

Over the Rivers and Through the Woods

Grade Six



OBJECTIVES

Students will examine the purpose of the keelboat used by the Corps of Discovery on their expedition. They will assess its strengths and weaknesses for navigating different rivers, and will also describe its overall purpose for the Expedition.



CLASS TIME

Three 45- to 60-minute sessions



NATIONAL STANDARDS

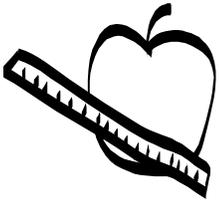
This lesson plan reflects some of the national standards of learning as defined by the National Council for the Social Studies (NCSS), the National Council for Teachers of English (NCTE), and the International Society for Technology in Education (ISTE). These standards are listed below:

- Social Studies: Time, Continuity, and Change
- Social Studies: Science, Technology, and Society
- Language Arts: Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
- Language Arts: Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- Technology: Basic Operations and Concepts
- Technology: Technology Research Tools



MATERIALS

- 1 overhead projector
- 1 overhead transparency of the “Louisiana Territory” map from the Resource Guide
- Chart paper
- Markers



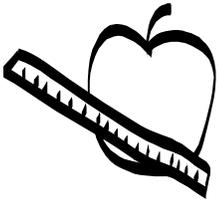
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- Copies of President Jefferson’s initial letter to Meriwether Lewis available on such Web sites as:
 - www.monticello.org/jefferson/lewisandclark/instructions.html
 - www.lewisandclark200.gov/edu/tjletter.cfm
 - www.clarkswcd.org/Education/LewisClark/LWLetter.htm
- Copies of each of the following:
 - “And Your Mission Is...!” worksheet
 - “Nickel for Your Thoughts” worksheet
 - “KWHL Chart”
 - “Why the Keelboat?” worksheet
 - “North America in the 1800s” map
 - “Keelboat Inventory” list
- 1 overhead transparency marker (optional)
- Keelboat Nickels
- A reserved computer lab with Internet access (optional)
- Web sites that include basic information about the keelboat used by Lewis and Clark, such as:
 - www.lewis-clark.org/boat1.htm
 - www.lewisandclark.net/boats.htm
 - www.lewis-clark.org/FTCCOLUMBIA/bo_keelb.htm
 - www.army.mil/cmh-pg/LC/The%20Mission/KeelboatPhotos/keelboat_photos.htm
 - www.lib.fit.edu/pubs/librarydisplays/L&C%20Brochure1.pdf
 - www.nps.gov/jeff/LewisClark2/CorpsOfDiscovery/CorpsOfDiscoveryMain.htm
- A selection of appropriate resources that provide accurate information about the details of Lewis and Clark’s journey, such as encyclopedias, reference books, magazines, and the Lewis and Clark journals.
- Red markers or colored pencils



PREPARATIONS

- Make an overhead transparency of the “Louisiana Territory” map from the Resource Guide.



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- Make copies of each of the following:
 - Thomas Jefferson’s letter to Meriwether Lewis (1 per student).
 - “And Your Mission Is...!” worksheet (1 per pair).
 - “Nickel for Your Thoughts” worksheet (1 per student).
 - “KWHL Chart” (1 per small group).
 - “Why the Keelboat?” worksheet (1 per student).
 - “North America in the 1800s” map (1 per small group).
 - “Keelboat Inventory” list (1 per small group).
- Gather several Keelboat Nickels (1 per student)
- Arrange to use the school computer lab for two class sessions (optional).
- Bookmark appropriate Internet sites (see examples under “Materials”; optional).
- Locate a selection of appropriate resources that provide accurate information about the details of Lewis and Clark’s journey (see examples under “Materials”).



