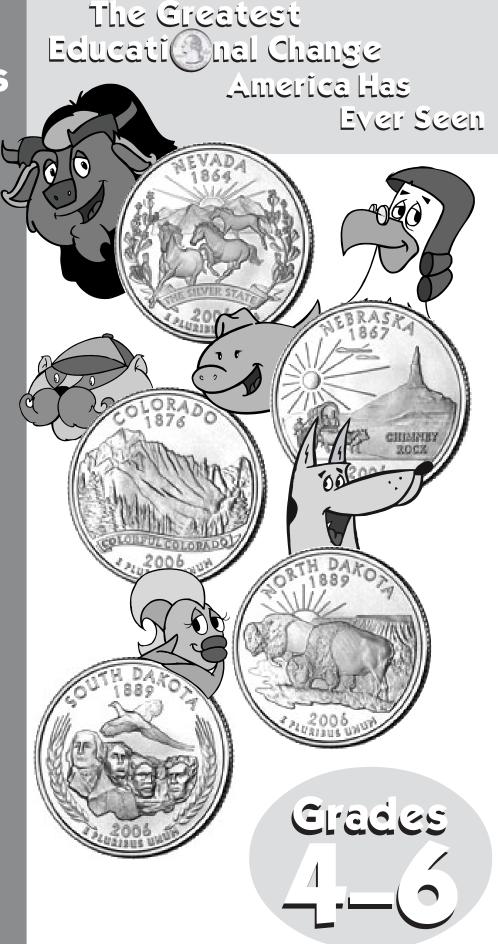
2006 Lesson Plans



This teaching guide includes:

- ◆ 6 teacher-friendly lesson plans that fit easily into your curriculum
- Reproducible student worksheets that coincide with each lesson
- Fun state facts and information on the new quarter designs
- USA map template with state outlines







Kids and coin collecting go hand in hand! By downloading the most recent sets of 50 State Quarters® Program lesson plans, you are able to bring the excitement of America's quarter craze right into your own classroom.

Launched in 1999, the United States Mint 50 State Quarters Program is a 10-year coin initiative commemorating each of the nation's states in the order that were admitted into the Union. Approximately every ten weeks (five times a year) through 2008, a new limited-edition quarter that displays an individual state's design is released into general circulation.

As it has every year since the beginning of this program, the United States Mint is offering the public three free sets of lesson plans (for grades K–1, 2–3, and 4–6). This year, we have added two new sets of free plans (for grades 7–8 and 9–12). All are designed to bring life to the history and beauty of our country. Moreover, these plans, created and reviewed by teachers to meet your curricular goals, draw upon the specific designs of the commemorative quarter reverses to help inspire students to learn about the culture, geography, and unique heritage of each state.

Each set of lesson plans blends clear instructions with kid-friendly reproducible worksheets, background information, and answer keys to help make instruction easier for you!

Within the 50 State Quarters Program lesson plans, you will also notice a strong connection to the United States Mint H.I.P. Pocket ChangeTM Web site. Appearing on the cover as well as within the plans themselves, the coin-loving H.I.P. Pocket Change Pals will show you ways to supplement the quarter activities with all of the fun and educational resources available on the site!

The H.I.P. Pocket Change Web site, located at www.usmint.gov/kids, is dedicated to promoting lifelong pleasure in coins and coin collecting. Through games, informational features, and interactive animated cartoons, the site introduces students to what's H.I.P. about coins—they're "History In your Pocket."

The United States Mint is proud to be taking such an active role in promoting knowledge about the individual states, their history and geography, and the rich diversity of the national heritage among America's youth. Take some time to explore all of the high quality educational resources available on the United States Mint H.I.P. Pocket Change Web site, including the materials related to the 50 State Quarters Program! We hope that you find these resources to be an extremely valuable addition to your classroom.



Visit us online at www.usmint.gov/kids



The Greatest Educational Change America Has Ever Seen

\ +	4	200		
Objective	Connections	Groupings	Class Time	Page
Amazing Metals	(Nevada) —			
Investigating metals, their properties, and their uses	Science	Whole groupSmall groupsPairsIndividual work	Two 45- to 60- minute sessions	2
Wagons West! (NExploring historical fiction and the journey west	Language ArtsSocial Studies	Whole groupSmall groupsIndividual work	Five 45- to 60- minute sessions	8
Colorful Colorad Understanding light and the effect of a prism	ColoradoSocial StudiesMathematicsScienceArt	Whole groupPairsIndividual work	Five 45- to 60- minute sessions	27
Neither Wind No	r Rain (North	Dakota) —		
Experiencing the effects of erosion	Science	Whole groupPairsIndividual work	Three 45- to 60- minute sessions	36
What an Accomp	lishment! (So	uth Dakota)		
Applying research and telling facts from opinions	Language ArtsSocial Studies	Whole groupSmall groupsPairsIndividual work	Four 45- to 60- minute sessions	49
Presidential Biog Learning about George Washington and the biography genre	graphy (Bicer • Social Studies • Language Arts	 Whole group Small groups Pairs Individual work 	Four 45- to 60- minute sessions	60
Iditional Resour				



1: Amazing Metals Based on the Nevada quarter reverse



OBJECTIVE

Students will participate in a guided investigation of metals, their properties, and their uses.



MATERIALS

- 1 overhead projector
- 1 overhead transparency (or photocopy) of the "Nevada Quarter Reverse" page
- 1 class map of the United States
- Locate copies of texts that give information about how minerals and metals are mined and used, such as:
 - National Audubon Society—First Field Guide—Rocks and Minerals by Edward Ricciuti and Margaret W. Carruthers
 - Eyewitness Book—Rocks and Minerals by Dr. R. F. Symes
 - Exploring Science—Rocks, Gems, and Minerals by Lisa Sitka
 - Rocks and Minerals by Neil Morris
- Chart paper
- Markers
- Highlighters (optional)
- "Marvelous Metals" worksheet
- "D" batteries
- Battery holders
- Light bulbs
- Light bulb sockets
- Insulated copper wires
- Wire stripper

PREPARATIONS

- 1. Make a copy of the "Marvelous Metals" worksheet (1 per student)
- 2. Locate and gather items made of metal, such as nickels, paper clips, aluminum foil, copper wire, iron elbow joints, and zinc connectors. Get enough items so that small groups each have five items to examine. Groups may all have the same items. Make sure that the items do not have sharp edges and are safe to handle. Label each item.
- 3. Before Session 2, create enough observation stations around the room so that the small groups can each examine five metal objects at each station.



Amazing Metals

- 4. Make sure to include a simple circuit at each station, or have the students build the circuits. Here's how to build a simple circuit:
- 5. Gather materials (a "D" battery, a "D" battery holder, a light bulb, a light bulb holder, and two insulated copper wires) and a wire stripper.
- 6. Insert the battery into the battery holder and the light bulb into the socket.
- 7. Strip the insulator off both ends of the wires with the wire stripper.
- 8. Attach one end of each wire to the terminals on the light socket. Connect the other ends to the terminals on the battery holder.



GROUPINGS

- Whole group
- Small groups
- Pairs
- Individual work



CLASS TIME

Two 45- to 60-minute sessions



CONNECTIONS

Science



TERMS AND CONCEPTS

- Metal
- Luster
- Malleability
- Hardness
- Conductivity



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of electrical circuits.

