Expanding Map Skills

Step-By-Step Activities to Engage Children in Creating Maps; Researching their Ancestor's Migration; Mapping Landforms of North America; Using a Grid to Identify Locations; Identifying Urban, Suburban, and Rural Environments; and More!

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Acknowledgements

AUTHOR

Dr. Priscilla Porter was a classroom teacher for over 20 years. The author of numerous teacher guides and publications, Dr. Porter is the senior author of *Reflections*, a Kindergarten to Grade 6 social studies textbook series published by Harcourt School Publishers @2007 and adopted by the State of California. Currently, Dr. Porter is the Director of the Porter History-Social Science Resource Center at the Palm Desert Campus of California State University San Bernardino.

Geography Consultant: Dr. Melanie Renfrew

Teacher Consultants

Kathleen Yearwood, Palm Springs Unified School District, Rio Vista School
Angela Sugg, Palm Springs Unified School District, Rio Vista School
Michel Cogley, San Francisco Unified School District
Cynthia Vaugh, San Francisco Unified School District
Jocy McManus, Desert Sands Unified School District
Brenda Scarcella, Desert Sands Unified School District

This is the third book in the series of Step-By-Step Activities for 2nd grade teachers. Available NOW are *Kid's Guide to Laws and Government, Exploring Family History,* and *Expanding Map Skills.* Available SOON in the series will be *Biographies of People Who Have Made a Difference.*

To be notified first when these and other books become available, sign up for an exclusive ***New Release Mailing List*** by sending an email to prisporter@aol.com. Let her know your grade level of interest, you'll be glad you did!

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Direct inquiries to:
Dr. Priscilla Porter prisporter@aol.com
Palm Desert Campus, California State University San Bernardino
37-500 Cook Street
Palm Desert, California 92211

Overview: Expanding Map Skills

California History-Social Science Grade 2, Standard 2

Students demonstrate map skills by describing the absolute and relative locations of people, places and environments by:

1. Locating on a simple letter-number grid system the specific locations and geographic features in their neighborhood or community (e.g., map the classroom, the school)
2. Labeling a simple map from memory of the North American continent, including the countries, oceans, Great Lakes, major rivers, mountain ranges; identifying the essential map elements of title, legend, directional indicator, scale, and date
3. Locating on a map where their ancestors live(d), describing when their family moved to the local community, and describing how and why they made the trip
4. Comparing and contrasting basic land use in urban, suburban and rural environments in California

Compelling Question: Where do people live and why?

Supporting Questions

1. When and how did my family or ancestors migrate to our state? Why do people move from one place to another?
2. What are the essential elements of a map? How can a grid be used to locate places on a map? Where is our school located in relation to other places in our neighborhood (absolute and relative location)?
3. How is the land used in urban, suburban and rural environments?
4. What are some countries and landforms on the continent of North America, and where are they located?

Description of the Unit

Students begin by interviewing a family member or friend to find out when, how, and why their families migrated to their state. Using a world map, they locate where their ancestors lived and then construct a flow map to show their movement. In Lesson 2 students become familiar with the essential map elements of title, legend, grid, scale, directional indicator, and date. They learn to use a simple number-letter grid to locate specific sites in their classroom. During Lesson 3, students compare and contrast basic land use in urban, suburban and rural environments of their state. While studying the North American continent in Lesson 4, students label from memory physical features such as countries, bodies of water and geographic landforms.

The unit illustrates the **five themes of geography: location** (relative and absolute); **place** (physical and human characteristics such as neighborhood landmarks; physical features of North America); **human-environment interaction** (land use); **movement** (from migrations to water flow in North American rivers); and, **regions** (i.e., neighborhoods, environmental regions in their state).

Common Core State Standards

A variety of activities in this unit develop the Common Core State Standards for reading/ language arts and mathematics. Abbreviations for the standards are included below. For example, RI 2.4 refers to Reading Standards for Informational Text, Grade 2, Standard 4.

Reading Standards for Informational Text

RI 2.4 Determine the meaning of words and phrases [academic content vocabulary] in a text relevant to a Grade 2 topic or subject area.

Reading Standards for Literature

RL 2.1 Ask and answer such questions as *who, what, where, when, why,* and *how* to demonstrate understanding of key details in a text.

RL 2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.

Language Standards

L 2.2a Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing – Capitalize geographic names.

L2.4c Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 2 reading and content,* choosing flexibly from an array of strategies. Use a known root word as a clue to the meaning of an unknown word with the same root.

Writing Standards

W 2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, uses linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

W 2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

W 2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing.

Speaking and Listening

SL 2.1 Participate in a collaborative conservation with diverse partners about *grade 2 topics and texts* with peer and adults in small and larger groups.
SL 2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

SL 2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Mathematics

Measurement and Data 2.1 and 2.2 Measure and estimate lengths in standard units. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. Estimate lengths using units of inches, feet, centimeters, and meters.

Lesson 1: Migration

Supporting Questions: When and how did my family or ancestors migrate to our state? Why do people move from one place to another?

Activity #1 *Grandfather's Journey*

Materials needed: If available, a copy of *Grandfather's Journey* by Allen Say. Other recommended literature books to read about migration may be substituted. Examples include *Watch the Stars Come Out* by Riki Levinson and *The Long Way to a New Land* by Joan Sandin. If the literature books are not available, skip to Activity #2 on the next page.

In the book, *Grandfather's Journey*, Allen Say shares his grandfather's journey from Japan to America and back again, many years later. It helps to set the stage for the shared emotions that often accompany the immigrant eperience. The book received the Caldecott Medal Award for Allen Say's "photoreal" watercolors.

Step 1: As you read the story, help students identify the overall structure of the story, including how the beginning introduces the story and the ending concludes the action (RL 2.5).

Encourage students to ask and answer such questions as *who, what, where, when, why,* and *how.* If needed, model for students some questions they might ask and answer:

- *Who* is the main character of the story?
- In *what* two countries does the story take place?
- *When* did the story take place?
- *Where* did grandfather travel?
- *Why* did grandfather leave Japan?
- *How* did grandfather travel?

Ask students what other questions they might ask and answer about the story (RL 2.1).

Locate Japan and America on a globe. Trace the route grandfather took to get from Japan to America. Identify California and San Francisco.

Step 2: What's Your Opinion? In *Grandfather's Journey*, grandfather traveled to and settled in California. On a sheet of chart paper, ask students to create a list of the reasons they think grandfather made this decision. Introduce the linking words of *because, and, also, etc..* Demonstrate how to use these linking words when explaining grandfather's decision.

Later in the story, grandfather returned to Japan. Discuss with students why they think grandfather made this decision. Encourage students to use the linking words when explaining grandfather's decision. Record their responses on the chart paper.

Step 3: Have students write an opinion piece in which they introduce the topic they are writing about (Grandfather's Journey), state their opinion ("In my opinion, I think grandfather should not have left Japan because _____," or "In my opinion, I think grandfather should have stayed in America because _____."

In their writing, students should support their opinion, use linking words (*because, and, also,* etc.) to connect their opinion with their reasons, and provide a concluding statement (W 2.1).

