students use the Time Zones map to determine the region’s time zones.

Making a Region Booklet

- Identify states in the South Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 34c–34d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 33c–33d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 34a–34b and the Region Booklets.

Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 34a–34b

1b. Texas, Oklahoma, Arkansas, Louisiana
2a. ★ 5d. over 250
2c. Little Rock, Arkansas 6b. Louisiana Purchase
4c. green 6c. Texas
5b. 5 to 50

Activity Sheet 34c

Check pages 56–57 of the Atlas for answers.

Activity Sheet 34d

- Major Land Uses: farming, ranching
- Population: most of the region: 5–50; large cities: over 250
- History: 1812 LA, 1836 AR, 1845 TX, 1907 OK

Taking a Closer Look

- State: Louisiana
- Landform: plains
- Main Land Use: farming
- Rainfall: 40–80 inches, or more than 2.5 inches of rain a month
- Population: 50–250 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe Shreveport as rainy all year, fairly flat, inhabited by some people, and used for farming.
South Central Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the South Central Region. Use pages 56–57 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. There are four **states** in the South Central Region.
   a. Give your United States Political Desk Map a title. Above the main map, write **SOUTH CENTRAL REGION**.
   b. Turn to pages 56–57 of the Atlas. What are the names of the four states in the region?
      ___________________________  ___________________________
      ___________________________  ___________________________
   c. On your map, outline each state and underline its name.

2. Every state has a **state capital**.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. ________
   b. On the map, find the capital of each state in the region and outline its symbol.
   c. Which capital is near 35°N, 92°W?
      ___________________________

3. There are several large **cities** in the South Central Region.
   a. The largest cities in the region are located in Texas. On your map, outline the symbols for these cities:
      • Houston
      • Dallas
      • San Antonio
      • El Paso
      • Fort Worth
   b. Other states in the region also have large cities. On pages 56–57 of the Atlas, point to the photo of New Orleans and read the caption.
   c. On your map, outline the symbol for New Orleans.
   d. Austin and Oklahoma City are both large cities and state capitals. Draw a dot next to their symbols.
4. The South Central Region has a wide range of land uses.
   b. Urban areas include cities and their suburbs. On the main map, next to an urban area, write □ = URBAN AREA.
   c. Farms in the South Central Region produce poultry, beef, cotton, and corn. What color is used to show farming? __________
   d. In an area with farming, write ⛔ = FARMING.
   e. Part of the region is used for ranching. In an area with ranching, write ⛴ = RANCHING.

5. Some parts of the region have very few people, while other parts have many people.
   a. On your Desk Map, find the Population map and outline the South Central Region.
   b. In most of the region, what is the population range? ___________ people per square mile.
   c. On the main map, in the region, write ⛵ = FEW PEOPLE.
   d. Many of the region’s highest population densities are in large cities. Compare the cities you marked on the main map with the population map. What is the population range of the Dallas–Fort Worth area? ___________ people per square mile
   e. Next to this urban area, write ⛵ = MANY PEOPLE.

6. Most of the land in the South Central Region once belonged to either Spain or France.
   a. On your Desk Map, find the Growth of the United States map and outline the South Central Region.
   b. Which land gain of 1803 included much of the South Central Region? ____________________________
   c. Which present-day state became part of the United States after 1845? ______________________
   d. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union.
      Then, on the main map, on each state in the region, write the year it was admitted to the Union.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 34a–34b to complete Activity Sheets 34c–34d.

   a. On the map below, label the four states.

   b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.
   
   a. Use your Desk Map to help you fill in the lines at the top.
   b. Find Shreveport on the map on pages 56–57 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Shreveport. Write a sentence in her speech balloon.

Cut out Activity Sheets 33c–33d and 34c–34d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**
(Other than urban areas)

________________________________
________________________________

**Population**
Most of the region has ____________ people per square mile.

Large cities in the region have ____________ people per square mile.

**History**
Year each state was admitted to the Union:

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>_____</td>
</tr>
<tr>
<td>Arkansas</td>
<td>_____</td>
</tr>
<tr>
<td>Texas</td>
<td>_____</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>_____</td>
</tr>
</tbody>
</table>

**Taking a Closer Look**

State ________________________________

Landform ________________________________

Main Land Use ________________________________

Rainfall ________________________________

Population ________________________________

**Other Characteristics**
Central Region: Land and Water

Teaching

Using the Atlas

Locate the Central Region.
1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      - The United States can be divided into many kinds of regions.
      - Today we’re going to look at one of those regions.
2. On the board, add CENTRAL to the word REGION.
   a. On a wall map or Physical Desk Map, point to the United States and ask:
      - Where is the center of the map?
      - Where do you think the Central Region might be?
   b. Then say to the class:
      - On page 49 of the Atlas, find the Central Region.
      - One characteristic these states have in common is location.
      - Which regions are neighbors of the Central Region? (North Central, East Central, South Central, Southwest, Northwest)
3. Have students turn to pages 58–59. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      - Has anyone been to the Central Region? Where?
      - How was it like these photos? How was it different?

Using the Maps

Identify major landforms in the region.
Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 35a–35b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 35a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–8. Walk around the room to answer questions and keep students on task.

Objectives
Students will be able to:
- Locate the Central Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 35a–35d, Central Region: Land and Water
- Raised Relief Maps
- Physical Desk Maps
- Map Markers

Here’s a Tip!
Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Maps
Day 2: Making a Region Booklet (The booklets will be completed in Lesson 36.)
Graphing Distances
Have students use the scale on their maps to measure the width of each of the five states in the Central Region (from east to west). Then have them graph those states from largest to smallest.

Read More About It
Your students might enjoy reading or listening to these books and others about the Central Region:
- *Little House on the Prairie* by Laura Ingalls Wilder
- *Sarah, Plain and Tall* by Patricia MacLachlan
- *Tom Sawyer* by Mark Twain

Making a Region Booklet

- **Locate the Central Region.**
- **Identify major landforms in the region.**
- **Identify major bodies of water in the region.**

1. Hand out Activity Sheets 35c–35d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.
2. Before giving students time to complete their activity sheets, tell them *not* to cut the activity sheets.

**Collect and review Activity Sheets 35a–35d. Save Activity Sheets 35c–35d to use in the Region Booklet in Lesson 36. Clean and collect materials, using your own procedure or one suggested on page xi.**

Answers

**Activity Sheets 35a–35b**

2c. grass  6d. Illinois
4b. 1,000–2,000  6f. Answers will vary.
4d. 40 to 80  7b. Iowa, Missouri, Illinois
5b. Flint Hills, Sand Hills  8d. Answers will vary.
6b. Lake Michigan

**Activity Sheet 35c**

Locations of rivers will vary.

**Activity Sheet 35d**

- **Plains:** Great Plains, Central Lowland
- **Plateau:** Ozark Plateau
- **Hills:** Flint Hills, Sand Hills
- **Lake:** Lake Michigan
- **Rivers:** Mississippi, Missouri, Arkansas, Des Moines, Platte

Answers will vary. The speech balloon should mention the plains and/or rivers on the map.
Central Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the Central Region. Use pages 58–59 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps

1. The Central Region is located in the center of the United States.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write CENTRAL REGION.
   b. Turn to pages 58–59 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. The Great Plains is the largest landform in the Central Region.
   b. On your map, in the western half of the region, draw plains symbols .
   c. Look at the Desk Map, in the legend. What is the natural region of the Great Plains? _______________

3. The Central Lowland is also a plain. This area is gently rolling and has grass, forest, and rivers.
   b. On your map, in the eastern half of the region, draw plains symbols .

4. The Ozark Plateau is a large elevated area of land.
   a. On your map, underline the words Ozark Plateau with a plateau symbol
   b. Look on the Raised Relief Map. What is the elevation range of the Ozark Plateau? _______________ feet
   c. On the Annual Rainfall map, draw a dot where the Ozark Plateau is located.
   d. What is the annual rainfall on the Ozark Plateau?
      _______________ inches
5. Many **hills** are located throughout the Great Plains.
   b. Which hills are labeled on the map?
      __________________________  __________________________
   c. On your map, draw hill symbols ⬤ in those areas.

