Where Are We?
Grade Five

OBJECTIVES
Students will be able to place key events in chronological order. Students will gain a working knowledge of geographical concepts: absolute location, relative location, longitude, and latitude. Students will be able to plot a map with the coordinates of the places visited by Lewis and Clark and the Corps of Discovery.

CLASS TIME
Four 45- to 60-minute sessions

NATIONAL STANDARDS
This lesson plan reflects some of the national standards of learning as defined by the National Council for the Social Studies (NCSS), the National Council for Teachers of English (NCTE) and the International Society for Technology in Education (ISTE). These standards are listed below:
• Social Studies: People, Places, and Environment
• Social Studies: Time, Continuity, and Change
• Social Studies: Geography
• Language Arts: Students employ a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interaction with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
• Language Arts: Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).
• Language Arts: Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
• Technology: Students use technology to locate, evaluate, and collect information from a variety of sources.

MATERIALS
• 1 overhead projector
• Blank overhead transparencies
• Copies of the worksheets attached to this lesson plan (see “Preparations”)
• A computer lab with Internet access
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• Web sites that include information about the Lewis and Clark Expedition
• Web sites that include information about maps and absolute and relative location
• Locate a text that gives information about the Lewis and Clark Expedition (see “Preparations”)
• Student history text
• Chart paper/markers
• Overhead transparency markers
• White construction paper (11 X 14) or drawing paper
• Markers or colored pencils
• Rulers
• Pencils
• Globe
• Atlas

PREPARATIONS

• Make copies of the following:
  – “Westward Journey Nickel Series” worksheet (from Resource Guide) (1 per student)
  – “Journey of Lewis and Clark” map (from Resource Guide) (1 per student)
  – “Location, Location, Location!” worksheet (1 per student)
  – “X Marks the Spot” worksheet (1 per student)
  – “Key Stops Along the Trail” worksheet (1 per student)
• Make an overhead transparency of each of the following:
  – “Journey of Lewis and Clark” map (from the Resource Guide)
  – “Westward Journey Nickel Series” worksheet
  – “Key Lines” worksheet
  – “X Marks the Spot” worksheet
• Locate a text that gives basic information about the Lewis and Clark Expedition, such as:
  – Lewis and Clark: From Ocean to Ocean by Harold Faber
  – The Incredible Journey of Lewis and Clark by Rhonda Blumberg
  – Lewis and Clark: Explorers of the American West by Steven Kroll
  – How We Crossed the West, The Adventures of Lewis and Clark by Rosalyn Schanzer
  – Lewis and Clark on the Trail of Discovery: An Interactive History with Removable Artifacts by Rod Gragg
Where Are We?

- *On the Trail of Lewis and Clark: A Journey Up the Missouri River* by Peter Lourie
- *As Far As the Eye Can Reach: Lewis and Clark’s Westward Quest* by Elizabeth Cody Kimmel
- *To the Pacific (Lewis and Clark)* by John Hamilton
- *A Personal Tour of Monticello* by Robert Young

- Bookmark Internet sites that include information about the Lewis and Clark Expedition.
- Bookmark Internet sites with information about maps and absolute and relative location.
- Arrange to use the school computer lab.
- Create a description of the relative location of your school to share with the students in Session 2.
- Have an apple cut in half at the middle and a peeled orange ready for Session 3.
- Have the longitude and latitude (relative location) of your school using an Internet site.
- Gather globes and atlases

**GROUPINGS**
- Whole group
- Pairs
- Independent work

**TERMS AND CONCEPTS**
- Obverse (front)
- Reverse (back)
- Relative location
- Parallels
- Latitude
- Longitude
- Cartography
- Prime Meridian
- Artifact
- Absolute location
- Meridians

**BACKGROUND KNOWLEDGE**
Students should have a basic knowledge of:
- Lewis and Clark’s Corps of Discovery
- Thomas Jefferson
- Hemisphere
- Louisiana Purchase
- Map skills
- Cardinal directions
- Chronological order
- Equator
- Intermediate directions

**STEPS**
**Session 1**

1. Display the “Journey of Lewis and Clark” overhead transparency. Discuss the Louisiana Purchase. Explain that the shape of our country was not always the same as it is today. Point out the area that was the United States before the Louisiana Purchase. Demonstrate
the extent to which the size of the country was increased through the Louisiana Purchase.

2. Discuss who explored the land and why. Explain, if necessary, that President Thomas Jefferson sent soldiers Meriwether Lewis and William Clark and a group who called themselves the Corps of Discovery to explore the newly acquired land. Show the students the area that Lewis and Clark explored. Note the area’s position in relation to your school’s location.