Activity #2 Migration Interview

Preparations for Activity #1

- For each student, a copy of the ***Family Migration Form*** (*Handout # 1.1*, page 10)
- Construct a **Class Migration Chart** to record information from the *Family Migration Form*. (Refer to the sample chart shown on page 7.)
- Arrange for a guest speaker students can interview for the Migration Interview.

Step 1: Show students a copy of a newspaper. Ask them what it is and discuss the general purpose of newspapers. Explain to students that one way newspaper reporters find out information to write an article is through interviews.

Begin the assignment by saying, during this activity, you are going to take on the role of journalist and interview a parent, a grandparent or a friend of the family and then you will write an informative/explanatory text. Using digital sources, we will combine the text together to make a classroom newspaper or a migration brochure (See page 7).

To get interesting information, journalists try to answer the 5 'W' questions and the 'H' question. These questions are: 'who, what, when, where, why and how. When you interview someone for this assignment, you will ask questions that contain each of these words.

Step 2: Procedure for the Migration Interview

1. Display a copy of the ***Family Migration Interview*** (Handout # 1.1, page 10). Review the interview form with the students.

2. Using the ***Family Migration Interview*** (Handout # 1.1, page 10), select a student to interview you about your family's migration. The student should ask questions about what you (the speaker) say to clarify comprehension, gather additional information, or deepen his/her understanding (S 2.3).

As you answer each question, model how to record the information on the interview form.

Family Migration Interview

Name of Interviewer (Student's name) _____
Date of the interview _____
Who are you interviewing? (person's name) _____
What is your relationship to the Person you interviewed? _____

Questions to ask during the interview:

When did your family (or ancestors) first move to our state?
From **where** did your family (or ancestors) move?
How did your family come to our state? By car? By airplane? By ship? Other?
Why did your family choose to move to our state?

3. Following the interview, display a **Class Migration Chart** as shown on the next page. (Include enough rows for each student in your class to later record his/her interview). Record the interview results from your interview on the Class Migration Chart.

Class Migration Chart

Student's Name	Person Interviewed	When arrived?	From Where?	How?	Why?

4. Use the information recorded on the ***Family Migration Interview*** to model how to write a simple informative/explanatory text to answer the 5 W's and H questions about your family's migration. Introduce the topic (tell whom they interviewed), use facts to develop points (when arrived, from where, and how), and provide a concluding statement or section to tell why the person migrated to the local area (W 2.2).

5. Invite a guest speaker to the classroom, such as the school principal, another school employee, or someone you know from the community. After one student conducts the interview, other students may ask questions about what the speaker says to clarify comprehension, gather additional information, or deepen understanding of the speaker's interview (SL 2.3). Model how to complete the ***Family Migration Interview*** (Handout # 1.1, page 10). Add the information from the interview to the Class Migration Chart.

6. Using the information recorded on the interview form, model how to write a simple informative/explanatory text. Introduce the topic (tell whom they interviewed), use facts to develop points (when arrived, from where, and how), and provide a concluding statement to tell why the person migrated to the local area (W 2.2).

7. Have students sit with a partner and practice asking each other the interview questions.

8. Students conduct the interview. Allow at least one week for the interview forms to be completed. (An adult may help the student print the answers to the interview questions.)

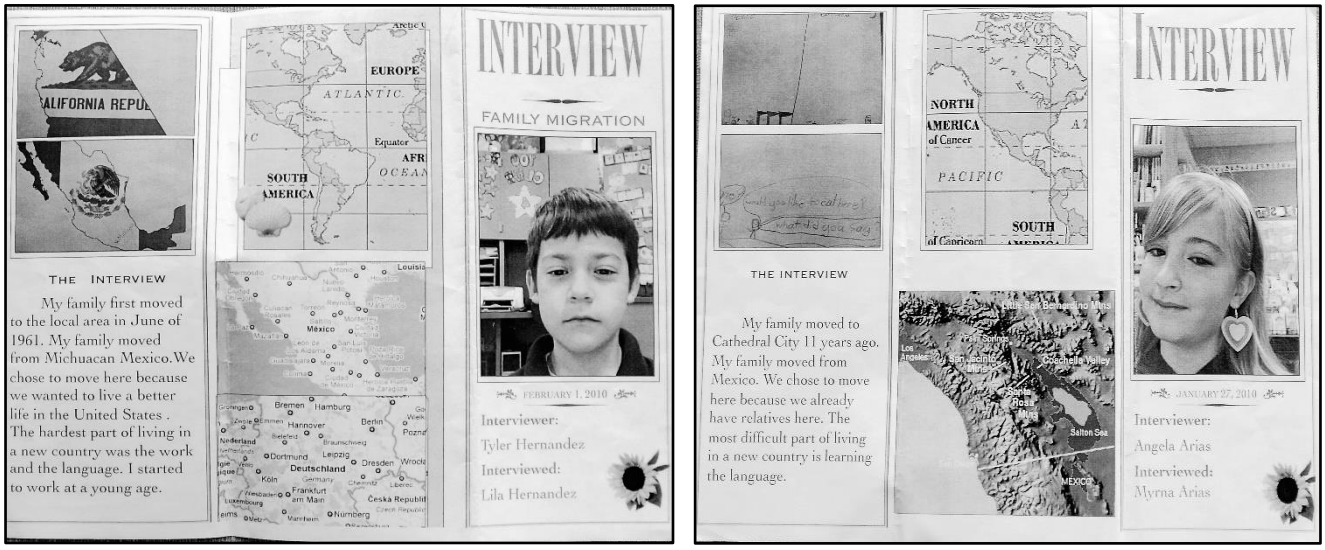
9. As students complete their interview, record the information on the Class Migration Chart.

10. Students use the information recorded on their interview form to write a simple informative/ explanatory text to answer the 5 W's and H questions. Introduce the topic (tell whom they interviewed), use facts to develop points (when arrived, from where, and how), and provide a concluding statement or section to tell why the person migrated to the local area (W 2.2).

Classroom Newspaper (Optional) With guidance and support from adults, students use a variety of digital tools and the informative/explanatory texts they wrote to publish a class newspaper. Determine a name for the newspaper and create a masthead. Several computer programs are available to help teachers with newspaper format and layout (W2.6).

Migration Brochure (Optional) With guidance and support from adults, students use a variety of digital tools to produce and publish a Migration Brochure (W2.6). Refer to the directions listed on the next page.

Following the migration interview, students use the notes from the interview and turn them into informative/ explanatory text. Construct two drawings or include maps to show the route taken to your state. Students take photos of their drawings and insert them into the brochure. For the cover page, include a photo of the student, the date of the interview, the name of the interviewer, and the name of the person interviewed. Optional: Draw or locate a digital print of the country's flag. (Consider using the Apple program called *Pages.*)



Migration Interview Brochures

Activity #3 Our Ancestors' World Migration Flow Map

Materials needed: Display a world map on the bulletin board. Assemble push pins and thin yarn or string for the *flow map.*

In this activity, the class creates a large world **flow map** on a bulletin board with yarn or string representing the arrows of migrations to your state. *A "flow map" shows movement with arrows, e.g., of migration. The flow map is an excellent technique for students to show in a visual and spatial way the source regions for their ancestors from Europe, Asia, Canada, Mexico, Central or South America, or wherever their ancestors originated.