GROUPINGS

- Whole group
- Small groups
- Independent work



TERMS AND CONCEPTS

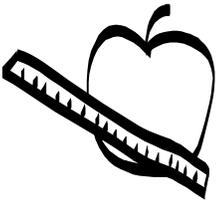
Obverse (heads)	Reverse (tails)	Journal	Lewis and Clark
Thomas Jefferson	Keelboat	Artifacts	



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- The Lewis and Clark Expedition (“Introduction” and “Lewis and Clark Expedition Overview” from the Resource Guide)
- Circulating coins and the new “Westward Journey Nickel Series™”
- Journal writing
- Basic research skills
- Internet navigation



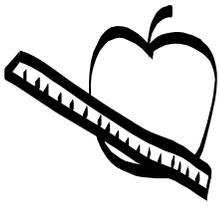
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STEPS

Session 1

1. Display the overhead transparency of the “Louisiana Territory” map. Explain that our country was not always the same shape that it is today. Show the students the section of the country that existed before the Louisiana Purchase.
2. Draw a concept web on chart paper, writing “Lewis and Clark” in the middle circle. Have the students brainstorm what they know about Lewis and Clark and their contribution to our country’s expansion. Record responses on the web.
3. Use the concept map to guide a discussion about Lewis, Clark, and the Louisiana Purchase. Be sure to discuss that in the early 19th century, President Jefferson bought the territory shown on the map as the Louisiana Purchase. He then sent a team of explorers, who were led by two men named Meriwether Lewis and William Clark, to explore this new land.
4. Explain that President Thomas Jefferson had several missions for Lewis and Clark to accomplish during their explorations.
5. Assign the students to pairs and give each pair one copy of Thomas Jefferson’s letter to Meriwether Lewis. Direct the students to read Jefferson’s letter and underline or highlight the missions of the Expedition.
6. Distribute one “And Your Mission Is...” worksheet to each pair of students. Read the directions aloud and have the students match Thomas Jefferson’s mission excerpts with the actual missions of the journey. Review the answers to check for student understanding.
7. Referring back to the “Louisiana Territory” map, follow Lewis and Clark’s route with your finger or an overhead marker, and point out that the explorers traveled over both land and water. Ask students to brainstorm the modes of transportation that Lewis and Clark may have used during their journey.
8. Explain that, starting in 2004 and continuing through 2005, our country is changing its nickels to tell the story of Lewis and Clark and their exploration of our country’s western lands 200 years ago. Display the Keelboat Nickel overhead transparency. Explain that the keelboat portrayed on the coin was the primary vessel used during the first part of Lewis and Clark’s journey. Guide the students to discuss how the keelboat might have helped Lewis and Clark in their mission to observe and record information about the plants, animals, and people they encountered along the way.
9. Divide the class into small groups of three or four students.
10. Distribute a Keelboat Nickel to each group for examination. Review the terms “obverse” and “reverse” with the students and ask them to very closely examine the “reverse” side of the nickel.

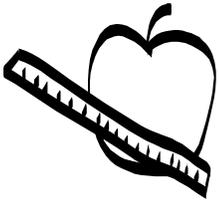


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11. Distribute one “A Nickel For Your Thoughts” worksheet to each student. Have students discuss in their groups why the keelboat might have been selected for a new nickel design. Direct students to record their responses on the “A Nickel For Your Thoughts” worksheet.

Session 2

1. Direct students to meet in their groups from Session 1.
2. Distribute one “KWHL Chart” to each group. In their groups, the students should select a recorder. Direct the students to examine what they Know, Want to know, and How they can learn more about Lewis and Clark’s keelboat. Have recorders add this information to the group KWHL charts. They should leave the Learn column empty for now.
3. Regroup and, as a class, use the group KWHL charts to create a class KWHL chart on the chalkboard. Explain that, today and in the coming days, the students will have the opportunity to learn more about the keelboat’s role in Lewis and Clark’s expedition.
4. Distribute one “Why the Keelboat?” worksheet to each student. Explain that the students will work in their groups to research important characteristics of the keelboat’s construction.
5. Review the three boxes on the “Why The Keelboat?” worksheet. Have the students discuss why it would be important to know about the keelboat’s safety features, cargo storage capability, and river navigation efficiency. Explain to the students that these three topics will be the focus of their research.
6. Visit the computer lab with your students, or provide significant print resources such as books, magazines, Encyclopedias, and the Lewis and Clark journals.
7. Allow an appropriate amount of time for student research.
8. When students have completed their research, direct them to discuss what they have learned about the keelboat’s construction in their groups. Have the recorders add this information to the “L” column of the groups’ KWHL charts. Then encourage the groups to share with the class what’s on their charts, adding new information to the “L” column of the class KWHL chart.
9. Give each student a copy of the “North America in the 1800s” map. Explain that most people would identify St. Charles, Missouri as the starting point of the Lewis and Clark Expedition but that the journey of the keelboat actually began before then. Using the map, track the journey of the keelboat. Guide students to discover that the keelboat’s trip began in Pittsburgh, before the Expedition itself was under way.
10. Have the students trace the river routes of the Ohio, Mississippi, and Missouri rivers