STEPS

Session 1

1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate Nevada on a classroom map. Note its position in relation to your school's location.



Amazing Metals

- 2. Display the "Nevada Quarter Reverse" overhead transparency. Ask the students what they see in the image on the coin. Lead a class discussion regarding the images and explain the following to the students.
- 3. Nevada has the largest wild horse population of any state. These horses run free on public lands.
- 4. Part of the Sierra Nevada mountain range is located in Nevada.
- 5. Nevada became a state in 1864.
- 6. An area called "The Great Basin" covers much of Nevada. Although more mountainous than most deserts, the Great Basin is mostly desert.
- 7. Sagebrush, which is shown on the coin, is the state flower of Nevada and grows in the desert.
- 8. Nevada's nickname is "The Silver State" because much of the silver found in the United States is found in Nevada. Explain that Nevada also produces gold, oil, and salt.
- 9. Ask the students what gold and silver have in common. The students may suggest that jewelry is made of gold and silver or that both are expensive. Guide the students to the conclusion that gold and silver are both metals.
- 10. Make a T-chart on chart paper with the columns labeled "Metals" and "Minerals." Ask the students to name some other metals (besides gold and silver) with which they are familiar. List these metals under the "Metals" column on the T-chart. Guide the students to name common metals such as copper, aluminum, iron, nickel, zinc, and platinum. Write the metals on the chart.
- 11. Tell the students that they will read a text about minerals and metals. Introduce the selected text. Read the text or excerpts of the text aloud with the students.
- 12. As a class, summarize the main points of the text. Record key concepts and ideas on a piece of chart paper.
- 13. Have the students choose a mineral or metal mentioned in the text. On a piece of note-book paper or in their science journals, have the students write a summary explaining the properties of the metal, how it's used, other names it may have, and facts about it. An illustration should also be included.
- 14. Have the students find a partner who wrote about a metal different from their own. Allow time for them to tell each other about the metal they chose.
- 15. Collect their writings.

Session 2

1. Review the material from Session 1.



Amazing Metals

- 2. Distribute the "Marvelous Metals" worksheets to the students. Tell the students that scientists use several terms to describe metals. Discuss the terms at the top if the worksheet. Review each of the terms and its meaning with the students. Tell the students that some metals have more of one property than another—for example, some are very hard, but not very bendable. Manufacturers choose different metals for different jobs depending on the needs of the job.
- 3. Using the items made of metal, have the students complete the "Marvelous Metals" worksheet in pairs. When the students are done, review the answers as a class.
- 4. Have the students get into small groups and assign the groups to each of the stations. Allow time for the groups to complete the activity.
- 5. Once the groups have completed the activity, have them compare their answers with those of other groups that have similar items.
- 6. Collect the "Marvelous Metals" worksheets.



ASSESSMENT

Use the worksheets to assess the students' achievement of the lesson objectives.



ENRICHMENT/EXTENSIONS

- Have students select one metal and research that metal, then report on where the metal is found, how it is mined, and its uses.
- Invite speakers who work with metals (jewelry maker, carpenter, electrician, computer technician) into the classroom to demonstrate how they use metals.



DIFFERENTIATED LEARNING OPTIONS

- Allow students to work in pairs to complete the worksheets.
- Allow students to dictate their written responses to a scribe.



CONNECTION TO WWW.USMINT.GOV/KIDS

Learn more about the metals used to make coins by looking at the October 2005 Coin of the Month Teacher Feature "Metals for Minting" found at www.usmint.gov/kids/index.cfm?fileContents=teachers/features/2005/10.cfm.



Name					
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Marvelous Metals

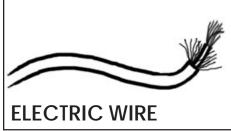
Directions: Based on your observations of the metal objects, choose an amount from each scale that rates the object's characteristics using the five terms scientists use to describe metals:

- Luster: Describes the metal's shininess.
- Malleability: Describes how bendable a metal is without breaking.
- Hardness: Describes how difficult the metal is to penetrate (go through).
- Conductivity: Describes how well the metal moves heat and electricity.
- Color: Describes the metal's color.

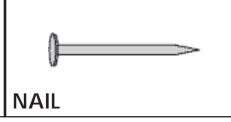
Item 1:			
How lustrous is it?		Somewhat	Not at all
How malleable?	Very	Somewhat	Not at all
How hard?	Very	Somewhat	Not at all
How conductive?	Very	Somewhat	Not at all
Describe the color	r:		
Item 2:			
How lustrous is it?	Very	Somewhat	Not at all
How malleable?	Very	Somewhat	Not at all
How hard?	Very	Somewhat	Not at all
How conductive?	Very	Somewhat	Not at all
Describe the colo	r:		
Item 3:			
How lustrous is it?	Very	Somewhat	Not at all
How malleable?	Very	Somewhat	Not at all
How hard?	Very	Somewhat	Not at all
How conductive?	Very	Somewhat	Not at all
Describe the colo	r:		

Item 4:			
How lustrous is it?	Very	Somewhat	Not at all
How malleable?	Very	Somewhat	Not at all
How hard?	Very	Somewhat	Not at all
How conductive?	Very	Somewhat	Not at all
Describe the colo	r:		
Item 5:			
How lustrous is it?	Very	Somewhat	Not at all
How lustrous is it? How malleable?	9		Not at all Not at all
	Very	Somewhat	
How malleable?	Very Very	Somewhat Somewhat	Not at all
How malleable? How hard?	Very Very Very	Somewhat Somewhat	Not at all Not at all

For each use of metal pictured below, tell whether the use requires that the metal be lustrous, malleable, hard, conductive, or colorful. Explain why.







Think of an object that is made of metal. Write 5 sentences describing the properties of the object and how it is used.



Nevada Quarter Reverse





Based on the Nebraska quarter reverse



OBJECTIVE

Students will describe the challenges the pioneers faced as they began their journey west. Students will understand and apply the elements of the historical fiction genre. Students will use historical fiction to learn more about a time period.



MATERIALS

- Nebraska quarters (optional)
- 1 overhead projector
- 1 class map of the United States
- Chart paper
- Markers
- 1 overhead transparency of each of the following:
 - "Nebraska Map"
 - "Background Information" page
 - "Nebraska Quarter Reverse" page (or photocopy)
 - "Can You Analyze This?" worksheet
 - "Monumental Measurements" page
- Locate multiple copies of a historical fiction text about pioneers, such as:
 - Roughing It on the Oregon Trail by Diane Stanley
 - Don't Know Much About the Pioneers by Kenneth C. Davis
 - Growing Up in Pioneer America: 1800 To 1890 (Our America) by Judith Pinkerton Josephson
 - Children of the Westward Trail by Rebecca Stefoff
 - You Wouldn't Want to Be an American Pioneer! by Jacqueline Morley
 - If You Traveled West in a Covered Wagon by Ellen Levine
 - Words West: Voices of Young Pioneers by Ginger Wadsworth
 - A Pioneer Sampler: The Daily Life of a Pioneer Family in 1840 by Barbara Greenwood
 - Daily Life in a Covered Wagon by Paul Erickson
 - Pioneer girl: Growing up on the Prairie by Andrea Warren
- Highlighters
- Copies of the following worksheets:
 - "Preview the Text"
 - "Can You Analyze This?"
 - "Reading Guide"