6. One of the **Great Lakes** borders the region.
   a. On pages 58–59 of the Atlas, find the photo of the Great Lake near Chicago. Also read the caption.
   b. Look at the map. What is the name of this Great Lake?
      __________________________
   c. On your map, outline that lake.
   d. Which Central Region state borders this lake? ____________
   e. Find and outline two other lakes in the Central Region.
   f. Which lakes did you outline?
      __________________________  __________________________

7. The **Mississippi River** is the longest river in the United States.
   a. From its source in Minnesota to its mouth at the Gulf of Mexico, draw an arrow along the Mississippi River.
   b. The Mississippi River forms part of the boundaries of three Central Region states. Which three?
      __________________________  __________________________  __________________________

8. Many other **rivers** flow through the Central Region before flowing into the Mississippi River.
   a. Draw an arrow along each of the following rivers:
      • Missouri River  • Arkansas River
      • Des Moines River
   b. The Platte River flows from the Rocky Mountains to the Missouri River. Draw an arrow along the Platte River.
   c. Draw arrows along two other rivers.
   d. Which rivers did you trace?
      __________________________  __________________________
Central Region: Land and Water

Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 35a–35b to complete Activity Sheets 35c–35d. Do not cut the activity sheets.
   
a. On the map below, draw the plains symbols you drew on your Desk Map or Raised Relief Map.
   
b. Add two rivers to the map.
2. Complete the items below.
   a. On the map, color or shade in the Central Region.
   b. Then write the names of landforms and bodies of water in the region.
   
   On Activity Sheet 35c, fill in the Junior Geographer’s speech balloon. Have her say something about what your map shows.

**Location**

**Major Bodies of Water**

Lake:

Rivers:

**Major Landforms**

Plains:

Plateau:

Hills:

**Land and Water**
Central Region: People and Places

Teaching

Using the Atlas

- **Identify states in the Central Region.**

  1. Review the previous lesson. Write **CENTRAL REGION** on the board and ask the class:
     - Where is the Central Region?
     - What are some land and water features in the Central Region? (Students should mention the Great Plains, Central Lowland, Ozark Plateau, and Mississippi and Missouri Rivers.)

  2. Have students turn to pages 58–59 of the *Junior Geographer Atlas*.
     a. On the main map, have them use a finger to outline the Central Region.
     b. Then ask the class:
        - How many states are in the Central Region? (5)
        - What are their names? (Nebraska, Iowa, Illinois, Missouri, Kansas)
        - Which state borders one of the Great Lakes? (Illinois)
        - Which states border the Mississippi River? (Iowa, Missouri, Illinois)
     c. Have students read the captions and region facts aloud.

Using the Map

- **Identify states in the Central Region.**
- **Identify major cities in the region.**
- **Identify other characteristics of the region.**

  3. Divide the class into groups. Hand out Activity Sheets 36a–36b, Political Desk Maps, and Map Markers.
     a. As a class, complete step 1 on Activity Sheet 36a. Have students hold up their maps so you can check the outlines of the states.
     b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- **Identify states in the Central Region.**
- **Identify major cities in the region.**
- **Identify other characteristics of the region.**

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 36a–36d, *Central Region: People and Places*
- Political Desk Maps
- Map Markers
- completed Activity Sheets 35c–35d
- scissors
- stapler or hole punch and yarn

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet
Exploring Where & Why
Map and Globe Skills

Lesson 36

Measuring Distance

Have students use the map scale to measure the distance between state capitals.

Time Zones

Have students use the Time Zones map to determine the region’s time zones.

Making a Region Booklet

- Identify states in the Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 36c–36d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 35c–35d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 36a–36b and the Region Booklets.

Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 36a–36b
1b. Iowa, Illinois, Missouri, Kansas, Nebraska
2a. ★
2c. Springfield, Illinois
2d. Lincoln, Nebraska
4d. farming
5b. Nebraska, Kansas
5d. over 250
6b. Illinois
6c. Louisiana Purchase

Activity Sheet 36c
Check pages 58–59 of the Atlas for answers.

Activity Sheet 36d

- Major Land Uses: farming, ranching
- Population: far west: 0–5; northeast: over 250
- History: 1818 IL, 1821 MO, 1846 IA, 1861 KS, 1867 NE

Taking a Closer Look

- State: Kansas
- Natural Region: grass
- Main Land Use: farming
- Rainfall: 20 to 40 inches, or dry winters and wetter summers
- Population: over 250 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Wichita area as moderately moist, densely populated, and used for farming.
Central Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the Central Region. Use pages 58–59 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. There are five states in the Central Region.
   a. Give your United States Political Desk Map a title. Above the main map, write CENTRAL REGION.
   b. Turn to pages 58–59 of the Atlas. What are the names of the five states in the region?
      ___________________________  ___________________________
      ___________________________  ___________________________
      ___________________________
   c. On your map, outline each state and underline its name.

2. Every state has a state capital.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. __________
   b. On the map, find the capital of each state in the region and outline its symbol.
   c. Which state capital is near 40°N, 90°W?
      ___________________________
   d. Which state capital is near 41°N, 97°W?
      ___________________________

3. Chicago and Kansas City are the two largest cities in the Central Region.
   a. Chicago, the largest city in the region, is also the third largest city in the United States. On pages 58–59 of the Atlas, point to the photo of Chicago and read the caption.
   b. On your map, outline the city symbol for Chicago.
   c. Kansas City is the largest city in Missouri. Outline its city symbol.
4. The Central Region has two main **land uses**.
   a. On pages 58–59 of the Atlas, point to the photo of a farming area and read its caption.
   b. Farms in the Central Region produce milk, butter, cheese, corn, soybeans, and wheat. On your Desk Map, in an area with farming, write = FARMING.
   c. Drier parts of the region are used for ranching. In an area with ranching, write = RANCHING.
   d. In the Central Region, is more land used for farming or for ranching? _________________________
   e. Urban areas include cities and their suburbs. Next to an urban area, write = URBAN AREA.

5. The Central Region has a wide range of **population** densities. Some areas have very few people, and other areas have many people.
   a. Find the Population map and outline the Central Region.
   b. Which Central Region states have areas with 0–5 people per square mile? ________________________
   c. On the main map, in an area with 0–5 people per square mile, write = ALMOST NO PEOPLE.
   d. In the northeast corner of the region, along Lake Michigan, what is the population range? ___________ people per square mile.
   e. On the main map, in Lake Michigan, write = MANY PEOPLE.

6. Most of the Central Region became part of the United States about 200 years ago.
   a. Find the Growth of United States map and outline the Central Region.
   b. The land gained by treaty in 1783 included which present-day Central Region state? __________________
   c. Which land was gained in 1803? __________________
   d. Now turn to the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union.
   Then, on the main map, on each state in the region, write the year it was admitted to the Union.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 36a–36b to complete Activity Sheets 36c–36d.
   
   a. On the map below, label the five states.
   
   b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.
   a. Use your Desk Map to help you fill in the lines at the top.
   b. Find Wichita on the map on pages 58–59 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Wichita. Write a sentence in his speech balloon.

Cut out Activity Sheets 35c–35d and 36c–36d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**
(others than urban areas)

________________________________
________________________________

**Population**
The far western section of the region has __________ people per square mile.
The northeast corner of the region has __________ people per square mile.

**History**
Year each state was admitted to the Union:

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>_____</td>
</tr>
<tr>
<td>Missouri</td>
<td>_____</td>
</tr>
<tr>
<td>Iowa</td>
<td>_____</td>
</tr>
<tr>
<td>Kansas</td>
<td>_____</td>
</tr>
<tr>
<td>Nebraska</td>
<td>_____</td>
</tr>
</tbody>
</table>

**Taking a Closer Look**

<table>
<thead>
<tr>
<th>State</th>
<th>Natural Region</th>
<th>Main Land Use</th>
<th>Rainfall</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Characteristics**
Looking at Regions

North Central Region: Land and Water

Teaching

Using the Atlas

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      • The United States can be divided into many kinds of regions.
      • Today we’re going to look at one of those regions.

2. On the board, add NORTH CENTRAL to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      • Which direction is north? Have a student point north.
      • Where do you think the North Central Region might be?
   b. Then say to the class:
      • On page 49 of the Atlas, find the North Central Region.
      • One characteristic these states have in common is location.
      • Which regions are neighbors of the North Central Region? (Northwest, Central, East Central)

3. Have students turn to pages 60–61. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      • Has anyone been to the North Central Region? Where?
      • How was it like these photos? How was it different?