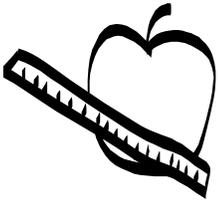
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with a red marker or pencil on their maps. Compare the river routes to the route of the Expedition.

11. Have the students discuss where the keelboat's journey ended. Guide the students to respond that the keelboat's journey ended in Fort Mandan, North Dakota, before the end of the Expedition. Direct the students to mark this location on their map. Have the students determine on how many rivers the keelboat traveled.
12. Have the students predict what happened to the keelboat and its cargo at this point and why it was no longer needed. Explain that the keelboat was sent back from Fort Mandan in order to carry reports and artifacts east to President Jefferson to show him evidence of the Expedition's success.

Session 3

1. Direct the students to meet in their groups from Session 1.
2. Distribute one "Keelboat Inventory" list to each group. Explain that the groups are now to pretend that they are back in St. Louis, unloading the cargo from the keelboat.
3. Explain to each group that their job is to sort this inventory list into six crates that can be shown to President Thomas Jefferson. Each crate should represent one of the goals of the Expedition identified on the "And Your Mission Is...!" worksheet from Session 1.
4. Distribute several pieces of chart paper and markers to each group.
5. Direct the groups to label each piece of chart paper "Crate 1," "Crate 2," and so on. Explain that each crate will represent a different mission of the Expedition. Remind the students that all the items on the inventory list must be represented in one of the crates.
6. Direct the groups to review their KWHL charts. Discuss the crate charts as a class and add any new information to the class KWHL chart.
7. Lead a class discussion on the role that the keelboat played in Lewis and Clark's Expedition. Have students discuss how the keelboat helped Lewis and Clark achieve their mission.
8. Direct the students to write a composition responding to the following prompt: "How would Lewis and Clark's expedition have been different without the keelboat? What part of the mission might have been more successful? What might have failed?"
9. If time allows, have students peer-edit their compositions for content, grammar, and mechanics, in class or as homework.
10. Collect the student compositions for assessment.



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ASSESSMENT

- Use the group worksheets, group charts, and individual compositions as assessment tools.
- Evaluate student participation in discussions .
- Take anecdotal notes regarding students' ability to work cooperatively.



ENRICHMENTS/EXTENSIONS

- Allow the students to independently explore the other forms of transportation used by Lewis and Clark during their journey.
- Invite students to explore and present information regarding one or several of the artifacts sent back on this keelboat.



DIFFERENTIATED LEARNING OPTIONS

- Allow students to work one-on-one with partners throughout these activities.
- Allow students to use a tape recorder, a portable word processor, or a scribe when creating their final compositions.



And Your Mission Is...!

On June 20, 1803, President Thomas Jefferson wrote a letter to Captain Meriwether Lewis outlining the duties and expectations he had for the expedition that Meriwether Lewis and William Clark would lead. Match each mission (these are just excerpts) to its goal (related activity). Keep in mind that the language and spelling of the original mission are that of Thomas Jefferson! As you match each mission with its goals, place the letter of the mission beside the goal.