- "Journal Writing Guide"
- "Westward Journals" (optional)
- Copies of texts about pioneers to add to a class library, such as:
 - Daily Life in a Covered Wagon by Paul Erickson
 - Frontier Schools and School Teachers by Ryan P. Randolph
 - If You Traveled West in A Covered Wagon by Ellen Levine
 - My Face to the Wind: The Diary of Sarah Jane Price, A Prairie Teacher by Jim Murphy
 - A Pioneer Sampler: The Daily Life of a Pioneer Family in 1840 by Barbara Greenwood
 - Prairie Songs by Pam Conrad
 - Roughing It on the Oregon Trail by Dane Stanley
 - Stories of Young Pioneers in Their Own Words by Violet T. Kimball
 - Winter Thunder by Marie Sandoz
 - Words West: Voices of Young Pioneers by Ginger Wadsworth
 - You Wouldn't Want To Be an American President by Jacqueline Morley



PREPARATIONS

- Gather Nebraska quarters (1 per student) (optional)
- Make copies of the following worksheets:
 - "Preview the Text" (1 per student)
 - "Can You Analyze This?" (1 per student)
 - "Reading Guide" (1 set of 3 pages per student)
 - "Journal Writing Guide" (1 per student)
 - "Westward Journals" (optional) (1 per student)
- Make an overhead transparency of each of the following:
 - "Nebraska Quarter Reverse" page
 - "Nebraska Map"
 - "Background information" worksheet
 - "Can You Analyze This?" worksheet
 - "Monumental Measurements" page
- Locate multiple copies of a historical fiction text about pioneers (see examples under "Materials").
- Gather copies of a text about pioneers for a class library (see examples under "Materials").
- Note that students may need an additional session to finish reading the text.





GROUPINGS

- Whole group
- Small group
- Individual work



CLASS TIME

Five 45- to 60-minute sessions



CONNECTIONS

- Language Arts
- Social Studies
- **Mathematics**

These standards of learning are suggested for the state of Nebraska:

- 4.10 Students will identify and use essential map elements
- 8.1.5 Students will describe growth and change in the United States from 1801-1861. Mathematics
- Students will estimate, measure, and solve word problems using standard units 4.3.2 for linear measure, area, mass/weight, capacity, and temperature.

Reading/Writing

- 4.1.1 By the end of the fourth grade, students will demonstrate the use of multiple strategies in reading unfamiliar words and phrases.
- 4.1.2 By the end of the fourth grade, students will demonstrate the use of multiple strategies to increase their vocabulary.
- 4.1.3 By the end of the fourth grade, students will identify the main idea and supporting details in what they have read.
- 4.1.5 By the end of the fourth grade, students will identify and use characteristics to classify different types of text.
 4.1.6 By the end of the fourth grade, students will identify and apply knowledge of
- the structure, elements, and literary techniques to analyze fiction.
- 4.1.7 By the end of the fourth grade, students will identify and apply knowledge of the text structure and organizational elements to analyze nonfiction or informational text.
- By the end of the fourth grade, students will write using standard English (conventions) for sentence structure, usage, punctuation, capitalization and spelling.
- 4.2.2 By the end of the fourth grade, students will write paragraphs/reports with focus, related ideas, and supporting details.
- 4.2.4 By the end of the fourth grade, students will demonstrate the use of multiple forms to write for different audiences and purposes.
- 4.2.5 By the end of the fourth grade, students will demonstrate the use of selfgenerated questions, note taking, and summarizing while learning.
 4.3.1 By the end of the fourth grade, students will participate in group discussions by

- asking questions and contributing information and ideas.
- By the end of the fourth grade, students will identify information gained By the end of the eighth grade, students will identify the main idea and by the end of the eighth grade, students will identify the main idea and
- supporting details in what they have read.
- 8.1.3 By the end of the eighth grade, students will identify and classify different
- By the end of the eighth grade, students will identify and apply knowledge
- of the structure, elements, and literary techniques to analyze fiction. By the end of the eighth grade, students will identify and apply knowledge of the text structure and organizational elements to analyze nonfiction or informational text.
- 8.1.6 By the end of the eighth grade, students will identify similarities and differences across a variety of eighth grade reading selections.
- By the end of the eighth grade, students will demonstrate the ability to analyze literary works, nonfiction, films, or media.
- 8.2.1 By the end of the eighth grade, students will write using standard English (conventions) for sentence structure, usage, punctuation, capitalization, and
- 8.2.2 By the end of the eighth grade, students will write compositions with focus, related ideas, and supporting details.
- By the end of the eighth grade, students will demonstrate the use of multiple forms to write for different audiences and purposes.
- 8.2.5 By the end of the eighth grade, students will demonstrate the ability to use self-generated questions, note taking, summarizing and outlining while
- 8.3.1 By the end of the eighth grade, students will participate in group discussions by asking questions and contributing information and ideas.

 8.4.1 By the end of the eighth grade, students will identify information gained
- and complete tasks through listening.



TERMS AND CONCEPTS

- Setting
- Character

Plot

Point of View



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- **Pioneers**
- Westward expansion
- Timeline
- Genre

- Journal writing
- Historical fiction





STEPS

Session 1

- 1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate Nebraska on a classroom map. Note its position in relation to your school's location.
- 2. Display the "Nebraska Quarter Reverse" overhead transparency or photocopy. Optionally, distribute actual quarters. Have the students identify the images in this coin design, including Chimney Rock, the pioneers, and the wagon. Lead a class discussion regarding the images.
- 3. Display the "Nebraska Map" overhead transparency and point out the Platte River Valley, the Oregon and California Trails, and the city of Omaha on the map. Remind the students that Chimney Rock is located west of Courthouse and Jailhouse Rock. Locate it and mark it on the "Nebraska Map." Collect the quarters, if used.
- 4. Tell the students that many drawings of Chimney Rock were made by artists, and most pioneers mentioned it in their diaries. Travelers reported that it was visible 40 miles away. Discuss this distance with the students. Talk about a store or other recognizable landmark that is 40 miles away from your school. Tell the students that Chimney Rock is said to have "the appearance of a haystack with a pole running far above its top" (by General Joel Palmer, leading a surveying party in 1845).
- 5. Display the "Monumental Measurements" overhead transparency and look briefly at the relative sizes of the different monuments shown. Tell the students that Chimney Rock was one of the most recognizable landmarks along the Oregon Trail. For the pioneers, it marked the end of the prairies and the approach to the Rocky Mountains. Talk to the students about the pioneers traveling along the Oregon Trail. Compare the size of Chimney Rock (325 feet from tip to base and 120 feet for the spire) with other landmarks like the Eiffel Tower (985 feet) and Statue of Liberty (305 feet).
- 6. Display the "Background Information" overhead transparency. Discuss the information with the students. Using the "Nebraska Map," point out the main routes the pioneers traveled and the importance and difficulty of traveling during that time in history.
- 7. On a piece of chart paper, start a concept web about the pioneer travels west. Add the student's thoughts and other ideas covered by the class discussion to the web.
- 8. Explain to the students that they will be reading historical fiction in small groups to learn more about the westward journey of pioneers in the mid-1800s. Define "historical fiction" as a story based on historical fact. All reading will be done during class time.
- 9. Divide the class into small groups and choose (or let students choose) a text to read.
- 10. Distribute a "Preview the Text" worksheet to the students.
- 11. Have the students get into their small groups to preview the text and complete the worksheet.