Step 1: Display a world wall map on a class bulletin board. Have each student orally present the location of the country of his/her ancestral origin. Each student should place a colored push pin at the ancestral point of origin. From the point of ancestral origin, attach a colored piece of yarn (or string) and pull it across the classroom map until it joins your location in your state. Put a title over the flow map, such as *Our Ancestors' World Migration Flow Map*. A separate legend can be made on the side showing the push pins as symbols of the ancestors' origins, and the yarn strings as their migration path.

Step 2: Refer to the Class Migration Chart developed during Activity #2. Discuss the reasons why people migrate. Have students write an answer to the supporting question, "Why do people move from one place to another?"

Activity #4 Welcome to Our Classroom Kit

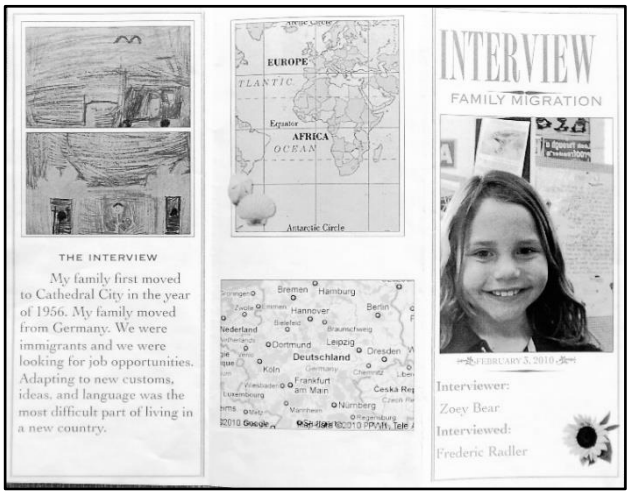
Step 1: Discuss what happens when people move to a new location, or what happens when people from another culture move to a new country. Ask questions such as, “What problems might newcomers to our area have when they first arrive?” (making friends; finding their way around the new area; speaking the new country’s language; finding foods they enjoy; getting used to the weather, if it is different)

Step 2: Have students make a list of the things we can do to help people who have just migrated here from other locations in the United States or from other countries. (We can help them feel welcome; introduce them to our friends; invite them to play with us at recess or eat with us at lunch; help them find their way; help them learn about our way of life; and, we can express an interest in their life.)

Step 3: Create a *Welcome to Our Classroom Kit*. Have the students help you decide what should go into the kit that be given to a new student in the class. (Class photograph with the names of the students, a school map, a copy of your class schedule, etc.)

Assessment

- Interview a parent or family friend asking the newspaper journalist-type questions: *who, what, where, when, how,* and *why did your ancestors migrate to our state?*
- Contribute information to the Class Migration Chart and the world flow wall map of *Our Ancestors’ World Migration Flow Map*.
- Write an informative/explanatory text summarizing the interview. (Optional: Create a class newspaper or migration brochure).
- Students write an answer to the question, “Why do people move from one place to another?”
- Make a list of ways to help people who have just moved to our area from other locations.



Migration Interview Brochure

Handout# 1.1

Family Migration Interview

Dear Parents,

In social studies, we are studying about when and how our families moved to our state. Your child will conduct an interview as a homework assignment. The interview questions are for a parent, a grandparent or a friend. Please help your child arrange the interview. Your child should ask each question, and have the person being interviewed answer each question orally. The child or the person being interviewed can then print a brief summary of each answer in the space provided. The homework is due on _____.

Name of interviewer (Student's name)_____

Date of the interview_____

Who are you interviewing? (Person's name)_____

What is your relationship to the person you interviewed? _____

_____

Questions for the Student to Ask During the Interview:

1. **When** did your family (or ancestors) first move to our state?

2. From **where** did your family (or ancestors) move?

3. **How** did your family (or ancestors) come to our state? By car? By airplane? By ship? By train? By bus? Other?

4. **Why** did your family choose to move to our state?

Lesson 2: Using a Map

Supporting Questions

- What are the essential elements of a map?
- How can a grid be used to locate places on a map?
- Where is our school located in relation to other places in our neighborhood (absolute and relative location)?

Activity #1 Essential Elements of a Map

Materials needed: A large variety of maps, including a map of your state.

Step 1: Different Kinds of Maps. Explain to students that a map is a drawing that shows where places are located. There are different types of maps. Some maps show small areas, such as Sea World or Disneyland. Other maps show large areas, such as cities, countries, or the world. Designing and drawing maps is the job of a **cartographer**, a person who draws maps by hand or by computer (RI 2.4).

Provide a variety of maps for groups of students to "read." If available, students may use magnifying glasses to see their map close-up. (Hint: If this is the first time students have used a magnifying glass, provide time for them to explore its use before proceeding with the lesson.)

Step 2: Reading a Map. Display multiple copies of a map of your choice, such as a map of your state, the United States, or of North America. Have students independently "read" the map. After the first independent reading, ask students to talk with a partner and share something they learned from the map. As students engage in collaborative conversations, circulate and check students' understanding (SL 2.1).

Using a document camera, display the map and conduct a "Think Aloud" to model effective literacy strategies for students to utilize when they encounter challenging text, or in this case a map. Model how to find the **map title** and the **map legend** (RI 2.4). Discuss other items you find on the map.

Students reread the map. This is the second independent activity in which students attempt to understand the map on their own. The goal is to teach students to reread text to acquire knowledge, develop fluency, and reinforce their use of text evidence.

Lead a discussion using text dependent questions based on the map. Students provide evidence from the map for their answers. The goal of text-dependent questions is to provide opportunities for students to use the map to support answers, deepen their comprehension of information, and apply learning to real world scenarios.

Step 3: Read a Map Grid. A **map grid** is a set of lines that divide a map into columns and rows of squares. **Rows** are always horizontal; they go left and right. Rows may be identified by letters such as A, B, C, and D, etc.… The row markers appear on both sides of the grid.

Columns are always vertical; they go up and down. Columns may be identified by numbers such as 1, 2, 3, and 4, etc….. The column markers appear at the top and bottom of the grid. Move your finger across the row and then up and down the column (RI 2.4).

Note: It is also correct to write letters across the top and numbers in the vertical columns at the left and right.

Step 4: Use a Map Scale
Explain to students that there are scales to weigh yourself and scales on a fish, but what kind of scales do maps have? The **map scale** helps you measure how far away something is. The scale is a line that stands for certain distances. The distance covered by the map scale line changes with each map. A map scale shows the relationship between distance on the map and distance on the earth. Scales are often listed in both miles and kilometers (Measurement 2.1, 2.2), (RI 2.4).

Review the scale on a map of your choice. Measure some distances twice, using units of different lengths for the two measurements – miles and kilometers; describe how the two measurements relate to the size of the unit chosen (Measurement 2.1, 2.2).