Using the Maps

1. Identify major landforms in the region.
2. Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 37a–37b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 37a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:

- Locate the North Central Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 37a–37d, North Central Region: Land and Water
- Raised Relief Maps
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Maps

Day 2: Making a Region Booklet (The booklets will be completed in Lesson 38.)
Making a Region Booklet

- Locate the North Central Region.
- Identify major landforms in the region.
- Identify major bodies of water in the region.

1. Hand out Activity Sheets 37c–37d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.

2. Before giving students time to complete their activity sheets, tell them not to cut the activity sheets.

Collect and review Activity Sheets 37a–37d. Save Activity Sheets 37c–37d to use in the Region Booklet in Lesson 38.

Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 37a–37b

2c. higher in the west 6b. Wisconsin, Minnesota
3b. 2,000–10,000 6d. North Dakota, South Dakota
4a. Michigan
5b. Lake Superior, Lake Huron, Lake Michigan, Lake Erie

Activity Sheet 37c

Location of river will vary.

Activity Sheet 37d

- Plains: Great Plains, Central Lowland
- Mountains: Black Hills
- Peninsulas: Upper Peninsula, Lower Peninsula
- Lakes: Lake Superior, Lake Michigan, Lake Huron, Lake Erie
- Rivers: Mississippi River, Missouri River, Red River
- National Monument: Mount Rushmore

Answers will vary. The speech balloon should mention the plains in the region, the Great Lakes, and/or rivers.
North Central Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the North Central Region. Use pages 60–61 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps

1. The North Central Region is in the northern part of the center of the country.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write North Central Region.
   b. Turn to pages 60–61 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. The Great Plains are the largest landform in the North Central Region. They are flat or gently rolling. They extend westward for hundreds of miles in this region.
   a. On the Major Landforms map in the Atlas, use your finger to circle the Great Plains.
   b. The Great Plains begin roughly at the Missouri River and extend west to the Rocky Mountains. On your map, throughout this region, draw plains symbols.
   c. On the Raised Relief Map, look at the elevation of the Great Plains. How does it change? (Circle one.)
      Higher in the east  Higher in the west  Stays the same
   d. The Central Lowland extends across southern Minnesota and Wisconsin. On your map, across the southern half of these states, draw plains symbols.

3. The Black Hills are actually low mountains. They are named for the darkness of their thick pine forests.
   a. On your map, underline the words Black Hills with small mountain symbols.
   b. Look on the Raised Relief Map. What is the elevation range of the Black Hills?
      ___________________________ feet
c. On pages 60–61 of the Atlas, point to the picture of Mount Rushmore. Then read the caption.

d. **Mount Rushmore** is located in the Black Hills. On your map, near the Black Hills, write ▲ MT. RUSHMORE.

4. A **peninsula** is an area of land almost completely surrounded by water.

   a. Which North Central state is made up of two peninsulas?

   ______________________________________

   b. On your map, outline this state.

   c. Underline the words *Upper Peninsula* and *Lower Peninsula*.

5. The **Great Lakes** form part of the most important inland waterway in North America.

   a. On pages 60–61 of the Atlas, point to the photo of the Great Lakes. Read the caption.

   b. Which Great Lakes border the North Central Region?

   ______________________________________  ______________________________________

   ______________________________________  ______________________________________

   c. Outline these four lakes.

   d. North of the Great Lakes, write **GREAT LAKES**.

6. Several **rivers** provide energy, transportation, and food for the region.

   a. The **Mississippi River** is the longest river in the United States. From its source in Minnesota to its mouth at the Gulf of Mexico, draw an arrow.

   b. The Mississippi River forms boundaries of many states. Which North Central states are along the Mississippi River?

   ______________________________________  ______________________________________

   c. The **Missouri River** is the second longest river in the United States. On your map, from its source in the Rocky Mountains to its mouth at the Mississippi River, draw an arrow along the Missouri River.

   d. Through which North Central states does the Missouri River flow?

   ______________________________________  ______________________________________

   e. The **Red River** flows north into Canada. Draw an arrow along the Red River.

   f. Draw arrows along two other rivers in the region.
Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 37a–37b to complete Activity Sheets 37c–37d. Do not cut out the activity sheets.

   a. On the map below, draw the plains symbols you drew on your Desk Map or Raised Relief Map.

   b. Label the four Great Lakes. Add a river to the map.
2. Complete the items below.
   
   a. On the map, color or shade in the North Central Region.
   b. Then write the names of landforms and bodies of water in the region.

   On Activity Sheet 37c, fill in the Junior Geographer’s speech balloon. Have her say something about what your map shows.

   **Location**

   **Major Landforms**
   Plains: __________________________________________________________
   __________________________________________________________
   Mountains: ______________________________________________________
   Peninsulas: ______________________________________________________

   **Major Bodies of Water**
   Lakes: __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   Rivers: __________________________________________________________
   __________________________________________________________
   __________________________________________________________

   **National Monument:** __________________________________________

   **Land and Water**

   **SAMPLE** for Review Only

   **SAMPLE** for Review Only

   **SAMPLE** for Review Only

   **SAMPLE** for Review Only
North Central Region: People and Places

Teaching

Using the Atlas

Identify states in the North Central Region.

1. Review the previous lesson. Write NORTH CENTRAL REGION on the board and ask the class:
   - Where is the North Central Region? (in the northern part of the center of the country)
   - What are some land and water features in the North Central Region? (Students should mention the Great Lakes, Great Plains, and the Mississippi and Missouri Rivers.)

2. Have students turn to pages 60–61 of the Junior Geographer Atlas.
   a. On the main map, have them use a finger to outline the North Central Region.
   b. Then ask the class:
      - How many states are in the North Central Region? (5)
      - What are their names? (North Dakota, South Dakota, Minnesota, Wisconsin, Michigan)
      - Which states border Canada? (North Dakota, Minnesota, Michigan)
      - Which states border the Great Lakes? (Minnesota, Wisconsin, Michigan)
   c. Have students read the captions and region facts aloud.

Using the Map

Identify states in the North Central Region.
Identify major cities in the region.
Identify other characteristics of the region.

3. Divide the class into groups. Hand out Activity Sheets 38a–38b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 38a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives
Students will be able to:
- Identify states in the North Central Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials
- The Nystrom Junior Geographer Atlases
- Activity Sheets 38a–38d, North Central Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 37c–37d
- scissors
- stapler or hole punch and yarn

Here’s a Tip!
Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet
Measuring Distance
Have students find their home town or city on the main map. Use the scale to measure the distances between the state capitals of the North Central Region and their town or city.

Time Zones
Have students use the Time Zones map to determine the following times. If it is noon in Detroit, Michigan, what time is it in Minneapolis, Minnesota? in Rapid City, South Dakota? in Chicago, Illinois?

Making a Region Booklet

1. Hand out Activity Sheets 38c–38d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 37c–37d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 38a–38b and the Region Booklets.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 38a–38b
1b. North Dakota, South Dakota, Minnesota, Wisconsin, Michigan
2a. ★
   5d. over 250
2c. Pierre, South Dakota
   6b. Louisiana Purchase
2d. Lansing, Michigan
   6c. North Dakota, South Dakota, Minnesota
5b. 0–5

Activity Sheet 38c
Check pages 60–61 of the Atlas for answers.

Activity Sheet 38d

Major Land Uses: ranching, farming, forestry
Population: western: 0–5; eastern cities: over 250
History: 1837 MI, 1848 WI, 1858 MN, 1889 ND, 1889 SD

Taking a Closer Look
State: South Dakota
Landform: plains
Main Land Use: farming
Rainfall: 20 to 40 inches, or dry winters and rainy summers
Population: 5–50 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Sioux Falls area as fairly flat, sparsely populated, rainy in summer and dry in winter, and used for farming.
North Central Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the North Central Region. Use pages 60–61 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Using the Map

1. There are five states in the North Central Region.
   a. Give your United States Political Desk Map a title. Above the main map, write **NORTH CENTRAL REGION**.
   b. Turn to pages 60–61 of the Atlas. What are the names of the five states in the region?

   __________________________________________________________

   ___________________________  ___________________________

   ___________________________

   c. On your map, outline each state. Then underline its name.

2. Every state has a state capital.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. _______
   b. On the map, find the capital of each state in the region. Outline its symbol.
   c. Which state capital is near 45°N, 100°W?

   __________________________________________________________

   d. Which state capital is near 43°N, 85°W?

   __________________________________________________________

3. Detroit and Milwaukee are the two largest cities in the North Central Region.
   a. **Detroit** is the largest city in the region. On your map, outline its city symbol.
   b. **Milwaukee** is the largest city in Wisconsin. On your map, outline its city symbol.