- 12. As a class, add any new content to the web.
- 13. Collect the completed "Preview the Text" worksheet.

Session 2

- 1. Review the concept web and the information discussed from Session 1 with the students.
- 2. Display the "Can You Analyze This?" overhead transparency and distribute a "Can You Analyze This?" worksheet to each student. Review the content of the worksheet. Encourage the students to highlight key information during the discussion.
- 3. Model analyzing a story line with the students using a simple story that is familiar to the students such as "The Three Little Pigs." Use the "Can You Analyze This?" overhead transparency as a guide for analyzing the story. Tell the students they will use this worksheet as a guide later. Encourage the students to take notes on the discussion.
- 4. Distribute the "Reading Guide" pages to the students. As a class, review the directions. Discuss and complete the vocabulary definitions at the top of the worksheet (see answer key). The students will use the definitions to help them complete the rest of the worksheet. Review the rest of the questions with the class.
- 5. Have the students get into their small groups and begin reading the chosen texts. Circulate among the groups and check for comprehension of the texts.
- 6. When there is about 10 minutes left in the class period, bring the class back together. As a class, discuss overall themes and content from the texts.
- 7. Review the web from the previous session and add any new information to the concept web
- 8. Collect the "Reading Guide" worksheets.

Session 3

- 1. Have the students get into their small groups from the previous session. Redistribute the "Reading Guide" worksheets to the students.
- 2. Have the students continue reading from the chosen text. The students should continue to fill in information on their "Reading Guide" worksheets. Circulate among the groups.
- 3. Once the students have completed the reading, discuss some of the student responses including the characters, setting, and plot on the "Reading Guide" worksheets.
- 4. Review and add any new information to the concept map.
- 5. Collect the "Reading Guide" worksheets.

Session 4

- 1. Display the overhead transparency of the "Nebraska Quarter Reverse" page.
- 2. As a class, discuss the details of the image on the coin. Point out the wagon and style of dress. Discuss the sequence of challenges that pioneers may have faced on their journey



westward regarding animals, food, and shelter. On a piece of chart paper, create a list of challenges and record the students' responses.

- 3. Display the challenges in the classroom for student reference. Provide time for the students to add any information from the concept web and chart to their "Reading Guide" worksheets.
- 4. Collect the "Reading Guide" worksheets.
- 5. Distribute the "Writing Guide" and "Journal Writing Guide" worksheets to the students.
- 6. Review the criteria of the journals ensuring that the students understand the following:
 - The journal entries that they will write are to be from the perspective of a member of a pioneer family traveling the trail.
 - There needs to be a sketch of Chimney Rock included in one of the entries.
 - Each entry must address at least one of the challenges often faced along the trail.
- 7. Allow enough time for the students to create their journal entries, using the worksheets and charts from previous sessions as a resource.
- 8. Have the students share their journal entries with others.
- 9. Collect all of the students' worksheets.



ASSESSMENT

- Take anecdotal notes about the students' participation in class discussions.
- Evaluate students' journal entries for integration of the historical information taught.



ENRICHMENT/EXTENSION

Once the journal entries are completed, have the students create a map showing the trail their characters took or a symbolic timeline to highlight the journey. Share and display the maps and timelines in the classroom.



DIFFERENTIATED LEARNING OPTIONS

- Provide books on tape.
- Allow students to dictate their journal entries to a scribe.



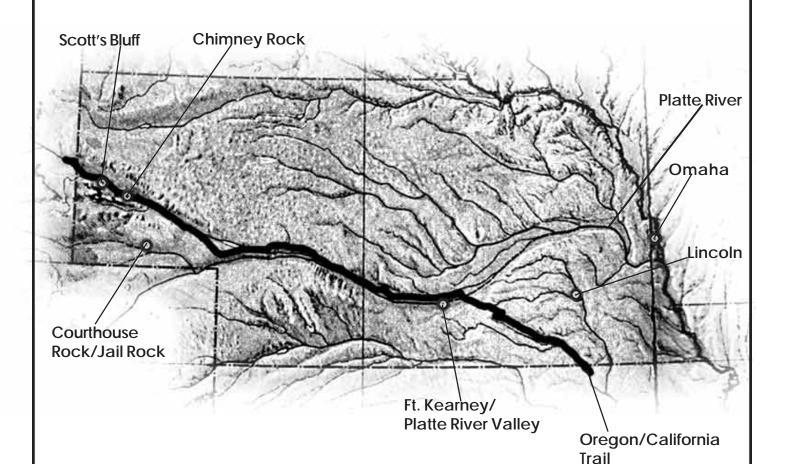
CONNECTION TO WWW.USMINT.GOV/KIDS

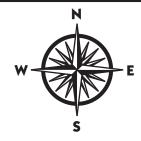
Have students learn about the Oregon Trail Memorial Half Dollar. The Oregon Trail is the historic route that led people west through five other states: Missouri, Kansas, Nebraska, Wyoming, and Idaho. Read the text at www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/2000/01.cfm.



Name _____

Nebraska Map





Scale: 1 inch = 70 miles -

Nebraska's greatest length (north to south) is 211miles. Its greatest width (east to west) is 430 miles.

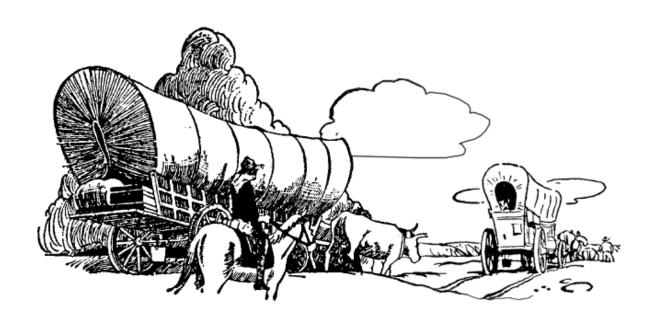


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Background Information

n the early 1840s, Nebraska's Platte River valley played a major role in what's called "the Great Migration," the years when thousands of pioneers were moving West. The pioneers crossed Nebraska following trails like the Oregon trail, which ran along the Platte River valley. The valley started near present-day Omaha and followed the Platte River. The trail (known as the California trail during the California gold rush) ran along the north bank of the river.

Many, many travelers used these trails until railroads reached the Pacific Coast. During 1860 and 1861, Pony Express riders also followed the Platte River valley, carrying mail to the West Coast. Fort Kearny was set up near the present-day city of Kearney to protect the travelers crossing Nebraska.





Name _____

Preview the Text

Directions: After you preview the text, fill in the indicated information about the text.

Title:	Based on the title and preview of the text, I think the book will be about:
Illustrator:	
If there is a table of contents, chapter title that sounds the most interesting:	
If there a description ot the author, summary of the information:	One thing I think I will like about this book is:
Book's publishing date:	



Name	
Name	

Can You Analyze This?