3. Review the journey of the Lewis and Clark Expedition. Discuss the three main goals of the mission: to study the plants, animals, and land; to form relationships with American Indian tribes; and to search for a water route to the Pacific Ocean. Briefly discuss why these goals would have been important. Display the “Westward Journey Nickel Series” overhead transparency. Distribute one “Westward Journey Nickel Series” worksheet to each student.

4. Explain to the students that the United States Mint is producing the Westward Journey Nickel Series in honor of Lewis and Clark and the Corps of Discovery. Tell the students that the “Westward Journey Nickel Series” worksheet contains images of the nickels from the Westward Journey Nickel Series.

5. Ask the students to look at the images on the “Westward Journey Nickel Series” worksheet. Ask them to look for similarities between the coin reverse (back) images. Lead the students to the conclusion that all of the reverse images contain:
   — The Latin phrase “E Pluribus Unum,” which is translated as “out of many, one”
   — The coin’s denomination
   — The name “United States of America”

6. Tell the students that, now that they have identified similarities between all the nickel designs, they will discover what makes each of these designs unique. Ask the students to begin the worksheet by recording what they see in each nickel’s design that may relate to the Corps of Discovery. Ask the students to hypothesize why each image was selected and its relationship to the Corps of Discovery. If desired, allow the students to use their textbooks and other classroom resources. Ask the students to record their answers on their “Westward Journey Nickel Series” worksheet.

7. Allow the students time to complete the worksheets individually. Then have the students get into pairs and allow them to collaborate for an additional five to ten minutes.

8. Lead a class discussion regarding the students’ answers on their completed “Westward Journey Nickel Series” worksheets. Use the students’ responses to complete a model worksheet on the overhead transparency.

9. As a class, create a timeline with key points from the discussion. Be sure to include the key locations where the Corps of Discovery stayed. Post the timeline in the classroom for student reference.

Note: Have a description of the relative location of your school ready to share with the students in Session 2.
Session 2

1. On a piece of chart paper, write the word “location.” Have the students get into pairs and discuss a definition. As a class, create a working definition. Record the student responses on the chart paper. Make sure that the students understand that location is “an item’s placement or where something is.”

2. Distribute a “Location, Location, Location!” worksheet to each student. Review the directions with the students. Tell the students that they should take notes on this sheet based on class discussions. The worksheet will be started in this session, and completed in Session 3. Introduce the term “relative location.” Tell the students that “relative location” describes a place’s location in relation to other places. It gets a traveler to a general area. Relative locations are described by landmarks, time, direction, or distance from one place to another. Add the definition to the chart paper. Ask the students for examples of relative locations within the school building.

3. Display and discuss the teacher-created description of the relative location of your school. Talk about familiar community landmarks.

4. Discuss the relative location of the school. Create a list of things that would need to be included on a map to help someone get from the school to their home. Model how to write a description for a relative location. Point out key street names and familiar landmarks such as parks and stores. Stress that accuracy is an important aspect of making maps.

5. As a class, review and discuss the four elements of a map: title, compass rose, scale, and legend or key.

6. Tell the students that each of them will create a map and written directions of the route from their home to school. They can use the description provided by the teacher as a guide. The map needs to include the four elements of a map.

7. Distribute paper and supplies for the maps. Allow sufficient time for the students to work on their maps.

8. Collect the “Location, Location, Location!” worksheets.

   Note: Have an apple cut in half at the middle (horizontally, like a latitude line) and a peeled orange ready for Session 3. Also locate the longitude and latitude (absolute location) of your school using an Internet site.

Session 3

1. Display and review the chart paper from the previous session. Introduce the term “absolute location.” Tell the students that “absolute location” refers to an exact location given with respect to a known place and uses a standard measurement system such as longitude and latitude coordinates. It gets a person to an exact location. Add the definition to the chart paper.
2. Distribute the students’ “Location, Location, Location!” worksheets from Session 2. Remind the students to add the definitions to the worksheet based on the class discussion.

3. Write the words “longitude” and “latitude” on the chart paper. Tell the students that longitude and latitude are sets of imaginary lines that divide the Earth into sections so locations can be described accurately. It is possible to know the absolute location of any point on the Earth. Lines of latitude are also called parallels, and lines of longitude are also called meridians. Discuss the similarities and differences between the definitions.

4. Show the students a halved apple and a peeled orange. Tell the students you will be doing a demonstration of longitude and latitude using fruit to help them remember the definitions.