4. The North Central Region has a wide range of land uses.
   a. On pages 60–61 of the Atlas, find the Major Land Use map.
b. Urban areas include cities and their suburbs. On your Desk Map, next to an urban area, write $\text{🏠} = \text{URBAN AREA}$.

c. Farms in the North Central Region produce milk, butter, cheese, corn, and wheat. In an area with farming, write $\text{🌾} = \text{FARMING}$.

d. In parts of the region, forestry is important. In an area with forestry, write $\text{🌲} = \text{FORESTRY}$.

e. Drier parts of the region are used for ranching. In an area with ranching, write $\text{牪} = \text{RANCHING}$.

5. The North Central Region has a wide range of population densities. Some areas have very few people, and other areas have many people.

a. Find the Population map and outline the North Central Region.

b. In the far western part of the region, what is the population range? $\text{______________ people per square mile}$.

c. On the main map, west of the region, write $\text{♀} = \text{ALMOST NO PEOPLE}$.

d. What is the population range of major cities along the Great Lakes in the eastern part of the region? $\text{______________ people per square mile}$.

e. On the main map, east of the region, write $\text{♀♀♀♀♀} = \text{MANY PEOPLE}$.

6. Land in the North Central Region was gained at three different times in our country’s history.

a. Find the Growth of the United States map and outline the North Central Region.

b. What was the land gain of 1803 called?

________________________________________________________________________

c. Which present-day states were expanded by the treaty of the Red River Basin?

________________________________________________________________________

________________________________________________________________________

d. Now look at the State Facts chart on page 78–81 of the Atlas. Find the column Admitted to Union.

Then, on your Desk Map, on each state in the region, write the year it was admitted to the Union.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 38a–38b to complete Activity Sheets 38c–38d.
   
   a. On the map below, label the five states.
   
   b. In the chart, list the capital and another city for each state.

States, Capitals, and Cities

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Complete the items below.

   a. Use your Desk Map to help you fill in the lines at the top.

   b. Find Sioux Falls on the map on pages 60–61 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Sioux Falls. Write a sentence in his speech balloon.

Cut out Activity Sheets 37a–37d and 38c–38d. Stack them from longest to shortest. Staple at the top.

**Looking at Regions**

Name ________________________________

**History**

Year each state was admitted to the Union:

- Michigan
- Wisconsin
- Minnesota
- North Dakota
- South Dakota

**Major Land Uses**

(Other than urban areas)

________________________________
________________________________
________________________________

**Population**

The western part of the region has ___________ people per square mile.
Large eastern cities in the region have ___________ people per square mile.

**Taking a Closer Look**

State _____________________________

Landform __________________________

Main Land Use _____________________

Rainfall ___________________________

Population _________________________

**Other Characteristics**
Looking at Regions

Northwest Region: Land and Water

Teaching

Using the Atlas

Locate the Northwest Region.

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      • The United States can be divided into many kinds of regions.
      • Today we’re going to look at one of those regions.

2. On the board, add NORTHWEST to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      • Which direction is northwest? Have a student point northwest.
      • Where do you think the Northwest Region might be?
   b. Then say to the class:
      • On page 49 of the Atlas, find the Northwest Region
      • One characteristic these states have in common is location.
      • Which regions are neighbors of the Northwest Region? (North Central, Central, Southwest)

3. Have students turn to pages 62–63. Review the map and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      • Has anyone been to the Northwest Region? Where?
      • How was it like these photos? How was it different?

Using the Maps

Identify major landforms in the region.
Identify major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 39a–39b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 39a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–8. Walk around the room to answer questions and keep students on task.

Objectives
Students will be able to:
• Locate the Northwest Region.
• Identify major landforms in the region.
• Identify major bodies of water in the region.

Materials
• The Nystrom Junior Geographer Atlases
• Activity Sheets 39a–39d, Northwest Region: Land and Water
• Raised Relief Maps
• Physical Desk Maps
• Map Markers

Here’s a Tip!
Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Maps
Day 2: Making a Region Booklet (The booklets will be completed in Lesson 40.)
Lesson 39

Making a Region Booklet

Tour National Parks
Have students use the map on pages 62–63 of the Atlas to locate the seven national parks in the region. On the Desk Map, students should then draw a route to see all seven parks.

Read More About It
Your students might enjoy reading or listening to this book and others about the Northwest Region:
• Our Only May Amelia by Jennifer Holm

Answers

Activity Sheets 39a–39b
2d. 14,410
4b. 2,000–5,000
8d. Answers may include: Olympic, North Cascades, Mt. Rainier, Crater Lake, Glacier, Yellowstone, Grand Teton

Activity Sheet 39c
Location of rivers will vary.

Activity Sheet 39d

Mountain Ranges: Olympic Mountains, Coast Ranges, Cascade Range, Salmon River Mountains, Bitterroot Range, Bighorn Mountains, Rocky Mountains
Plateau: Columbia Plateau
Plain: Great Plains
Ocean: Pacific Ocean
Sound: Puget Sound
Rivers: Missouri, Yellowstone, Snake, Columbia
National Parks: Any two: Olympic, North Cascades, Mt. Rainier, Crater Lake, Glacier, Yellowstone, Grand Teton

Answers will vary. The speech balloon should mention the mountains and/or rivers on the map.

Clean and collect materials, using your own procedure or one suggested on page xi.
Northwest Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the Northwest Region. Use pages 62–63 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Maps

1. The Northwest Region is in the northwest corner of the country.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write NORTHWEST REGION.
   b. Turn to pages 62–63 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. This region has some of the most rugged mountains in the country.
   b. On the Raised Relief Map, feel the mountains in the region.
   c. On your map, underline the name of each of these mountain ranges with mountain symbols ▲▲▲▲.
      • Olympic Mountains
      • Coast Ranges
      • Cascade Range
      • Salmon River Mountains
   d. Mt. Rainier is the highest mountain in the region. What is its elevation? ______________ feet
   e. Outline Mt. Rainier’s mountain peak symbol ▲.

3. The Columbia Plateau was formed by lava that poured out of cracks in the earth’s surface.
   a. On pages 62–63 of the Atlas, point to the photo of the plateau. Read the caption.
   b. Now find the plateau on the Major Landforms map.
   c. On your Desk Map or Raised Relief Map, underline the name Columbia Plateau with a plateau symbol △△△△△.
4. The Great Plains vary in elevation. However, they are at their highest elevation in this region.
   a. On the Raised Relief Map, find the elevation of the plains east of the Rocky Mountains.
   b. What is the elevation range of the Great Plains in the Northwest Region? _______________________ feet
   c. On your map, east of the Rocky Mountains, draw plains symbols ____________.
   d. Also write GREAT PLAINS.

5. The Pacific Ocean forms the western boundary of the region.
   b. On your map, underline the words Pacific Ocean with ocean symbols _____.
   c. Puget Sound is a large body of water in northwest Washington. Underline the name of the sound.

6. Several major rivers flow out of the mountains.
   a. The Missouri River is the second longest river in the United States. From its source in the Rocky Mountains to its mouth at the Mississippi River, draw an arrow along the Missouri River.
   b. Also draw an arrow along each of the following rivers:
      • Yellowstone River
      • Snake River
      • Columbia River

7. Several lakes in the region are formed by dams.
   a. On your map, in the legend, circle the symbol for dam.
   b. On the map, outline two lakes formed by dams. Label them L for lake.

8. There are seven national parks in the Northwest Region.
   a. In the Atlas, point to the photo of Grand Teton National Park. Read the caption.
   b. Then use the main map to find two national parks.
   c. On your Desk Map or Raised Relief Map, locate each of these national parks and write NP.
   d. Which national parks did you locate?
Northwest Region: Land and Water

Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 39a–39b to complete Activity Sheets 39c–39d. Do not cut out the activity sheets.

a. On the map below, draw the mountain symbols you drew on your Desk Map or Raised Relief Map.

b. Add two rivers to the map.
2. Complete the items below.
   
   a. On the map, color in the Northwest Region.
   
   b. Then write in names of landforms, bodies of water, and national parks in the region.

   On Activity Sheet 39c, fill in the Junior Geographer’s speech balloon. Have her say something about what your map shows.