Directions: After you preview the text, fill in the indicated information about the plot. "Plot" is the sequence of actions or events in the story. The information you fill in is based on the four basic components of plot.

•	ng of the story, where readers learn ers, location and time period.
that the major character I	ed early in the story, where we learn has a problem or conflict, either perneone or something else (external).
	action, where the conflict is pushed nse or important occurs, usually near
	g up" of the story, where questions left ered, or intentionally left unanswered.



Name _____

Reading Guide (1)



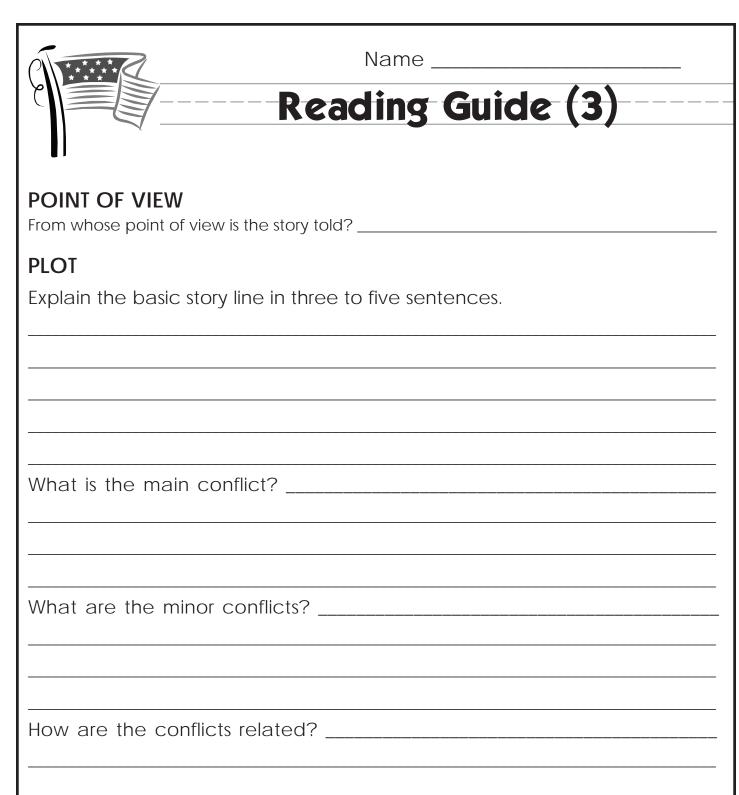
DADT 1

Directions: Write definitions for these literature terms.
Genre:
Setting:
Character:
Plot:
Point of view:
Historical fiction:
PART 2 Directions: Complete this section based on class discussions, your notes, and the text you are reading.
Title of text:
Author:
CHARACTERS
Describe the main character
List three to five of his/her character traits
What do the characters learn?



Reading Guide (2)

THEME
What is the theme (what is the story about)?
What is the author trying to say about that subject?
How does the author communicate this theme (how do you know what the theme is)?
Explain how the author uses symbolism, setting or the characters to convey the theme.
HISTORICAL SETTING
Where does the action take place?
What time period, era, time of day, time of year, etc. does this action take place?
How does this time and place affect the characters?
What historical references are made in the text?





Reading Guide Part 1 Key

PART 1

Directions: Write definitions for these literature terms.

Genre: a category of literary composition characterized by a particular style, form, or content.

Historical Setting: describes the scene for you by telling you where and when the story's action occurs. Setting generally includes the *time* and *place*.

Character(s): the person or people presented by the writer.

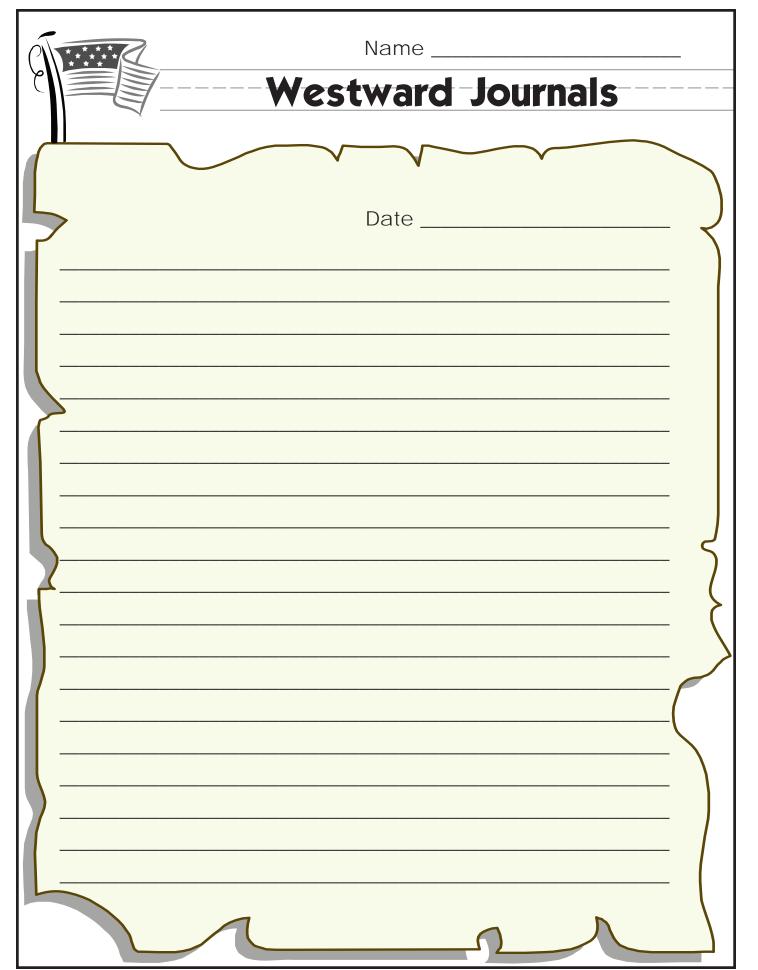
Plot: the sequence of actions or events in the story.

Point of View: the perspective from which a story is told—who tells the story and how it is told. Some examples of points of view are:

- First person—the narrator uses "I" to tell the story. The author is (or pretends to be) a character in the story.
- Third person—the narrator uses "he," "she," or "they" to tell the story and does not participate in the action.
- Third person omniscient—the narrator uses "he," "she," or "they" to tell the story, but also knows and tells the characters' thoughts and things the characters don't know.

Historical fiction: a story based on historical fact.