Step 5: Find Directions on a Map or Globe
Provide students with the definition of "cardinal directions." **Cardinal directions** help you find places on a map. They are the main directions of north, east, south, and west. The **directional indicator** is the symbol on a map or globe that shows the cardinal directions (RI 2.4). (Note: It is sometimes referred to as the "compass rose.")

To practice cardinal directions, label the classroom walls north, east, south, and west. Play a game of Simple Simon, using directions in your commands. For example, "*Simon says face north and hop"* or "F*ace west."* If your direction begins with "Simon says," students follow your directions. If you do not say "Simon says," students remain in their current location.

Activity #2 A Scavenger Hunt

Materials needed: Multiple copies of the same map or a variety of different maps.

Step 1: Use multiple copies of the same map or a variety of different maps. Remind students that all maps have certain elements or parts. Explain that they are going to go on a "scavenger hunt" to locate the different parts of a map. Distribute a copy of a variety of maps to pairs or small groups of students.

As you name each of the following elements, have students locate them on their map.

1. **Title**: **The map title tells what the map shows** (RI 2.4). The title should be simple with key geographic names with capital letters and with bold print. It is usually located at the top center, but it may be located to the side.

Have students work with their partner to locate the title of the map and produce complete sentences to clarify the meaning and location of a map title (SL 2.6).

2. **Map Legend**: **The map legend is the part of a map that shows what the symbols mean** (RI 2.4). A map legend is a key to the symbols used on the map. It is usually located in a box in an area of the map that does not have important geographic features. (Note: In an atlas, the legend might be on a separate page.)

Have students work with their partner to locate the map legend and produce complete sentences to clarify the meaning and location of a map legend (SL 2.6).

3. **Map Grid: A set of lines that divide a map into columns and rows of squares** (RI 2.4). Have students work with their partner to locate the map grid. Have one partner point to a spot on the map and his partner tell the row and column of the square in which the spot is located. Have students produce complete sentences that clarify the meaning of a map grid and share with the class the square they picked and its location on the map (SL 2.6).

4. **Map Scale: The part of the map that helps you find distance** (RI 2.4). The scale is usually at the bottom of the legend, although it may be drawn in a bottom corner of a map. Most scales on maps for children are bar scales that have ruler-like measurements showing distance in feet or in miles. Students can estimate lengths using units of inches, feet, miles, centimeters, meters and kilometers.

Have students work with their partner to locate the scale on their map and produce complete sentences to clarify the meaning and location of a map scale (SL 2.6).

5. **Directional Indicator: The directional indicator is the symbol on a map that shows directions** (RI 2.4). Locate the directional indicator on the maps you are using. This can be as simple as a North arrow pointing to the top of the map, or a simple North-South, West-East indicator drawn with crossed lines. A way to remember the directions is "**N**ever **E**at **S**oggy **W**affles." The rule regarding cardinal directions is: If you are facing north, west is on your left, east is on your right, and south is behind you. A "compass rose" shows the in-between directions of northwest, northeast, southeast, and southwest and can be labeled with the abbreviations NW, NE, SE, and SW.

Have students work with their partner to locate the directional indicator on their map and produce complete sentences to clarify the meaning and location of a directional indicator (SL 2.6).

6. **Date: The date on a map is the time of the map's construction** (RI 2.4). Usually, the date is written in a lower corner, sometimes next to the name of the cartographer. (Note: Dates are not included on a textbook atlas, but the copyright date for the textbook may be used. Some maps do not list the date.)

Have students work with their partner to locate the date on their map and produce complete sentences to clarify the meaning and location of a map date (SL 2.6).

Activity #3 Using a Grid to Identify Locations on a Map

Preparation needed: Construct an 8 1/2" by 11" map of your classroom showing a simple floor plan. Include a title, directional key, and the date.

Materials needed: a document camera to display your classroom map, or provide each student with a copy of the classroom map; a transparency of the grid shown on page 17; for each student, a ruler and a blank sheet of paper to draw a classroom map.

Step 1: Using a Grid. If available, print the grid shown on page 17 on to a transparent sheet. If a transparency is not available, use a document camera to display the grid.

Explain to students that each square has a letter and a number. To locate the names of rows and columns, slide your finger straight across or straight up and down.

Have students practice finding squares as volunteers suggest combinations of letters and numbers, such as B-2 or D-3.

Have students take turns giving directions as you mark locations on the grid of your class map. For example, “Go to location G-5 and place an ‘X’ on the square.” Continue until all squares on the grid have been identified.

Optional Outdoor Activity for Grids (The following activity is based on the work of Michele Cogley and Cynthia Vaughn of San Francisco Unified School District.)

Set up: In a large outdoor space on the playground, use chalk to draw a 6 X 6 grid to accommodate up to 36 students. The grid lines should be approximately 1 meter apart to allow for movement inside the grid squares.

Procedure: Students stand facing the grid. Remind students that the direction to read coordinate graphs is to walk “over first, then up (or down)”.

1. Call a student’s name and ask him/her to go stand in a specific grid location, such as D2. Continue to call students to grid locations.

2. Call a student’s name and have the student walk to a location and do jumping jacks or toe touches or spin, or some other movement in the grid.

3. Have all students take a spot on the grid. Call out a grid location and toss that person a ball or beanbag. Call out another location to which the ball should be tossed. Check for accuracy. Eventually, have students call the grid locations.

Step 2: Floor Plan Map. Explain that a **map** is like “a picture from above that helps us find places” (locations). Define a **location** as “where” a place is on a map. Explain that there are many kinds of maps, but they can all be used to find the location of places. (RI 2.4)

As you display the map you have drawn of your classroom, note the title, directional key, and the date. The map shows the location of things in our classroom. This kind of map is a **floor plan**. Invite students to identify various locations on the classroom map.

Explain that a “*bird’s eye view*” is a common expression used to describe the spatial or map view. Differentiate a spatial or “view from above” from a horizontal picture view, or “view from the front.” For example, the teacher’s desk, a work table, and a bookcase will look different in a picture than on a “map” (or floor layout, diagrammed from above). When discussing larger maps, explain what it would be like to look down on the earth from an airplane or a space vehicle.

Step 3: Finding Grid Locations on a Map. Overlay the transparent grid on the classroom map. If a transparency is not available, draw grid lines on your classroom map and display it using a document camera.

Explain that the grid is used to help us locate places on a map. Model how to use the overlay grid to locate places on the map by locating the number at the top or bottom of the column and the letter at the beginning or end of the row.

Provide several examples such as “The teacher’s desk is located at C-2”. Ask the students, “How is a grid useful?” (It makes finding a place on a map fast and easy.)

Play the game *Treasure Hunt* using the grid. Hide an object in the classroom and let each student name a location on the grid to see if he or she can locate the treasure.

Step 4: Adding Grid Lines to a Map. Duplicate a copy of the classroom map for each student. Demonstrate and guide students to use a ruler to lightly draw horizontal and vertical grid lines over their map at one inch intervals. Students label the grid lines with numbers and letters.

Students draw their own copy of a classroom map and identify the location of his/her desk. Students add grid lines to his/her map.