   **Location**

   **Major Landforms**
   - Mountain Ranges:
   - Plateau:
   - Plain:

   **Major Bodies of Water**
   - Ocean:
   - Sound:
   - Rivers:

   **National Parks:**

   - 
   - 
   - 

   **Land and Water**
Northwest Region: People and Places

Objectives

Students will be able to:
- Identify states in the Northwest Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 40a–40d, Northwest Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 39c–39d
- scissors
- stapler or hole punch
- and yarn

Here’s a Tip!

Teach the lesson in two parts. Saved the marked maps from Day 1 to use on Day 2.

Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet

Teaching

Using the Atlas

- Identify states in the Northwest Region.

1. Review the previous lesson. Write NORTHWEST REGION on the board and ask the class:
   - Where is the Northwest Region? (in the northwest corner of the country)
   - What are some land and water features in the Northwest? (Students should mention the mountains, Pacific Ocean, and rivers flowing from the mountains.)

2. Have students turn to pages 62–63 of the Junior Geographer Atlas.
   a. On the main map, have them use a finger to outline the Northwest Region.
   b. Then ask the class:
      - How many states are in the Northwest Region? (5)
      - What are their names? (Washington, Oregon, Idaho, Montana, Wyoming)
      - Which states share a boundary with Canada? (Washington, Idaho, Montana)
      - Which states border the Pacific Ocean? (Washington, Oregon)
   c. Have students read the captions and region facts aloud.

Using the Map

- Identify states in the Northwest Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

3. Divide the class into groups. Hand out Activity Sheets 40a–40b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 40a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.
Lesson 40

Making a Region Booklet

- Identify states in the Northwest Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 40c–40d. Students will also need their marked Political Desk Maps.

2. Give students time to complete their activity sheets.

3. Then help students assemble their Region Booklets.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 40a–40b and the Region Booklets.

Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 40a–40b
1b. Washington, Oregon, Idaho, Montana, Wyoming
2a. ★
2c. Helena, Montana
2d. Salem, Oregon
5b. 0–5
5d. over 250
6b. Louisiana Purchase
6c. 5

Activity Sheet 40c
Check pages 62–63 of the Atlas for answers.

Activity Sheet 40d
Major Land Uses: ranching, forestry, farming
Population: east: 0–5; western cities: over 250
History: 1859 OR, 1889 MT, 1889 WA, 1890 ID, 1890 WY

Taking a Closer Look
State: Wyoming
Landform: mountains
Main Land Use: ranching
Rainfall: 10–20 inches, or dry all year
Population: 5–50 people per square mile, or under 100,000

Answers will vary. Students may describe the Laramie area as dry, mountainous, sparsely populated, and used for ranching.
Northwest Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the Northwest Region. Use pages 62–63 of The Nystrom Junior Geographer Atlas to help you complete the activity.

Using the Map

1. There are five states in the Northwest Region.
   a. Give your United States Political Desk Map a title. Above the main map, write NORTHWEST REGION.
   b. Turn to pages 62–63 of the Atlas. What are the names of the five states in the region?

   ___________________________________________  ___________________________________________
   ___________________________________________
   ___________________________________________

   c. On your map, outline each state. Then underline its name.

2. Every state has a state capital.
   a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. ______
   b. On the main map, find the capital of each state in the region and outline its symbol.
   c. Which state capital is near 47˚N, 112˚W?

   ___________________________________________
   d. Which state capital is near 45˚N, 123˚W?

   ___________________________________________

3. Seattle and Portland are the two largest cities in the Northwest Region.
   a. Seattle is the largest city in Washington. On pages 62–63 of the Atlas, find the photo of Seattle and read the caption.
   b. On your map, outline the city symbol for Seattle.
   c. Portland is the largest city in Oregon. Outline its city symbol.
4. The Northwest Region has a wide range of land uses.
   a. On pages 62–63 of the Atlas, find the Major Land Use map. Also look at the rainfall map on pages 32–33.
   b. Drier parts of the region are used for ranching. On your Desk Map, in an area with ranching, write = RANCHING.
   c. In parts of the region with more rainfall, forestry is important. In an area with forestry, write = FORESTRY.
   d. Farms in the Northwest Region produce beef, milk, apples, potatoes, wheat, and sugar beets. In an area with farming, write = FARMING.
   e. Urban areas include cities and their suburbs. Next to an urban area, write = URBAN AREA.

5. Compared with other regions, the Northwest has a low population density. In fact, Wyoming has fewer people than any other U.S. state. But a few areas with big cities have high population densities.
   a. On your Desk Map, find the Population map and outline the Northwest Region.
   b. In most of the eastern part of the region, what is the population range? ___________ people per square mile.
   c. On the main map, in the eastern part of the region, write = ALMOST NO PEOPLE.
   d. What is the population range of the areas surrounding Seattle, Washington, and Portland, Oregon? ___________ people per square mile.
   e. On the main map, next to Seattle, write = MANY PEOPLE.

6. Land in the Northwest Region was part of the United States by the mid-1800s.
   a. On your Desk Map, find the Growth of the United States map and outline the Northwest Region.
   b. Which land was gained in 1803? ________________
   c. How many present-day states in the region were once considered part of Oregon Country? __________
   d. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union. Then, on your Desk Map, on each state in the region, write the year it was admitted to the Union.
Looking at Regions

Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 40a–40b to complete Activity Sheets 40c–40d.

a. On the map below, label the five states.

b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.
   a. Use your Desk Map to help you fill in the lines at the top.
   b. Find Laramie on the map on pages 62–63 of the Atlas. Then use maps in the Atlas and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Laramie. Write a sentence in his speech balloon.

Cut out Activity Sheets 39c–39d and 40c–40d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**  (other than urban areas)
________________________________
________________________________
________________________________

**Population**
In the east the region has ____________ people per square mile.
Near western cities the region has ____________ people per square mile.

**History**

Year each state was admitted to the Union:

Oregon ____________
Montana ____________
Washington ____________
Idaho ____________
Wyoming ____________

**Taking a Closer Look**

State ________________________
Landform ________________________
Main Land Use ________________________
Rainfall ________________________
Population ________________________

Other Characteristics
Southwest Region: Land and Water

Teaching

Using the Atlas

Locate the Southwest Region.

1. Introduce the lesson by writing REGION on the board.
   b. Review the maps and text on those pages. Explain:
      - The United States can be divided into many kinds of regions.
      - Today we’re going to look at one of those regions.

2. On the board, add SOUTHWEST to the word REGION.
   a. On a wall map or Physical Desk Map, point to the middle of the United States and ask:
      - Which direction is southwest? Have a student point southwest.
      - Where do you think the Southwest Region might be?
   b. Then say to the class:
      - On page 49 of the Atlas, find the Southwest Region.
      - One characteristic these states have in common is location.
      - Which regions are neighbors of the Southwest Region? (Northwest, Central, South Central)

3. Have students turn to pages 64–65. Review the maps and photos.
   a. Have students read the captions and region facts aloud.
   b. Ask the class:
      - Has anyone been to the Southwest Region? Where?
      - How was it like these photos? How was it different?

Using the Maps

Identify major landforms in the region.
Locate major bodies of water in the region.

4. Divide the class into groups. Hand out Activity Sheets 41a–41b, Raised Relief Maps, Physical Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 41a. Have students hold up their maps so you can check the outline of the region.
   b. Give students time to complete steps 2–8. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Locate the Southwest Region.
- Identify major landforms in the region.
- Locate major bodies of water in the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 41a–41d, Southwest Region: Land and Water
- Raised Relief Maps
- Physical Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts. Save the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Maps
Day 2: Making a Region Booklet (The booklets will be completed in Lesson 42.)
Find the Distance
Have students use the map on pages 64–65 of the Atlas to locate five of the region’s national parks: Bryce Canyon, Carlsbad Caverns, Redwood, Rocky Mountain, and Saguaro. Ask them to figure out which two parks are farthest apart.

Read More About It
Your students might enjoy reading or listening to these books and others about the Southwest Region:
- *A Desert Scrapbook* by Virginia Wright-Frierson
- *Lizard Sees the World* by Susan Tews
- *Amelia Hits the Road* by Marissa Moss

Making a Region Booklet
- Locate the Southwest Region.
- Identify major landforms in the region.
- Locate major bodies of water in the region.

1. Hand out Activity Sheets 41c–41d. Students will also need their marked Raised Relief Maps and Physical Desk Maps.
2. Before giving students time to complete their activity sheets, tell them *not* to cut the activity sheets.