5. Begin with the orange and point out the lines the sections naturally make. Ask the students which lines the orange sector lines are similar to. The students should respond “longitude.” Point out that longitude has an “O” in the word and orange begins with “O.”

6. Using a globe, provide the following information and point out the lines to the students: Lines of longitude (or meridians) run vertically from the North Pole to the South Pole. Meridians are used to describe a position and measure distances in degrees east or west of the line that runs through Greenwich, England, called the “Prime Meridian.” Meridians repeat every 180 degrees east and 180 degrees west around the globe and meet at a line opposite the Prime Meridian called the “International Date Line.”

7. Show the students the horizontally-bisected apple, holding both halves together. Separate the halves and point out the line of latitude or the “equator.” Ask the students which type of line the cut though the apple is similar to. The students should respond “latitude.” Point out that latitude has an “A” in the word, and apple begins with “A.”

8. Using a globe, provide the following information to the students: Lines of latitude (or parallels) circle the globe horizontally. Latitude describes a position north or south in relation to the equator. The equator is at 0 degrees latitude. The North Pole is at 90 degrees north and the South Pole at 90 degrees south. The degrees of latitude are about 69 miles apart. Lines of latitude never meet because they are parallel.

9. Display the “Key Lines” overhead transparency. As a class, discuss, locate, and label the main lines of longitude and latitude. The students should also label and outline the equator, Prime Meridian, Tropic of Cancer, and Tropic of Capricorn on their maps at the bottom of the “Location, Location, Location!” worksheet.

10. Distribute an “X Marks the Spot” worksheet and an atlas to each student. Using a Web site, provide the latitude and longitude of the school to the nearest second.

11. Have the students mark your school’s location on the “X Marks the Spot” worksheet and the overhead transparency.

12. Have the students work in pairs to complete the first eight questions. Review the answers as a class. Have the students connect the dots and discuss various stops along Lewis and Clark’s trail. Briefly discuss the significance of each stop along the trail.
13. For additional practice, put the following locations on the overhead transparency and have the students name the cities and states found there. The answers are in brackets.
   - 39° 58' north latitude and 83° 0' west longitude [Columbus, Ohio]
   - 58° 38' north latitude and 134° 13' west longitude [Juneau, Alaska]
   - 33° 54' north latitude and 112° 07' west longitude [Phoenix, Arizona]
   - 42° 39' north latitude and 73° 45' west longitude [Albany, NY]
   - 30° 26' north latitude and 84° 17' west longitude [Tallahassee, Florida]
   - 43° 37' north latitude and 116° 12' west longitude [Boise, Idaho]
   - 44° 19' north latitude and 69° 47' west longitude [Augusta, Maine]

Review the answers as a class.

14. Display the description of the school’s relative location from the previous session. Compare and discuss the differences between the examples of relative and absolute location given for the same place.

15. Brainstorm situations in which it would be better to use relative or absolute locations. For example, a hurricane tracker would use absolute location; a person hiking in the woods would use relative location.

16. Collect the students’ “Location, Location, Location!” and “X Marks the Spot” worksheets.

Session 4

1. Review the discussions from previous sessions and the timeline from Session 1.
2. Distribute a “Journey of Lewis and Clark” map and the students’ “X Marks the Spot” worksheets to each student.
3. Display the “Journey of Lewis and Clark” overhead transparency. Review Lewis and Clark’s route with the class. Using the longitude and latitude marks on the “X marks the Spot” worksheet, discuss key cities that are located along Lewis and Clark’s route and their importance.
4. Tell the students that they will research information about the various stops along the trail and record the information on the “Key Stops Along the Trail” worksheet.
5. As an example, explain to the students that Jefferson’s home, Monticello, was where Jefferson displayed some of the items gathered by Lewis and Clark. Have the students find the absolute location of Monticello and indicate it on the map.
6. Take the students to the computer lab and have them use one of the bookmarked sites for their research. Tell the students they may also want to research journal entries to discover the importance of each of the stops along the trail.
7. Allow the students sufficient time for research.
8. As a class, review and discuss the research findings. Collect the students’ worksheets.
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**ASSESSMENT**
Use the worksheets and research to evaluate the student’s ability to meet the lesson objectives.

**ENRICHMENTS/EXTENSIONS**
- Have the students take a Global Positioning System (GPS) reading of the following places: school, home, fire department, friend’s house, and post office. Students should record their readings and compare them with the readings of other students in the class.
- Have students create a map and written directions from their home to Thomas Jefferson’s home, Monticello, in Charlottesville, Virginia. The map should have absolute and relative locations for both their home and Monticello.
- Have students research information about the architecture of Monticello and create a blueprint.