OT:	Name
'(اع	Journal Writing Guide
	Journal Willing Guide
11	Journal topic: You are traveling west with your family in 1867 to begin a new life. Describe in detail the journey in the covered wagon and life on the trail, and seeing landmarks such as Chimney Rock. As your family approaches Chimney Rock, be sure to add a sketch of this landmark to your journal entry.
	You need to create five dated journal entries, from the perspective of one or more people in the family.
	Use the literature terms below to help you create story details for your rough draft.
	Setting:
	Characters:
	Plot:
	Conflicts:



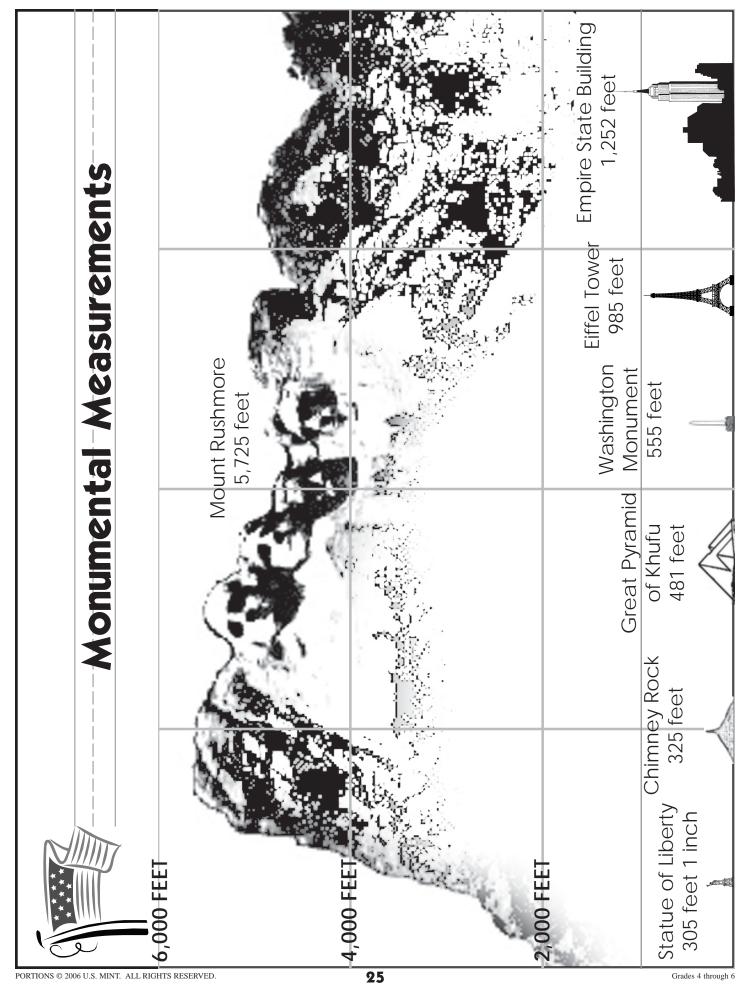


Journal Entry Rubric

<u> </u>						
CATEGORY	4	3	2	1	SELF	TEACHER
CONTENT	Entries are well- organized and include all of the required informa- tion. The factual information is correct.	Entries are well organized and include most of the required information. Most of the facts are correct.	Entries are somewhat orga- nized; some required informa- tion is included. Facts are some- what correct.	Entries lack organization. Little or none of the factual information is correct.		
ORGANIZA- TION	Entries are well focused and logical.	Entries are fo- cused and mostly logical.	Entries are somewhat focused and logical.	Entries are unfocused and lacking details.		
APPLICATION OF LITERATURE TERMS	Entries always include setting, characters, plot, and conflicts.	Entries mostly include setting, characters, plot, and conflicts.	Entries sometimes include setting, characters, plot, and conflicts.	Entries seldom include setting, characters, plot, or conflicts.		
MECHANICS	Very few errors in spelling, capitalization, punctuation, and grammar.	Some errors in spelling, capitalization, punctuation, and grammar.	Several errors in spelling, capitali- zation, punctua- tion, and gram- mar.	Many errors in spelling, capitali- zation, punctua- tion, and gram- mar.		
GRAPHIC DETAIL AND NEATNESS	Illustration of Chimney Rock has many details and is very neat.		Illustration of Chimney Rock has very few details.	Illustration of Chimney Rock is difficult to iden- tify.		
CONCLUSION	Conclusion is strong and clear what the writer is "getting at."	Conclusion is recognizable and ties up most loose ends.	Conclusion is recognizable, but does not tie up all loose ends.	Conclusion is lacking; the paper just ends.		

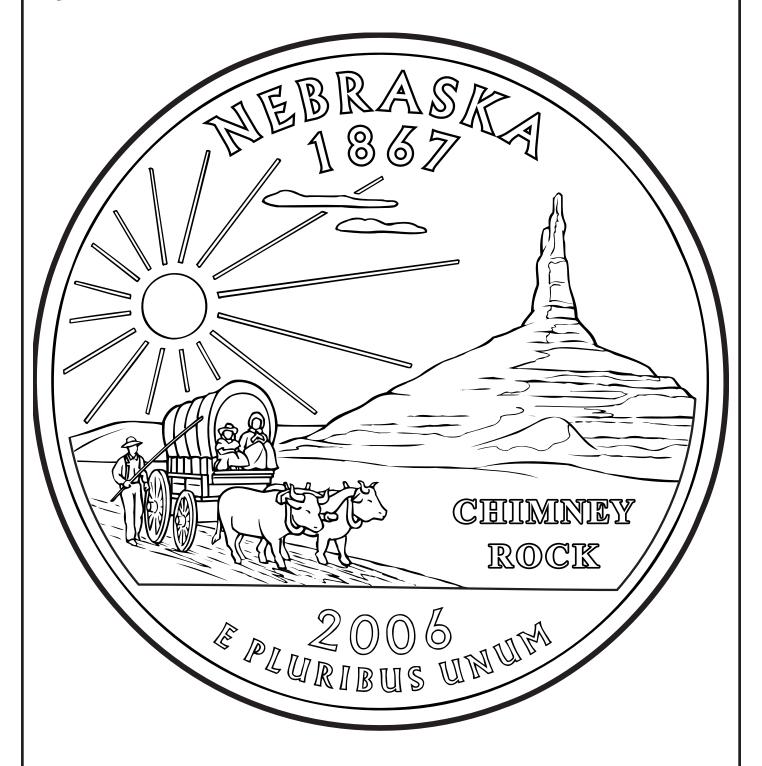
TOTAL POINTS

TEACHER COMMENTS





Nebraska Quarter Reverse



26



Based on the Colorado quarter reverse



OBJECTIVES

Students will explain the relationship between wavelength and the color of light. Students will identify the colors of the visible spectrum. Students will analyze the effect of a prism on white light and describe why this occurs.



MATERIALS

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the "Colorado Quarter Reverse" page
- 1 class map of the United States
- Copies of the following worksheets:
 - "Color Wheels"
 - "Why is the Sky Blue?"
 - "Why is the Sky Blue Rubric"
- Copies of a text about the state of Colorado, such as:
 - America the Beautiful, Colorado by Deborah Kent
 - Colorado by Dennis Brindell Fradin
 - Colorado by Sara Bledsoe
 - Rocky Mountain National Park by David Petersen
 - Hello USA, Colorado by Sara Bledsoe
 - Celebrate the States: Colorado by Eleanor H. Ayer
- Prisms
- White paper
- Flashlights
- Markers (red, orange, yellow, green, blue, and violet)
- Tag board
- Scissors
- Glue
- Rulers
- Pencils
- Poster paper





PREPARATIONS

- Make copies of the following:
 - "Color Wheel" worksheet (1 per student)
 - "Why is the Sky Blue?" worksheet (1 per student)
 - "Why is the Sky Blue Rubric" (1 per student)
- Make an overhead transparency (or photocopy) of the "Colorado Quarter Reverse" page.
- Reserve computer lab for one session for research.
- Locate an appropriate text about Colorado (1 copy per small group) (see examples under "Materials").
- Bookmark appropriate Web sites on light and color.
- Gather the materials for the experiment.