Collect and review Activity Sheets 41a–41d. Save Activity Sheets 41c–41d to use in the Region Booklet in Lesson 42. Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 41a–41c

2d. 14,494 5f. 282
3b. Coast Ranges, Sierra Nevada 6a. smooth
5b. shrub or desert

Activity Sheet 41c

- Mountain Ranges: Coast Ranges, Sierra Nevada, Rocky Mountains
- Mountain Peaks: Mt. Elbert, Mt. Whitney, Pike’s Peak
- Valleys: Central Valley, Death Valley
- Plateau: Colorado Plateau
- Canyon: Grand Canyon
- Basin: Great Basin
- Plain: Great Plains
- Ocean: Pacific Ocean
- Lake: Great Salt Lake
- Rivers: Colorado, Sacramento, San Joaquin, Rio Grande
- National Parks: any two in the region

Answers will vary. The speech balloon should describe the mountains in the region, the large desert areas, and/or the Colorado River.
Southwest Region: Land and Water

In this lesson, you will locate landforms and bodies of water in the Southwest Region. Use pages 64–65 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

Using the Maps

1. The **Southwest Region** is in the southwest corner of the country.
   a. Give your Raised Relief Map or United States Physical Desk Map a title. Above the map, write **SOUTHWEST REGION**.
   b. Turn to pages 64–65 of the Atlas. Find the region on the locator map.
   c. On your Desk Map or Raised Relief Map, outline the region.

2. The Southwest has some of the highest **mountains** in the country.
   a. On the Raised Relief Map, feel the mountains in the region.
   b. On your map, underline the name of each of these mountain ranges with mountain symbols ▲▲▲▲.
      • Coast Ranges • Rocky Mountains • Sierra Nevada
   c. Outline the mountain peak symbols ▲ for these mountain peaks:
      • Mt. Elbert • Pike’s Peak • Mt. Whitney
   d. Mt. Whitney has the highest elevation in the 48 connected U.S. states. What is its elevation?
      __________________ feet

3. The **Central Valley** is located between two mountain ranges.
   b. What two mountain ranges surround the Central Valley?
      __________________________________________
   c. On your map, underline the name **Central Valley**.

4. The **Colorado Plateau** is west of the Rocky Mountains. Water and wind on the plateau have created many unusual landforms.
   a. On the Raised Relief Map, feel the Colorado Plateau.
b. On your map, underline the name of this landform with plateau symbols ▶️.

c. The **Grand Canyon** is a deep canyon cut into the Colorado Plateau. Underline its name.

5. The **Great Basin** is a large, dry area surrounded by higher mountains.
   
a. On your Desk Map, underline the name **Great Basin** with a basin symbol ▼️.
   
b. What is the natural region in most of the Great Basin?

   ________________
   
c. Find the names of three deserts in the region. In each of these areas, draw desert symbols 🌵️.
   
d. The **Great Salt Lake** is a large, low area that has filled with water. On the Raised Relief Map, feel the Great Salt Lake.
   
e. On your map, outline the Great Salt Lake. Label it **L** for lake.
   
f. **Death Valley** has the lowest elevation in the United States. What is its elevation? ________________ feet below sea level

6. The **Great Plains** are east of the Rocky Mountains.
   
a. On the Raised Relief Map, feel the plains east of the Rocky Mountains. Do they feel smooth or bumpy? ________________
   
b. On your map, throughout the Great Plains, draw plains symbols ▶️.

7. Many rivers flow through the Southwest Region.
   
a. The **Colorado River** flows southwest through the region. From its source in the Rocky Mountains to its mouth at the Gulf of California, draw an arrow along the Colorado River.
   
b. Also find and draw arrows along the following rivers:
      • Sacramento River
      • Rio Grande
      • San Joaquin River
   
c. Many rivers in the region flow into the **Pacific Ocean**. Underline the words **Pacific Ocean** with ocean symbols 🌊.

8. There are 20 **national parks** in the Southwest Region.
   
a. In the Atlas, point to the photo of a national park. Read the caption. Then, on the main map, find two national parks.
   
b. On your Desk Map or Raised Relief Map, locate each of these national parks and write **NP**.
Southwest Region: Land and Water

Making a Region Booklet

Pulling It Together

1. Use the Atlas, your marked Physical Desk Map or Raised Relief Map, and Activity Sheets 41a–41b to complete Activity Sheets 41c–41d. Do not cut out the activity sheets.

   a. On the map below, draw the mountain and desert symbols you drew on your Desk Map or Raised Relief Map.

   b. Add the Colorado River to the map.
2. Complete the items below.
   
a. On the map, color or shade in the Southwest Region.

b. Then write the names of landforms, deserts, bodies of water, and national parks in the region.

⚠️ On Activity Sheet 41c, fill in the Junior Geographer’s speech balloon. Have him say something about what your map shows.

**Location**

**Major Landforms**

Mountain Ranges:

- __________________________
- __________________________
- __________________________

Mountain Peaks:

- __________________________
- __________________________
- __________________________

Valleys:

- __________________________
- __________________________

**Major Bodies of Water**

Ocean:

- __________________________

Lakes:

- __________________________

Rivers:

- __________________________
- __________________________
- __________________________

**National Parks**

- __________________________

**Land and Water**
Teaching

Using the Atlas

**Identify states in the Southwest Region.**

1. Review the previous lesson. Write SOUTHWEST REGION on the board and ask the class:
   - **Where is the Southwest Region?** (in the southwest corner of the country)
   - **What are some land and water features in the Southwest?** (Students should mention high mountains, low valleys, rivers, and desert areas.)

2. Have students turn to pages 64–65 of the Junior Geographer Atlas.
   a. On the main map, have them use a finger to outline the Southwest Region.
   b. Then ask the class:
      - **How many states are in the Southwest Region?** (6)
      - **What are their names?** (California, Nevada, Utah, Arizona, Colorado, New Mexico)
      - **Which states share a boundary with Mexico?** (California, Arizona, New Mexico)
      - **Which state borders the Pacific Ocean?** (California)
   c. Have students read the captions and region facts aloud.

Using the Map

**Identify states in the Southwest Region.**
**Identify major cities in the region.**
**Identify other characteristics of the region.**

3. Divide the class into groups. Hand out Activity Sheets 42a–42b, Political Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 42a. Have students hold up their maps so you can check the outlines of the states.
   b. Give students time to complete steps 2–6. Walk around the room to answer questions and keep students on task.

Objectives

Students will be able to:
- Identify states in the Southwest Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 42a–42d, Southwest Region: People and Places
- Political Desk Maps
- Map Markers
- completed Activity Sheets 41c–41d
- scissors
- stapler or hole punch and yarn

Here’s a Tip!

Teach the lesson in two parts. Saved the marked maps from Day 1 to use on Day 2.
Day 1: Using the Atlas and Using the Map
Day 2: Making a Region Booklet
Lesson 42

Making a Region Booklet

- Identify states in the Southwest Region.
- Identify major cities in the region.
- Identify other characteristics of the region.

1. Hand out Activity Sheets 42c–42d. Students will also need their marked Political Desk Maps.
2. Give students time to complete their activity sheets.
3. Then help students assemble their Region Booklets.
   a. Hand out completed Activity Sheets 41c–41d.
   b. Have students cut their four activity sheets along the dashed lines.
   c. Show them how to stack the sheets from longest to shortest.
   d. Staple the booklets along the top edge or punch two holes in the top and have students tie with yarn.

Collect and review Activity Sheets 42a–42b and the Region Booklets.
Clean and collect materials, using your own procedure or one suggested on page xi.

Answers

Activity Sheets 42a–42b
1b. California, Nevada, Utah, Arizona, Colorado, New Mexico
2a. ★
2c. Salt Lake City, Utah
2d. Santa Fe, New Mexico
4c. orange
5b. 0 to 5
5d. West
6b. Mexican Cession
6c. Colorado, New Mexico
6d. 1853

Activity Sheet 42c
Check pages 64–65 of the Atlas for answers.

Activity Sheet 42d
Major Land Uses: ranching, farming, forestry
Population: most: 0–5; west: 50–250
History: 1850 CA, 1864 NV, 1876 CO, 1896 UT, 1912 NM, 1912 AZ

Taking a Closer Look
State: Nevada
Natural Region: shrub or desert
Main Land Use: ranching
Rainfall: 0–10 inches, or dry all year
Population: 5–50 people per square mile, or 100,000 to 500,000

Answers will vary. Students may describe the Reno area as dry, sparsely populated, and used for ranching.