Working in pairs, one student picks a spot on the map and tells his partner the row and column of the square in which the spot is located. The partner puts his/her finger on the square and tells what is located in the square. Students continue to work in pairs to identify locations on each map.

Activity #4 Using a Grid to Identify Locations on a Map of Our School

If available, use Google Earth to display an overhead view of your school. Identify the various locations.

Display a school map using a document camera, or provide each student with a copy of the school map. (Hint: Check with the school office for a copy of the emergency route map of the school.)

Using a grid overlay (page 17), have students identify locations such as the classroom, restrooms, office, and other landmarks. As an option, students use pencils and a ruler to draw grid lines on their copy of the school map.

Activity #5 A Neighborhood Map

Materials needed: for each student, a map of your school's neighborhood. Good sources include: Google maps; American Automobile Association (AAA) map; city maps, Chamber of Commerce, a telephone book.

Use only the portion that shows your school with a few nearby major streets. It helps to include some nearby landmarks that are play areas or are part of the "popular culture," e.g., a neighborhood park, fast food place, or grocery store.

Step 1: "Read" the neighborhood map. If possible, use Google maps. Provide time for students to "read" the map and share what they find. On print maps, locate the title of the map, the directional indicator, the legend, the scale, and the date of the map. If grid lines are printed on the map, use the existing lines. If there is no grid, make a grid with a ruler.

Step 2: Maps can show an **absolute location**. For example, "Our school is located at … (provide your school's address). This is an absolute location. Have students find the school's location on the map. Locate the absolute location of other features on the map. For example, the school might be at D-4, the mall A-1 to A-2, and McDonald's at C-3. (Note: The gridlines are a model for later grades when students learn to locate places on maps and on the globe with latitude and longitude coordinates.)

Step 3: Maps can also show a **relative location**, i.e., “Carlos lives near the school.” “Near the school” or “far from the school” are relative location terms. These phrases describe where a place is in relationship to other places. “Near, nearer, nearest,” and “far, farther, farthest” are sets of relative location terms. Other relative location words include *next to, above, below, under, on, left, right, behind, around, over, etc.* Identify the relative location of some features on the map. Ask questions such as “Which is closer to the school, McDonald’s or the mall?”

Step 4: Neighborhood Map Project. Have pairs or groups of students draw maps of the neighborhood. Remind them that maps use a **bird’s-eye view**. This is how the neighborhood might look to a bird in flight. It is seen from above.

Suggest they show streets, buildings and other landmarks. For a sample of neighborhood maps, refer to the map on the cover of this guide and to the one shown below. (Note: The map shown below was constructed using construction paper.)

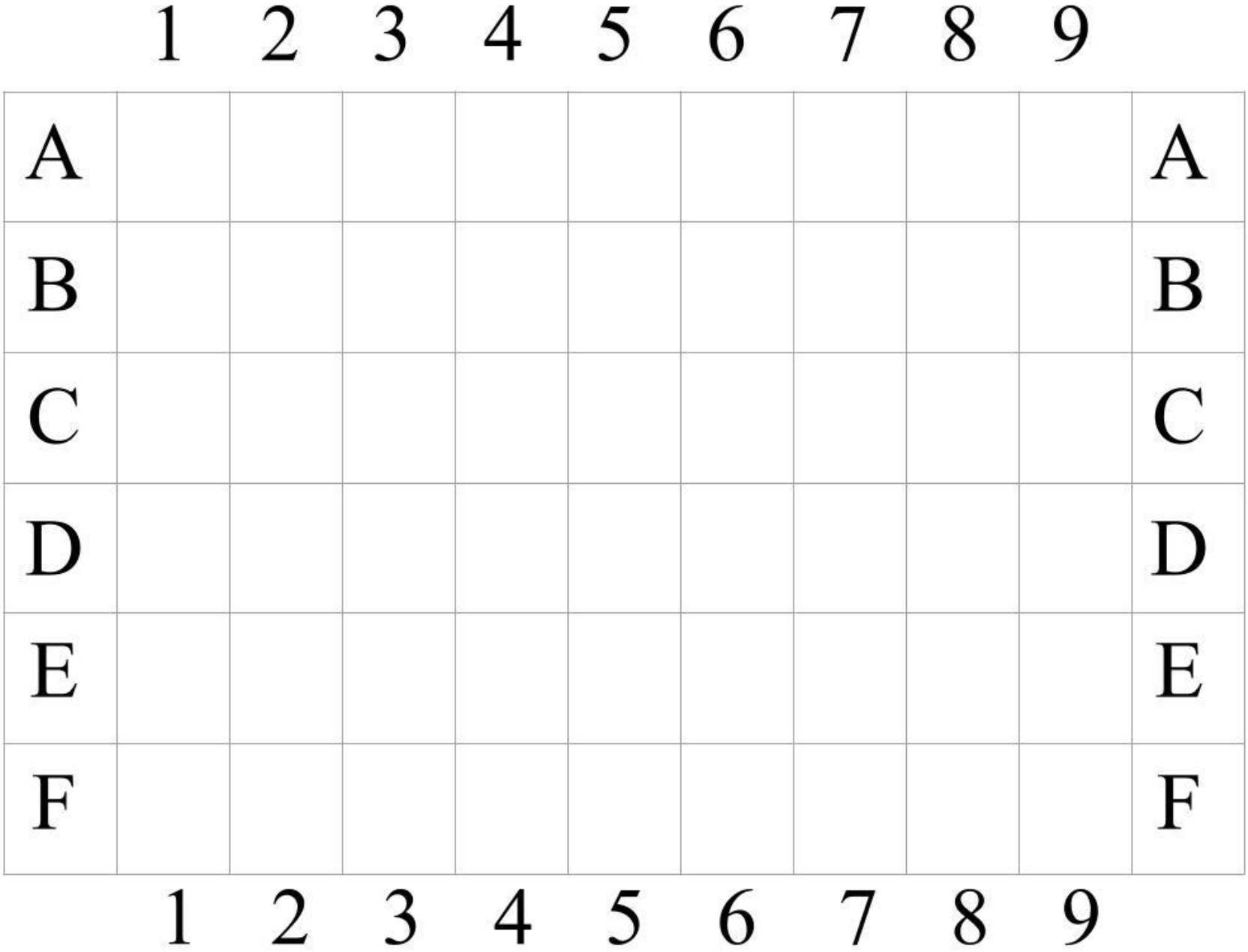
When the neighborhood map is complete, students use a ruler to lightly draw horizontal and vertical grid lines over their map.

Maps should include a title, a directional indicator, and a legend or key. Have students neatly put the date next to their names. Emphasize that all the printing on a map should be as neat and clear as possible to be readable.

Have each student write at least three sentences to identify specific locations on his/her map. For example, “Our school is located at G-3.” Partners can trade their maps with other pairs and give each other directions for locating places on the new map. Game pieces can be used if desired.

Assessment

- Identify the essential elements of a map.
- Construct a map of the classroom, add grid lines, and identify locations on the map.
- Use letter-number grid indicators to identify locations on a school map.
- Use letter-number grid indicators to describe absolute locations and relative locations.
- Draw a map of the neighborhood, including grid lines, streets and specific landmarks and write 3 sentences to identify specific locations on the map.