GROUPING

- Whole group
- Small groups
- Pairs
- Individual work



CLASS TIME

Five 45- to 60-minute sessions



CONNECTIONS

- Science
- Social Studies
- Mathematics
- Art



TERMS AND CONCEPTS

- Obverse (front)
- Reverse (back)
- Light
- Prism





BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- Color
- Equal parts



STEPS

Session 1

- 1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate Colorado on a classroom map. Note its position in relation to your school's location.
- 2. Display the transparency or photocopy of the "Colorado Quarter Reverse" page. Examine the design with the students and have them identify the images and the phrase "Colorful Colorado."
- 3. Divide the class into small groups. Distribute a copy of a text on Colorado to each group. Introduce the students to the selected texts about Colorado. Explain to the students that they will work in their groups to find some pictures or phrases to explain why the governor of Colorado would have chosen the "Colorful Colorado" image for the quarter. The students will share their findings with the rest of the class.
- 4. Allow time for the students to search. Allow each group to share with the class.
- 5. Write the student responses on chart paper.
- 6. Ask the students where color comes from. Explain that we couldn't see color without light, and that white light contains all the colors of the rainbow.
- 7. Divide the students into small groups of three or four. Explain to the students that they will be looking at how white light can be broken up into colors. Distribute a prism, a sheet of white paper, and a flashlight to each group. Darken the room if necessary. Have a student in each group hold the prism. Have another student hold the flashlight. A third student should hold up the sheet of paper. Align the flashlight, the prism, and the paper so that a rainbow shows on the white paper. Discuss with the students what is happening.
- 8. After the students return the materials, have them take out their science journals or a sheet of paper. Have the students draw an illustration of what they observed and write five sentences about their observation.
- 9. Collect the written observations and drawings.

Session 2

1. Review the observations from the previous session. Explain to the students that the six main colors in the rainbow or spectrum are revealed by the prism. Ask the students to identify the colors. Lead them to mention red, orange, yellow, green, blue, and violet.



Sometimes in books and other reference materials you will see a seventh color: indigo. Indigo is only added to the list to make it easier to remember the colors by combining the first letters of their names. The letters form the name "Roy G. Biv." Review this with the students if necessary.

- 2. Now that the students have split white light into colors, ask them how they might combine the different colors to make white. If the students suggest mixing paints, explain to the students or show them that mixing paints would make grey or brown, depending on the ratio of colors.
- 3. Distribute tag board, pencils, scissors, markers, rulers, and one copy of the "Color Wheel" worksheet to each student. Review the directions and have the students complete the activity.
- 4. As a class, discuss what happened during the color wheel experiment. Collect the sheet and materials.

Session 3

- 1. Review the activity from Session 2. Review the concept that white light is made up of all the colors of the spectrum. Explain to the students that wavelength determines color. Red is the shortest wavelength and violet the longest. As you go through the colors of the spectrum, each color has a longer wavelength than the one preceding it.
- 2. Explain to the students that they will be researching some information to answer a question that is related to light and color.
- 3. Pair the students. Distribute the "Why Is the Sky Blue?" worksheet and the "Why is the Sky Blue Rubric."
- 4. Review the directions and the rubric with the students. Assign each pair one of the three questions. Have the students choose what presentation method they are going to use.
- 5. Take the students to the computer lab and allow them time to research.

Sessions 4 and 5

- 1. Allow time for the students to finish their presentations.
- 2. Have the students present their projects.
- 3. Collect all project-related student materials for assessment.



ASSESSMENT

- Use the "Why is the Sky Blue Rubric" to assess student achievement of the stated objectives.
- Review and evaluate student journal entries.





ENRICHMENTS/EXTENSIONS

- Have pairs find the answer to more than one question.
- Have students design a picture book on light and color using the information from the demonstrations used in this lesson.
- Have students research more about infrared and ultraviolet light.



DIFFERENTIATED LEARNING OPTIONS

- Have the students use books to find the answers to the questions.
- Allow students to make audio or video recordings of their presentations.



CONNECTION TO WWW.USMINT.GOV/KIDS

- Have students learn more about light with the 2003 Maine quarter lesson plan for grades 2–3 at www.usmint.gov/kids/index.cfm?fileContents=teachers/lessonPlans/ lesson_select.cfm&grade=2.
- Have students learn more about light by visiting the 2005 Kansas quarter plan for grades 4 through 6 at www.usmint.gov/kids/index.cfm?fileContents=teachers/lessonPlans/ lesson_select.cfm&grade=3.
- Have students learn more about light with the February 2004 Coin of the Month, the Thomas Edison Commemorative Silver Dollar, at www.usmint.gov/kids/ index.cfm?FileContents=/kids/coinnews/cotm/2004/02.cfm.

C	
	*

Name _____

Color Wheel

Directions

1. Glue the circle at right to heavy paper and cut it out, or cut your own circle 3 inches in diameter from heavy paper.

- 2. Using a pencil and a ruler, divide the circle into 6 roughly equal parts.
- 3. Color the sections in this order: red, orange, yellow, green, blue, and violet.
- 4. Carefully poke the point of your pencil through the center of your circle from the front of the wheel. Move the wheel along the pencil until the wheel is near the eraser. The colors should face upward when the pencil is resting on its point.
- 5. Spin the pencil as fast as you can between your hands and observe the color effect.
- 6. Record your observations below.

Observations

How did the colors look when you spun the pencil?

Why do you think this happened?



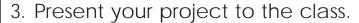
Name

Why Is the Sky Blue?

DIRECTIONS

- 1. Working with a partner, find the answer to one of these questions:
 - Why is the sky blue?
 - Why are clouds white?
 - Why is the sunset red?





WORK SPACE

Notes from research:	
Rough sketches of diagrams:	





Why Is the Sky Blue? Rubric

REQUIRED ELEMENTS

- 1. Written explanation of answer, which must contain information about wave lengths.
- 2. Illustration of answer.

CATEGORY	4	3	2	1	SELF	TEACHER
USE OF CLASS TIME	Excellent. Always focused on the project; never distracted others.	Very good. Usually focused on project without distracting others.	Fair. Sometimes focused on project but distracted others.	Did not use time to focus on the project, or often distracted others.		
GRAPHICS CLARITY	All graphics clear; content easy to see.	Most graphics clear and easy to see.	Some graphics clear and fairly easy to see.	Many graphics unclear or too small.		
GRAPHICS LABELS	All major items are clearly labeled.	Almost all major items are clearly labeled.	Some major items are clearly labeled.	Labels are too small to see or labels are missing.		
REQUIRED ELEMENTS	All are included, plus more information.	All are included.	One is missing or incomplete.	Several are missing or incomplete.		
KNOWLEDGE GAINED	Student can answer all ques- tions about the topic and how the presentation was created.	Student can answer most questions about the topic and how the presentation was created.	Student can answer some questions about the topic and how the presentation was created.	Student appears to have little knowledge about the topic or the presentation's creation.		
CONTENT ACCURACY	All facts are accurate.	Most facts are accurate.	Some facts are accurate.	Few facts are accurate.		
CONTENT GRAMMAR	Grammar is free of mistakes.	There is 1 gram- matical mistake.	There are 2 grammatical mistakes.	There are more than 2 grammatical mistakes.		
MECHANICS TOTAL POIN	Capitalization and punctuation are correct throughout	capitalization or	There are 2 errors in capitalization or punctuation.			