Measuring Distance
Have students use the map scale to measure the distance between major cities of the region. For example, ask what the distance is between Phoenix, Arizona, and San Jose, California, or between Los Angeles and San Francisco.

Using Time Zones
Have students use the Time Zones map to determine the region’s time zones.
Southwest Region: People and Places

In this lesson, you’ll learn about states, cities, and other characteristics of the Southwest Region. Use pages 64–65 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Using the Map

1. There are six states in the Southwest Region.
   - a. Give your United States Political Desk Map a title. Above the main map, write **SOUTHWEST REGION**.
   - b. Turn to pages 64–65 of the Atlas. What are the names of the six states in the region?

   __________________________________________
   __________________________________________
   __________________________________________

   c. On your map, outline each state and underline its name. Try not to cover the labels on the map.

2. Every state has a state capital.
   - a. On your Desk Map, in the legend, find the symbol for state capital. Draw it here. ________
   - b. On the map, find the capital of each state in the region and outline its symbol.
   - c. Which state capital is near 41˚N, 112˚W?

   _______________________________________
   - d. Which state capital is near 36˚N, 106˚W?

   _______________________________________

3. Los Angeles and Phoenix are the region’s largest cities.
   - a. Many large cities are in California. On your map, outline the symbols for the following cities:
     - Los Angeles
     - San Diego
     - San Jose
     - San Francisco
   - b. Phoenix and Denver are both large cities and state capitals. Draw a dot next to their capital symbols.
4. The Southwest Region has a wide range of land uses.
   
   a. On pages 64–65 of the Atlas, find the Major Land Use map.
   
   b. Urban areas include cities and their suburbs. On your Desk Map, next to an urban area, write $\text{=} = \text{URBAN AREA}$.
   
   c. Most of the region is used for ranching. What color is used to show ranching? _______________
   
   d. In an area with ranching, write $\text{=} = \text{RANCHING}$.
   
   e. The Central Valley in California is the most productive farming area west of the Rocky Mountains. Farms in the Central Valley grow a variety of fruits, vegetables, and nuts. In this valley, write $\text{=} = \text{FARMING}$.
   
   f. Along the northern coast of California, forestry is also important. In this area, write $\text{=} = \text{FORESTRY}$.

5. The population is not spread evenly throughout the Southwest.
   
   a. On your Desk Map, find the Population map and outline the Southwest Region.
   
   b. In most of the region, what is the population? ___________ people per square mile
   
   c. On the main map, in one of those areas of the region, write $\text{=} = \text{ALMOST NO PEOPLE}$.
   
   d. What part of the region has the most people per square mile? 
   Circle one: West Center East
   
   e. In that part of the region, write $\text{=} = \text{SOME PEOPLE}$.

6. Much of the land in the Southwest Region once belonged to Mexico.
   
   a. On your Desk Map, find the Growth of the United States map and outline the Southwest Region.
   
   b. Which land was gained in 1848? ________________
   
   c. Which present-day states were part of the Louisiana Purchase, Texas Annexation, and Mexican Cession?
   _________________________  ___________________________

   d. When was land in southern Arizona gained? ________________

   e. Now look at the State Facts chart on pages 78–81 of the Atlas. Find the column Admitted to Union.

   On your Desk Map, on each state in the region, write the year it was admitted to the Union.
Pulling It Together

1. Use the Atlas, your marked Political Desk Map, and Activity Sheets 42a–42b to complete Activity Sheets 42c–42d.
   
a. On the map below, label the six states.

b. In the chart, list the capital and another city for each state.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Another City</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

States, Capitals, and Cities
2. Complete the items below.

   a. Use your Desk Map to help you fill in the lines at the top.
   
   b. Find Reno on the map on pages 64–65 of the Atlas. Then use the maps, the photo on page 32 of the Atlas, and your Desk Map to help you complete the Taking a Closer Look box.

Help the Junior Geographer describe Reno. Write a sentence in her speech balloon.

Cut out Activity Sheets 41c–41d and 42c–42d. Stack them from longest to shortest. Staple at the top.

**Major Land Uses**
(Other than urban areas)

________________________________
________________________________
________________________________

**History**

Year each state was admitted to the Union:

California ______________________
Nevada ______________________
Colorado _____________________
Utah _________________________
New Mexico __________________
Arizona _____________________

**Population**

Most of the region has __________ people per square mile.

The western part of the region has __________ people per square mile.

**Taking a Closer Look**

State _________________________
Natural Region ______________________
Main Land Use ______________________
Rainfall __________________________
Population _________________________

**Other Characteristics**
Alaska and Hawaii

Teaching

Exploring Alaska

- Locate Alaska.
- Identify major landforms in the state.
- Locate major bodies of water in the state.
- Identify other characteristics of the state.

1. Introduce the lesson by writing ALASKA on the board.
   a. Have students turn to page 49 of the Junior Geographer Atlas. Ask them to point to Alaska.
   b. Then have students turn to page 66. Say:
      - Alaska is a state. It is not connected to any other U.S. region.
      - What is north of Alaska? (Arctic Ocean)
      - What is south of Alaska? (Pacific Ocean)
      - Which country borders Alaska? (Canada)

2. Review the maps and photos.
   a. Have students read the introduction and captions aloud.
   b. Ask the class:
      - Has anyone been to Alaska? Where?
      - How was it like these photos? How was it different?

3. Divide the class into groups. Hand out Activity Sheets 43a–43b, Activity Globes, Raised Relief Maps, Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 43a. Have students hold up their maps so you can check their outlines of the state.
   b. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Answers

Activity Sheets 43a–43b

2a. Brooks Range, Alaska Range
2e. 20,320
3a. Arctic Ocean, Pacific Ocean
5a. ★
6b. 0 to 5

Answers will vary. Students should mention that Alaska is not connected to the 48 states. Its northern location makes it colder than other states.

Objectives

Students will be able to:
- Locate Alaska and Hawaii.
- Identify major landforms in the state.
- Locate major bodies of water in the state.
- Identify other characteristics of the state.

Materials

- The Nystrom Junior Geographer Atlases
- Activity Sheets 43a–43b, Alaska
- Activity Sheets 43c–43d, Hawaii
- Activity Globes
- Raised Relief Maps
- Physical Desk Maps
- Political Desk Maps
- Map Markers

Here’s a Tip!

Teach the lesson in two parts.
Day 1: Exploring Alaska
Day 2: Exploring Hawaii
Lesson 43

Exploring Where & Why
Map and Globe Skills

Using Map Scale
Ask students how many miles 1 inch stands for on the Hawaii map scale. Then ask them how many miles 1 inch stands for on the Alaska map scale. Which map scale represents a larger distance? Have students measure 100 miles on each map.

Read More About It
Your students might enjoy reading or listening to these books and others about Alaska and Hawaii:
- Julie of the Wolves by Jean Craighead George
- The Seasons and Someone by Virginia Kroll
- The Last Princess by Fay Stanley

Teaching Exploring Hawaii

- Locate Hawaii.
- Identify major landforms in the state.
- Locate major bodies of water in the state.
- Identify other characteristics of the state.

1. Introduce the lesson by writing HAWAII on the board.
   a. Have students turn to page 49 of the Junior Geographer Atlas. Ask them to point to Hawaii.
   b. Then say to the class:
      - Hawaii is a state.
      - Which regions are neighbors of Hawaii? (none)

2. Have students turn to page 67. Review the maps and photos.
   a. Have students read the introduction and captions aloud.
   b. Ask the class:
      - Has anyone been to Hawaii? Where?
      - How was it like these photos? How was it different?

3. Divide the class into groups. Hand out Activity Sheets 43c–43d, Activity Globes, Raised Relief Maps, Desk Maps, and Map Markers.
   a. As a class, complete step 1 on Activity Sheet 43c. Have students hold up their maps so you can check their markings.
   b. Give students time to complete their activity sheets. Walk around the room to answer questions and keep students on task.

Answers

Activity Sheets 43c–43d

2b. Hawaii
2c. Maui
2d. Niihau
3c. Waialeale
4b. over 80

Answers will vary. Students should mention that Hawaii is not connected to the 48 states and is not in North America. Its location makes it hotter than other states.
In this lesson, you will locate major physical features and learn important facts about Alaska. Use page 66 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

### Exploring Alaska

1. **Alaska** is the largest state in the United States. It is located in the far northwest corner of North America.
   
   
   b. On the Activity Globe, find Alaska and outline it.
   
   c. On the United States Physical Desk Map, locate Alaska in the inset map. Draw a general outline around the state.