1 2 3 4 5 6 7 8 9
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Lesson 3: Urban, Suburban and Rural

Supporting Question: How is the land used in urban, suburban and rural environments?

Materials needed: a map of your state; photos that illustrate the "*urban, suburban, and rural*" environments in your state (Try calendars, magazines i.e., *National Geographic*, etc.)

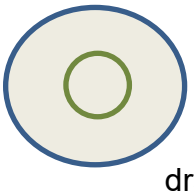
Activity #1 Land Use

Step 1: Invite students to look outside the classroom and describe the land they see. Ask questions such as:

- What is land?
- How is land used in different ways?
- What are some of the things that are built on the land?
- What is planted on land?
- What areas are crowded?
- Where can more people live, in apartment buildings or houses with yards?
- Why do so many people live in the cities?
- Why don't more people live in the mountains? forests? deserts?
- Is land expensive? Does it cost different prices in different areas?

Step 2: Show students a map of your state and have them identify the title, directional indicator, legend, and scale of the map. (A larger wall map is desirable, but a map in your textbook or an atlas may be used.)

Ask students to identify areas where large cities or urban areas are located. Have them find areas where no towns, few towns, or small towns are located. Explain that cities are called **urban** areas while places with small populations commonly found in towns, farms, ranches, in the countryside, and in deserts are called **rural** areas (RI 2.4).



Draw two circles on the board, one circle inside the other. Label the inner circle with "Urban" and the outer circle with "Suburban." You can point out that it looks donut-shaped. A short distance away, write "Rural" with no boundary around it. This is a simple "model" or example of land use. Because the drawing of models and maps with ones' own hand is necessary to develop spatial thinking, have each student copy this *donut-shaped* illustration on a piece of paper and label the urban, suburban, and rural areas..

Step 3: Define *urban, suburban, and rural.* Show pictures of each environment and have students sort them into urban, suburban, and rural areas (RI 2.4). Compare and contrast each of the environments as you present the following information:

Urban is a term that refers to dense population areas. A typical result of population density is cities, where most of the land is covered with buildings, apartments, houses, and streets to accommodate lots of people. On a population map, it is easy to visualize where people live in concentrated ways and in dense population clusters. **Show a variety of pictures of urban environments**. Explain that urban areas or cities are big places with many people and lots of

things to do. “Downtown” areas in the centers of cities usually are the most crowded and have the tallest buildings (RI 2.4).

Suburban refers to smaller cities that are located right next to a big city, and these suburban areas often form a circle or ring ***around*** the bigger city. “Sub” is a prefix that means “***under***” or “***around***”. Ask students if they can think of another word that starts with “sub” (e.g., submarine, subway) (L2.4c). And, a suburb is a community ***around*** a city (RI 2.4). **Show a variety of pictures of suburban environments.** Some characteristics of suburbs include:

1. It has quieter neighborhoods and less traffic than a city.
2. The first suburbs were called “bedroom communities” because there were more houses (with bedrooms) than office buildings and manufacturing plants. Such bedroom communities are places for workers to go home to sleep after working in the city. Bedroom communities are designed to support the central city and not become the city. Bedroom communities tend to be safer for children because there is less traffic and there are more parks and more houses instead of apartment buildings.
3. In suburbs, the land tends to be more open, less developed, and more available for building individual homes. In the suburbs, most workers are commuters, and they drive into the city every day. (At this point you can ask the students about how many of their parents drive to work? Does it take a long time? This is called “commuting,” another form of geographic movement.)

Rural means “countryside,” away from the city, where houses are scattered. People live in or near small towns. There may be farms where food crops are grown; ranches where livestock animals are herded; forests with trees which may remain as a reserve for wild animals or as an area for camping or logging; and, deserts where plants and animals live in small numbers due to the dry environment (RI 2.4). **Show a variety of pictures of rural environments.**

Optional Activity: Have students write informative/explanatory text to tell what urban, suburb, and rural areas are like and how the land is used in each (W2.2).

	Urban	**Suburb**	**Rural**
What kind of area is it?	Possible response: Very large town, many businesses, apartments, homes, busy with people	Possible response: Smaller community, quieter neighborhoods, fewer people, less traffic, homes may have bigger yards	Possible response: In the country, houses and buildings may be far apart, fewer in number, and area may be quieter
How is the land used?	Possible response: Land is used mostly for buildings	Possible response: Land has buildings, homes, and may be used for manufacturing	Possible response: Land is used for growing food and trees, raising horses, cows and sheep

Activity #2 Land Use Maps

Materials needed*:* State map that shows land use. (Refer to the maps in your textbook, an atlas, or go to Google, type in the name of your state and “land use map.” The maps should show the largest population concentrations (urban + suburban areas); the medium settled areas; and, the rural areas of the mountains, forests, deserts etc.

Explain to students that land in our state is used in different ways. Have students locate the major **urban** areas (cities) of your state. Review the general location of **suburban** areas. Locate the **rural areas** with the fewest number of people.

Activity #3 Create a Banner

Materials needed: For each group, a strip of bulletin board paper cut into 5-foot lengths. Cut a v-shaped line across the bottom of the paper to form a banner.

Using pictures, photographs, or student-drawn pictures, have students work in groups to design banners illustrating different types of land use. Each group works on one environment: urban, suburban, or rural. After labeling the type of land use in large letters across their banner, students glue or draw pictures onto the banner to illustrate land use in that environment.

As an alternative, have each student in the group draw a picture on a piece of white construction paper. Under the picture, the student writes a sentence describing the type of land use shown in the picture. Each student's work is then be glued on to the group's banner. Hang the banners around the classroom.

Activity #4 Compare and Contrast Land Use

Step 1: Ask questions to encourage students to compare and contrast the basic land use in urban, suburban and rural environments in your state.

- How is the land used in each of the environments?
- What types of buildings are found in each of the areas?
- What types of plants are found in each of the areas?
- What types of human activity are found in each of the areas?
- Why do some people prefer to live *in an urban area? in a suburban area? in a rural area?*
- In which area would you prefer to live? Explain your choice.

Step 2: Review with students that **signal words** can be used to **compare and contrast** two things: ***and, both, each, but,*** and ***however*** are signal words.

- To compare two types of land use, think about things that are the same.
- Two contrast two types of land use, think about things that are different.

Model how to write several compare/contrast sentences.

Activity #5 Ways People Use the Land in Our State

Have each student write an informative/explanatory text "Compare and Contrast Ways People Use the Land in Our State." The text should introduce the topic, use facts and definitions to develop points, use at least two signal words to compare or contrast ways the land is used, and provide a concluding statement or section (W 2.2).

Assessment

- Distinguish between urban, suburban, and rural environments in your state.
- Using pictures, photographs, or student-drawn pictures, work in small groups to design banners illustrating types of land use (urban, suburban, or rural).
- Write an informative/explanatory text "Compare and Contrast Ways People Use the Land in Our State."

Lesson 4: Countries and Landforms of North America

Supporting Question: What are some countries and landforms located on the continent of North America, and where are they located?