**DIFFERENTIATED LEARNING OPTIONS**
- Provide students with a scribe for writing their ideas for the research worksheets.
- Allow students to work with a partner when completing the research activities.
Location, Location, Location!

Directions: Define the terms and answer the questions below from the class discussion. You may also use your textbook.

Location: __________________________________________
_______________________________________________

Relative location: __________________________________
_______________________________________________
_______________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

How can relative location change over time?
_______________________________________________

Absolute location: _________________________________
_______________________________________________

Longitude: _______________________________________
_______________________________________________

Another name for longitude: ________________________

Latitude: _________________________________________
_______________________________________________

Another name for latitude: _________________________

Explain the difference between absolute and relative location.
_______________________________________________
_______________________________________________
_______________________________________________

List the four main parts of a map.
_______________________________________________
_______________________________________________
_______________________________________________

Connect these words to the map:
Tropic of Cancer
Prime Meridian
Equator
Tropic of Capricom
Location, Location, Location!

Key

Directions: Define the terms and answer the questions below from the class discussion. You may also use your textbook.

Location: an item’s placement or where something is (in relation to its surroundings or fixed points).

Relative location: a place’s location in relation to other places. Relative location descriptions use landmarks, time, direction, or distance between places. They get a traveler to a general area.

How can relative location change over time?
Landmarks can change or disappear.

Absolute location: an exact location in relation to a known origin or place using a standard measurement system such as longitude and latitude coordinates. It gets a traveler to an exact area.

Longitude: imaginary lines that run vertically from the North Pole to the South Pole. The lines measure distances east or west of the Prime Meridian (which runs through Greenwich, England). Meridians are incremented in degrees and meet at the International Date Line.

Another name for longitude is: meridian

Latitude: imaginary lines that circle the globe horizontally. Latitude measures distances north or south of the equator (at 0 degrees latitude). The North Pole is at 90 degrees north and the South Pole at 90 degrees south. The degrees of latitude are about 69 miles apart. The lines never meet because they are parallel.

Another name for latitude is: parallel

Explain the difference between absolute and relative location.
Absolute location is defined by latitude and longitude, while relative location refers to the position of a place as compared to other places (for example, north and east of a specific place).

List the four main parts of a map:
title, compass rose, scale, legend.

Connect these words to the map:
Tropic of Cancer
Prime Meridian
Equator
Tropic of Capricorn
Key Lines

Directions: Identify the Equator, Prime Meridian, Tropic of Cancer, and Tropic of Capricom. Write the names and the degrees of longitude or latitude for each on the lines.
X Marks the Spot

Directions: Identify the locations on the map by following the coordinates listed below it.

Example: The location 43 degrees N, 75 degrees W is in what state? On the map, write its name on the state.

Find each of these locations and write its number by its dot on the map:

1. 46° 48' north latitude and 100° 47' west longitude
2. 46° 25' north latitude and 117° 01' west longitude
3. 38° 02' north latitude and 78° 29' west longitude
4. 43° 48' north latitude and 99° 24' west longitude
5. 46° 11' north latitude and 123° 50' west longitude
6. 38° 49' north latitude and 90° 23' west longitude
7. 38° 37' north latitude and 90° 11' west longitude
8. 47° 30' north latitude and 111° 18' west longitude
**X Marks the Spot**

**Key**

**Directions:** Identify the locations on the map by following the coordinates listed below it.

130°W 120°W 110°W 100°W 90°W 80°W 70°W

40°N 30°N 20°N

**Example:** The location 43 degrees N, 75 degrees W is in what state? On the map, write the name of the state. New York

Find each of these locations and write its number by its dot on the map:

1. 46° 48' north latitude and 100° 47' west longitude  Bismarck, ND
2. 46° 25' north latitude and 117° 01' west longitude  Lewiston, ID
3. 38° 02' north latitude and 78° 29' west longitude  Charlottesville, VA
4. 43° 48' north latitude and 99° 24' west longitude  Oacoma, SD
5. 46° 11' north latitude and 123° 50' west longitude  Astoria, OR
6. 38° 49' north latitude and 90° 23' west longitude  St. Louis, MO
7. 38° 37' north latitude and 90° 11' west longitude  Hartford, IL
8. 47° 30' north latitude and 111° 18' west longitude  Great Falls, MT
# Key Stops Along the Trail

**Directions:** Using your “X marks the spot” worksheet and other available resources, write the name of a city or area visited by Lewis and Clark in the first column. In the second column, explain its importance to the Expedition.

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<th>IMPORTANCE</th>
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