MISSION

GOAL

- A. "To explore the Missouri river, & such principal stream of it, as, by it's course and communication with the waters of the Pacific ocean,...may offer the most direct & practicable water communication across this continent for the purposes of commerce."
- B. "Beginning at the mouth of the Missouri, you will take {careful} observation of latitude & longitude, at all remarkable points on the river, & especially at the mouths of rivers...& other places & objects..."
- C. "The commerce which may be carried on with the people inhabiting the line you will pursue, renders a knolege of those people important. You will therefore endeavor to make yourself acquainted...with the names of the nations & their numbers; their language, traditions, monuments; their food, clothing, accommodations; laws, customs & dispositions..."
- D. "Notice the soil & face of the country and mineral Productions of every kind."
- E. "Notice the growth & vegetable productions."
- F. "Notice the animals of the country generally."

_____ Gather all mineral, rock, and soil samples.

_____ Gather information about Native American peoples and their culture.

_____ Collect samples of any new plant life.

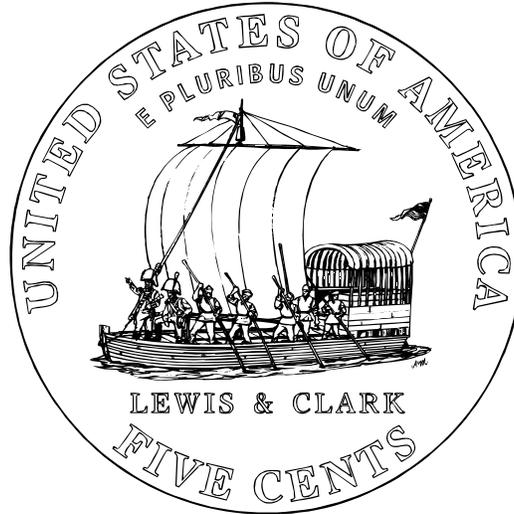
_____ Collect samples of any new animals.

_____ Make careful maps.

_____ Find a direct water Route to the Pacific Ocean.



Nickel for Your Thoughts



Directions: Examine the picture of the Keelboat Nickel reverse above carefully and think about the following questions.

1. What was the purpose of the keelboat that is pictured on the nickel? Why do think the boat was constructed like this?

2. Do you think that Lewis and Clark were able to take the boat on the entire journey? Why or why not?

3. What are some advantages of using a large boat like the one in the picture?

4. What are some disadvantages of using a large boat like the one in the picture?



KWHL Chart

For the Lewis and Clark Keelboat

K WHAT DO WE KNOW?	W WHAT DO WE WANT TO KNOW?	H HOW CAN WE FIND OUT WHAT WE WANT TO KNOW?	L WHAT DID WE LEARN?



Why The Keelboat?