Activity #1 Locate the North American Continent

Materials needed: a copy for each student of a world map (Refer to your textbook, an atlas, or Google Earth.)

Step 1: Discuss the definition of a continent as *one of seven main land areas on earth.* Use the world map to identify the continents: North America, South America, Africa, Europe, Asia, Australia, and Antarctica. (Teacher Note: Eurasia is one landmass, but it is counted as two separate continents because of historical and cultural reasons. The traditional boundary between Europe and Asia is the Ural Mountains down to the Caspian and Black Seas.)
Optional: Sing some continent songs listed on page 29.

Step 2: Review and discus the definition of a country as *an area of land with its own people and laws.* Ask questions such as:

- Our country, the United States, is located on which continent? (North America) What other countries are located on the map of North America?
- What bodies of water do you see on the map of North America? (oceans, seas, rivers)
- What landforms do you see on the map of North America? (mountains, deserts, etc.)

Activity #2 Read and Sort

Materials needed: For each pair of students, a copy of ***Read and Sort*** (Handout #4.1, page 24) and ***North America*** (Handout #4.2 Form A, page 25; a map of North America (in your textbook or an atlas).

Step 1: Display a map of the continent of North America. Briefly identify the countries, the bodies of water, and the types of landforms found on the continent of North America.

Step 2: Cut out the terms listed on ***North America*** (Handout #4.2, page 25). Use a document camera (if available) to present each term and have students help you decide in which column it should be placed on a copy of **Read and Sort (**Handout #4.1). (**Optional Activity:** Make a word card for each location listed on Handout #4.2. Use a pocket chart to sort the terms into the proper category.)

Step 3: To each pair of students, distribute a copy of ***Read and Sort*** (Handout #4.1) and ***North America*** (Handout #4.2). Students work together to cut and place each term in the proper category on the chart: countries, bodies of water, or landforms.

Step 4: Students share their list of terms in each category and make revisions, as needed. Finally, have students glue the terms on the chart.

Activity #3 Labeling a Map of North America

Materials needed: For each student, a copy of **North America** (Handout #4.2, Form A (page 25) or Form B (page 26), and a blank outline **Map of North America** (Handout #4.3, page 27). It is recommended the map be enlarged to 11" x 17"); colored pencils, or a pencil and crayons. (Note: Felt tip pens are not recommended for labeling.) Refer to your textbook or an atlas for a map of North America.

Teacher Directions: Distribute a copy of a blank outline Map of North America (Handout #4.3, page 27), enlarged to 11" x 17", if possible. (Note: Once the map is enlarged, the distance scale is no longer accurate.) Refer to Handout # 4.2 Form A, page 25, for a recommended list of the items to label on the North America Map. Handout # 4.2 Form B (page 26) is a longer list of items to include. Select the form that best fits your students.

The best way to learn map locations is to locate and label the places oneself. The process of writing and looking several times at the shapes and positions (locations) makes the map more likely to go into one's visual memory. (Optional, but not recommended: Students cut out the names and glue them on the map in the appropriate position.)

Allow several days for students to copy the countries and the physical features listed onto his/her copy of the outline map of North America. If available, it is recommended the teacher use a document camera and label each item as students label their map. Stress the importance that students capitalize geographic names (L 2.2a),

Step #1 Countries of North America

- **United States of America** (U.S.A., includes Alaska), **Canada, Mexico**
- **Central America** extends from Guatemala and Belize to Panama. **Optional**: Label Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama. Encourage students to print very neatly to label the small Central American countries, and they can use the space in the ocean nearby.

The map should include a title, legend, directional indicator, date, and the student's name.

Step 2: Physical Features of North America

Select one group of physical features each day. A good starting point is with water features. On successive days, discuss and label the oceans, the rivers, and the Great Lakes.

Make a legend with symbols on the left, identify what they represent, and draw a box around it afterward. A small number of symbols should be selected - simpler is better. Develop the map legend as each new physical feature is discussed.

- Water features are traditionally shown in blue, with blue lines for rivers.
- Mountains can be shown with upturned V's or as regions of a medium brown color. (If the latter is chosen, carefully copy the mountainous areas, draw lines around them, and fill in with brown.)

Students use a map of North America in the textbook or an atlas as reference to label each of the geographic locations on their copy of Handout # 4.3. Students should capitalize all geographic locations (L 22.2a).

Bodies of Water

- **Large bodies of water: Pacific Ocean, Atlantic Ocean, Arctic Ocean. Optional:** Water features to include are Hudson Bay, Gulf of Mexico, and the Caribbean Sea.
- **Rivers: Colorado River, Mississippi River, Missouri River, Ohio River**. (Point out that these latter two rivers flow into the Mississippi River and that the direction these waters flow is downhill because of gravity. In the case of all three rivers, their water eventually flows into the ocean.)
- **Great Lakes. Optional:** Label the lakes from west to east: Lake Superior, Lake Michigan, Lake Huron, Lake Erie, Lake Ontario. (A good memory acronym is "H.O.M.E.S"; however, this acronym does not provide the correct order on the map.) Note**:** The Great Lakes flow into each other and then into the St. Lawrence River. This complex lake system is sometimes called the "St. Lawrence Seaway System," and it connects the great mid-western cities such as Chicago and Detroit with the Atlantic Ocean (which is important for the economy of this manufacturing area).

Geographic Landforms

- **Mountains: Sierra Nevada** ("snowy mountains"), **Rocky Mountains** (which include the Canadian Rockies and extend all the way from Canada through Central America to Panama), and the **Appalachian Mountains. Optional**: Sierra Madre Mountains in Mexico Label the two branches – Sierra Madre Occidental and Sierra Madre Oriental; for Spanish-speaking students, point out this means the "mother mountains," "western and eastern."
- Largest island: **Greenland** (Geographically Greenland is a part of the North American continent; politically Greenland is a territory of Denmark.)
- Island chains: **Caribbean islands** (general, as a group). **Optional**: Cuba**,** Haiti, Dominican Republic, Jamaica, and the Bahamas. Sometimes these are called the "West Indies" because of Christopher Columbus' voyage toward India. He sailed west and thought he had arrived in India when he landed here, thus the name West Indies.
- The **Great Plains**: Plains are flat land areas. The Great Plains are wide, large grassy areas used for ranching; there is not enough rainfall for farming unless the land is watered (by irrigation). The American Great Plains are not crowded areas and are an example of "rural" land use as described earlier in Lesson 3.

Step 3: Coloring Maps After labeling, lightly shade each country a different color. While there is no one right way to make a map, certain principles exist. For example, the Great Plains could be colored in a light sandy brown or a grassy green color, or they could simply be labeled on the white background. Colored pencils will work the best. If crayons are used, have children color lightly. (Note: felt tip pen colors are not recommended).

Assessment

- Locate and label the countries of North America.
- Locate and label major physical features on a map of the continent of North America, including major water bodies (oceans, rivers, lakes), and geographic landforms (mountain ranges, islands and the Great Plains).