2. Alaska has two major **mountain ranges**.
   
   a. On page 66 of the Atlas, on the Major Landforms map, locate these mountains. What are their names?
   
   b. On the Raised Relief Map, feel the mountains.
   
   c. On your Physical Desk Map, underline the names of these mountain ranges with mountain symbols ▲▲▲▲.
   
   d. **Mt. McKinley** is the highest mountain peak in the United States. On page 66 of the Atlas, find the photo of Mt. McKinley and read its caption.
   
   e. On your map, outline the mountain peak symbol ▲ for Mt. McKinley. What is its elevation? ____________ feet

3. Three major bodies of water border Alaska.
   
   a. Two **oceans** border Alaska. What are their names?
   
   b. On your map, underline the names of these oceans with ocean symbols ⬇️⬇️.
   
   c. The **Bering Sea** is part of the Pacific Ocean. Underline its name with ocean symbols.

4. There are many **islands** and **peninsulas** along Alaska’s coast.
   
   a. The Aleutian Islands are a long chain of islands in western Alaska. Underline these islands with a dotted line.
b. On page 66 of the Atlas, on the main map, point to two peninsulas in Alaska.

c. On your map, label each of these peninsulas P.
   - Seward Peninsula
   - Alaska Peninsula

5. Juneau is Alaska’s state capital.
   a. On your United States Political Desk Map, in the legend, find the symbol for state capital. Draw it here. ________
   b. On the inset map of Alaska, locate Juneau and outline its symbol.

6. Alaska has the lowest population density in the United States.
   a. Find the Population map and outline Alaska.
   b. What is the population range in most of Alaska?
      ________ people per square mile.
   c. On the inset map of Alaska, write = ALMOST NO PEOPLE.

Pulling It Together

7. Use the Atlas, your marked Desk Maps or Raised Relief Map, and Activity Sheets 43a–43b to complete the map below.
   a. Draw mountain symbols on the map.
   b. Label two oceans.
   c. Add a capital symbol and label it.

Write two sentences explaining how Alaska’s location makes it different from other states.
Hawaii

In this lesson, you will locate major physical features and learn important facts about Hawaii. Use page 67 of *The Nystrom Junior Geographer Atlas* to help you complete the activity.

**Exploring Hawaii**

1. **Hawaii** is located southwest of the 48 connected United States. It is the only U.S. state that is not in North America.
   - b. On the Activity Globe, draw a box around Hawaii.

2. Hawaii is a group of more than one hundred **islands** that were formed by volcanoes. Only the main islands are shown on the map.
   - a. Underline the names of the eight main islands.
   - b. Which island is the largest? ___________________________
   - c. Which island is near 21˚N, 156˚W? ______________________
   - d. Which island is near 22˚N, 160˚W? ______________________
   - e. Find the name of the **ocean** that surrounds these islands and underline it with ocean symbols 🌊✈️.

3. Hawaii has several tall **mountain peaks**. Many of the state’s mountains are volcanoes.
   - a. On the Raised Relief Map, feel the mountains.
   - b. **Mauna Kea** is the highest point in Hawaii. On your Physical Desk Map, outline the mountain peak symbol ▲ for Mauna Kea.
   - c. On page 67 of the Atlas, use the Major Landforms map to find other mountain peaks. Which peak is on Kauai? ______________________

4. Hawaii has a tropical **climate**.
   - b. The northeast coast of the island of Hawaii receives some of the highest annual rainfall in the state. What is the rainfall range in this area? ________________ inches

**SAMPLE for Review Only**

Mauna Loa and Kilauea are the only active volcanoes in Hawaii.
c. On the Seasonal Temperature map, circle Hawaii. How would you describe the summers and winters in Hawaii? ________

5. Honolulu is Hawaii’s state capital.
   a. On your United States Political Desk Map, on the inset map of Hawaii, locate Honolulu and outline its symbol.
   b. On which island is Honolulu located? __________________

6. The population density in Hawaii varies from island to island.
   a. Find the Population map and circle Hawaii.
   b. Which island has the most people per square mile? __________
   c. On the inset map of Hawaii, above the island, write = MANY PEOPLE.
   d. What is the population range on the island of Hawaii? ________________ people per square mile
   e. On the inset map, below the island, write = FEW PEOPLE.

Pulling It Together

7. Use the Atlas, your marked Desk Maps or Raised Relief Map, and Activity Sheets 43c–43d to complete the map.
   a. Label the islands on the map below.
   b. Draw mountain peak symbols.
   c. Label the ocean.
   d. Add a capital symbol and label it.

Write two sentences explaining how Hawaii’s location makes it different from other states.
Reviewing Unit 5

Teaching

Note: This review is designed to assess knowledge of any one region. Use it after completing the pair of lessons for each region. The review can be used repeatedly to assess knowledge of any or all regions.

Before you begin this review, decide whether you will use the paper-and-pencil Unit Review, the Hands-on Assessment, or both.

Using the Atlas

► Review the region.

1. Discuss the region.
   a. Have students review specific region pages in the Junior Geographer Atlas.
   b. Remind students of the lessons they completed on this region.
   c. Have students describe any related student work or bulletin boards around the classroom.
   d. Have students define key terms related to the region, such as region, landform, bodies of water, boundaries, land use, and population.

2. Answer any questions students may have about the region. Then have students put away their Atlases.

Using the Unit Review

► Demonstrate ability to meet unit objectives.

3. Hand out Unit Review 5a–5b. Read the instructions to the class. Then give students time to complete their unit reviews.

Answers

Answers will vary, depending on the region.

Answers will vary. Students should list 10 words that accurately describe the land, water, people, places, and/or location of the region.

Objectives

Students will be able to:
► Review the region.
► Demonstrate ability to meet unit objectives.

Materials

The Nystrom Junior Geographer Atlases
Unit Review 5a–5b, Reviewing Unit 5
Political Desk Maps
Map Markers
Junior Geographer patches (see page 276)

Here’s a Tip!

Help students study for their unit reviews. Suggest that they
• Review specific region pages in the Junior Geographer Atlas and write any questions they have.
• Look at the completed Region Booklet in their Junior Geographer packs.
Here's a Tip!
For students who do not meet the unit objectives, have them review the relevant Atlas pages again. If they took the written Unit Review the first time, have them take the Hands-on Assessment (or vice versa).

Alaska and Hawaii
Use the Unit Review or the Hands-on Assessment as a model for your own test on Alaska or Hawaii.

Collect and review Unit Review 5a–5b or the marked Desk Maps.

Photocopy this section of the page so you have patches for students who have successfully completed the unit. Have them write the name of their favorite state or city in the region and glue their patches on their Junior Geographer packs.

Junior Geographer
I ❤️

Junior Geographer
I ❤️

Junior Geographer
I ❤️
Exploring Where & Why
Map and Globe Skills

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Reviewing Unit 5
In the last two lessons, you learned about one of the regions of the United States. How much did you learn?

Circle the letter of the correct answer.

1. Which directions are in the name of the region? (Circle 1–2 answers.)
   a. North  
   b. South  
   c. East  
   d. West  
   e. Central

2. Which of the following bodies of water are in the region?
   a. Missouri River  
   b. Lake Erie  
   c. Gulf of Mexico  
   d. Colorado River

3. Which of the following landforms is in the region?
   a. Allegheny Plateau  
   b. Coast Ranges  
   c. Gulf Coastal Plain  
   d. Lower Peninsula  
   e. Sand Hills

4. Name four states in the region.
   • ____________________________
   • ____________________________
   • ____________________________
   • ____________________________

5. Name two state capitals in the region. (Include the states too.)
   • ____________________________
   • ____________________________

6. Name two other large cities in the region.
   • ____________________________
   • ____________________________

7. What is the most widespread land use in the region?
   a. forestry  
   b. farming  
   c. ranching  
   d. no widespread use
8. How would you describe the population density of the region?
   a. almost no people
   b. many people
   c. some people
   d. many people in some areas, almost no people in others

9. Mark the following on the map below.
   a. Outline the boundaries of the region.
   b. Label the states in the region.
   c. Label a major landform in the region.
   d. Label a major body of water in the region.
   e. If the region borders another country, label the country.
   f. If the region shares a coastline with an ocean or gulf, label it.

List ten words or phrases that describe the region. You might mention its land, water, people, places, or location.