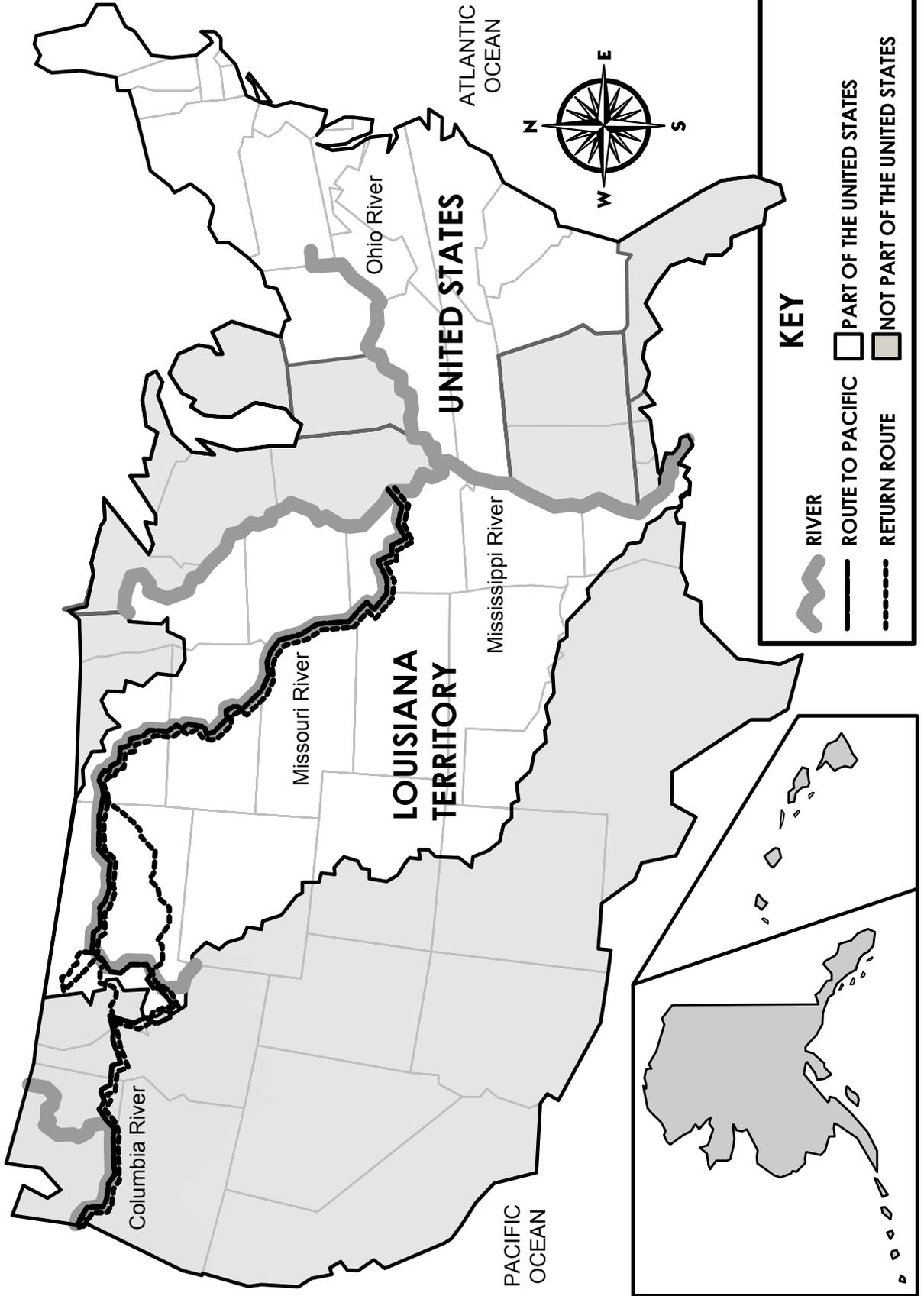
Directions: As you research the keelboat's characteristics, sort and record your findings into one of the three following categories.

SAFETY FEATURES

CARGO STORAGE

RIVER NAVIGATION EFFICIENCY

North America in the 1800s





Keelboat Inventory

- 1 Male and Female antelope with their skeletons
 - The horns of two mule or black-tailed deer
 - 1 Mandan bow and quiver of arrows
 - Recarra's tobacco seed
 - 1 Martin skin
 - 1 tail of a mule deer
 - 1 weasel
 - 3 squirrels
 - The bones and skeleton of a small burrowing wolf (the skin being lost by accident)
 - The skeleton of the white and gray hare
 - 4 buffalo robes
 - 1 ear of Mandan corn
 - 1 skin of the male and female antelope
 - 1 skin of a yellow bear
 - Specimens of plants numbered 1 to 67
 - Specimens of plants numbered 1 to 60
- 1 Mandan earthen pot
 - 1 tin box containing insects and mice
 - 1 specimen of a plant and part of its root, highly prized by the natives as a remedy in cases of a snake or dog bite
 - Skins of male and female prairie dogs
 - 1 skin of a red fox
 - 2 skins of the white hare
 - 1 buffalo robe containing articles of American Indian clothing
 - 4 horns of the mountain ram
 - 1 buffalo robe painted by a Mandan man representing a battle between various American Indian tribes
 - 1 living burrowing squirrel
 - 4 living magpies
 - 1 living hen
 - 1 large pair of elk's horns