Handout #4.1

Read and Sort

Countries	Bodies of Water	Landforms

North America

(Recommended list of items to label)

For Activity #2, cut each of the following countries, bodies of water, and landforms and sort them into the correct location on the *Read and Sort* chart.

Canada	United States	Mexico
Arctic Ocean	Pacific Ocean	Atlantic Ocean
Central America: Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama	Colorado River	Mississippi River
Missouri River	Ohio River	Great Lakes
Sierra Nevada Mountains	Rocky Mountains	Appalachian Mountains
Caribbean Islands	Great Plains	Greenland (An island that belongs to Denmark)

For Activity #3, use a map of North American for reference. Locate each of the above features and neatly write their name in the correct location on a map of the continent of North America.

Handout # 4.2 Form B

Map of North America

(Recommended list of items to label)

Label each of the following geographic locations on a map of North America.

United States	Canada	Mexico
Arctic Ocean	Pacific Ocean	Atlantic Ocean
Belize	Guatemala	El Salvador
Honduras	Nicaragua	Costa Rica
Panama	Cuba	Haiti
Jamaica	Dominican Republic	Bahamas
Greenland (part of Denmark)	Hudson Bay	Gulf of Mexico
Caribbean Sea	Colorado River	Mississippi River
Ohio River	Missouri River	Lake Superior
Lake Michigan	Lake Huron	Lake Erie
Lake Ontario	Salton Sea	Great Plains
Sierra Nevada Mountains	Rocky Mountains	Appalachian Mountains
Sierra Madre Occidental	Sierra Madre Oriental	Caribbean Islands

Handout # 4.3

North America

Extended Activities

Floor Map of Your Classroom. Materials needed: construction paper cut into shapes to represent desks and chairs, bookcases, workstations, the teacher's desk and chair, and other classroom objects; large sheet of construction paper for each pair of students; and, scissors, glue, colored pencils.

In this activity, students work together in pairs to construct a floor map of the classroom. Using shapes cut from construction paper, have the students decide what shapes best represent each of the main objects in the room. Assist students as they design their symbol key. After students have completed their maps, check their understanding by asking them to locate certain items on their map.

Maps should include a title, a directional key (compass rose), the date, a legend or key, and should be relatively accurate in scale and placement relationships. Emphasize that all the printing on a map should be as neat and clear as possible to be readable.

Other Extended Activities:

- Read the book *Flat Stanley* by Jeff Brown. Construct a Flat Stanley and send him traveling to visit with family members and friends. Include a journal for each person to write about Stanley's adventures. Each entry should include the date and the location along with photographs of Stanley visiting the various sites. Directions should provide an introduction letter with the teacher's name, the address of the school, and the date that Stanley should be returned to the school. If desired, each student in the class can send out a Flat Stanley.

- Have each student draw a "mental map" of the route he or she takes to get to school. After drawing a mental map, students can highlight the actual path traveled on a neighborhood or community map. Mental maps include our ideas of where places are and how to get there. They are images we store in our minds.

- Use removable stickers to mark the locations in the United States, North America, or the world where students have traveled on vacation or when visiting family.

- Ask students what types of maps they would like to make: a flow map showing the pathway from their house to the park or to their friends' houses, a map of a location where they would like to travel on a vacation, etc.

- As a class activity, construct a large physical map of North America as a backdrop for a skit in which members of the class assume roles of migrants to California and discuss the physical features they witnessed during their migration.

- Geographic themes and topics occur throughout children's books. While reading stories, identify the various geographic locations and mark them on a large map.

- A Map of a Room at Home - Give students a blank paper and ask them to draw a map of a room in their home showing the location and layout of the room. Include a map key.

- Use sugar cookie dough to create a Land Use Map of your state. Use candy, sprinkles, etc. to locate the farming, forestry, desert, and other land use areas. Bake and enjoy!

- Make a treasure map of the school yard or the neighborhood, using common symbols like playground equipment, trees, or roads. Include a key so treasure hunters can follow the map. Using the symbols, write directions to the treasure. On a smaller scale, hide a "treasure" in your classroom and write directions to its location. Or, teams of students can hide a treasure and write directions to its location in the classroom or on the school grounds.

Singing Geography Songs

Seven Continents Song

(Sung to the tune of *Brother John*)

There are seven,
There are seven,
Con-ti-nents, Con-ti-nents
North and South America,
Australia, Asia, Africa,
Europe and Antarctica.
Europe and Antarctica.

I Can Name all of the Oceans

(Sung to the tune of *My Bonnie Lies over the Ocean*)

Oh, I can name all of the oceans.
Oh, I can name all of the seas.
Oh, I can name all of the oceans.
Now, why not sing them with me.
(Refrain)
Atlantic, Pacific, Arctic and Indian, too.
Atlantic, Pacific, Arctic and Indian, too.

Resources for *Expanding Map Skills*

Brown, Jeff. *Flat Stanley*. HarperCollins, 2006. After a bulletin board falls on him, flattening him to half an inch thick, Stanley finds out that being flat can be fun as he travels in an oversized envelope. Children discover all the ways in which being flat can be an adventure. Refer to the Extended Activities section of this unit for classroom ideas.

Fowler, Allan. *North America* (Rookie Read-About Geography). Children's Press, 2001. This "little" geography book introduces young readers to landforms, climate, and animals of North America. It is an easy-to-read book appropriate for second graders.

Fox, Mary Virginia. *North America* (Continents). Heinemann, 2001. This excellent resource for this unit contains interesting information and colorful maps and photographs of North America. Students learn about the mountains and deserts, rivers and lakes, the weather, wild animals and more.

Greenwood, Barbara. *The Kids Book of Canada.* Kids Can Press, 1998. This book introduces the land and people of Canada. It is organized by province and has good illustrations.

Levinson, Riki. *Watch the Stars Come Out* (Puffin Unicorn Series). Illustrated by Diane Goode. Puffin Books, 1995. Grandma tells about her mama's journey to America by boat. A little girl hears how, long ago, her great-grandmother sailed across the sea with her older brother to join their immigrant parents in a new land called America.

North America Political Map – Set of 5 laminated 11" x 17" desk pad maps. Available from Social Studies School Service Item #1587627. $39.99

Peterson, David. *North America, A True Book*. Children's Press, 1998. This small book with large-size type and good photographs provides an introduction to the maps, climates and landscapes, animals, and people of North America. The text is for better readers who are above grade level.

Sandin, Joan. *The Long Way to a New Land.* (I Can Read Level 3). HarperCollins, 1986, reprint. "We will go to America!" It is 1868, and Carl Erik's family faces starvation in Sweden. As their hopes fade, they must endure a journey over land and sea to reach a better life in a new country thousands of miles away.

Say, Allen. *Grandfather's Journey.* HMH Books for Young Readers; Reprint edition, 2008. This tale tells of one man's love for two countries and his constant desire to be in both places. 1994 Caldecott Medal.

Wade, Mary Dodson. *Map Scales* (Rookie Read-About Geography). Children's Press, 2003. This "little" geography book teaches young readers the skill of using a map scale line to measure and calculate the distance between two points on a map. It is an easy-to-read book appropriate for second graders.