TEACHER COMMENTS



Colorado Quarter Reverse





Based on the North Dakota quarter reverse



OBJECTIVES

Students will understand the effects of wind and water on landforms in the Badlands and elsewhere.



MATERIALS

- 1 overhead projector
- 1 overhead transparency of each of the following:
 - "North Dakota Quarter Reverse" page (or photocopy)
 - "Go With the Flow" worksheet
 - "Badlands Background" fact sheet
- Copies of the following worksheets:
 - "Go With the Flow"
 - "Badlands—Student Notes"
 - "Wind Blown"
- 1 class map of the United States
- Chart paper
- Markers
- Physical map of North Dakota
- Color images of the Badlands
- Copy of a text that gives basic information about the Badlands, weathering, and erosion, such as:
 - Disappearing Mountain and Other Earth Mysteries: Erosion and Weathering by Louise Spilsbury and Richard Spilsbury.
 - Earth: The Ever-Changing Planet by Donald M. Silver
 - Learning about Rocks, Weathering and Erosion with Graphic Organizers by Diana Estigarribia
 - Badlands: Beauty Carved from Nature (Doors to America's Past Series) by Linda Wade
 - Badlands of the High Plains by Chuck Haney
- Medium-size cardboard box
- Magazine
- Small desk fan
- Plastic rectangular planter box, as long as possible, with a quarter-inch hole in one of the short sides



- Baking pan
- Coffee filter
- Sand
- Smooth pebbles
- Rough gravel
- Stack of books allowing for a 3-inch and 6-inch pile
- Ruler
- 5 to 6 cups of water
- Measuring cup
- 3 rocks, 3 to 5 inches in diameter (small enough to fit in the planter box)
- Newspaper
- Tape
- Small shovel or trowel
- Paper towels
- Highlighters
- Journals
- Pencils



PREPARATIONS

- Make copies of the following:
- "Badlands—Student Notes" worksheet (1 per student)
- "Wind Blown" worksheet (1 per student)
- "Go With the Flow—Erosion Investigation" worksheet (1 per student)
- Make an overhead transparency of each of the following:
- "North Dakota Quarter Reverse" page
- "Badlands Background" fact sheet
- "Go With the Flow—Erosion Investigation" worksheet
- Gather color images of the Badlands, especially those in North Dakota.
- Locate texts that give basic information about the Badlands, weathering, and erosion and have them available in the classroom (see examples under "Materials").
- Bookmark Internet sites about the Badlands.
- Bookmark Internet sites about erosion.
- Review the content of the "Badlands Background" fact sheet for background information before Session 1.



- Remove the top and one of the sides from a medium-size cardboard box for the experiment in Session 2.
- Set up the lab stations prior to Session 3.



GROUPINGS

- Whole group
- Pairs
- Individual work



CLASS TIME

Three 45- to 60-minute sessions



CONNECTIONS

Science



TERMS AND CONCEPTS

- Tablelands
- Badlands
- Geology
- Erosion



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- Bison
- Science experiments
- Predicting
- Observing



STEPS

Session 1

1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate North Dakota on a classroom map. Note its position in relation to your school's location.



- 2. Display the "North Dakota Quarter Reverse" overhead transparency or photocopy. Examine the design and have the students identify the images, including the sun, the landforms (the Badlands), and the two bison.
- 3. Ask the students why they think these images might be important to North Dakota, and accept all responses. Have students brainstorm what they know about bison. Lead a class discussion on the difference between a buffalo and a bison. Include the idea that the buffalo is genetically a cousin to the bison, but they are different animals. Only the bison is native to the United States, but the American bison is often called a buffalo.
- 4. On a class map, locate the Badlands in the western part of North Dakota.
- 5. Display the images of the Badlands for the students. Tell the students that the Badlands are known for their beauty and ruggedness. The Badlands were formed by erosion when bursts of heavy rain were followed by periods of drought.
- 6. Discuss the characteristics of the Badlands that can be noted from the images. Record the student responses on chart paper.
- 7. Display the "Badlands Background" fact sheet overhead transparency and distribute a "Badlands—Student Notes" worksheet to each student.
- 8. Discuss and highlight the content of the fact sheet with the students. Emphasize that the Badlands were created sixty million years ago and shaped by erosion.
- 9. Direct the students to complete the worksheet during the class discussion of the Badlands.
- 10. Allow time for the students to complete their worksheets.
- 11. Display the "Badlands—Student Notes" overhead transparency. Review the answers as a class.
- 12. Collect the students' worksheets.

- 1. Display the images of the Badlands and the "Badlands Background" fact sheet overhead transparency. Review the material covered in session 1.
- 2. Write the word "erosion" on a piece of chart paper. Have the students get into pairs and briefly brainstorm all that they know about erosion.
- 3. As a class, discuss the ideas brainstormed and create a definition for "erosion." Record the student responses on the chart paper.
- 4. Discuss the following with the students to ensure they understand these points:
 - Erosion is the process that shapes the Earth.
 - Erosion can happen quickly or gradually over time.
 - Wind and water are two sources of erosion.
 - Waves and glaciers (ice) can also reshape the land.
- 5. Have the students summarize what they learned about erosion and apply that information



- to what they've learned about the Badlands. Students should know that the Badlands were shaped by erosion.
- 6. Distribute a "Wind Blown" worksheet to each student. Explain that you will be using sand to demonstrate wind erosion.
 - **Note:** If there is enough time and supplies, the students can work together in small groups to complete the science experiments.
- 7. Review the terms "prediction" (what they think will happen) and "observation" (what actually happens) with the students. Tell the students they will need to predict and record observations throughout the demonstration.
- 8. Display a medium-sized cardboard box with its top and one side removed. Pour a pile of sand in the center of the bottom of the box.
- 9. Before each of the steps, tell the students to predict what will happen and allow them time to record their observation after each step.
- 10. Tell the students you are going to move air over the sand from the open side of the box to simulate wind on a desert or beach.
- 11. Ask three students blow lightly for 5 to 10 seconds at the same time over the sand from the open side of the box. Have all the students record their observations.
- 12. Ask a student to take the magazine and wave it up and down into the box for 5 to 10 seconds. Record observations.
- 13. Place the small desk fan by the open side of the box and briefly turn it on low for 5 to 10 seconds. Record observations.
- 14. Ask the students if the experiment would have different outcomes if smooth pebbles or rough gravel were used and record their predictions. Discuss the responses. Repeat the process with the other two substances.
- 15. Ask the students to summarize what happened in the "Wind Blown" experiment. Ask the students to suggest some places in the world where sand would be affected by wind erosion. Answers can include any specific beach or desert.
- 16. Allow the students sufficient time to complete their worksheets. Review the answers as a class and collect the worksheets.

Note: Assemble the materials for the water erosion experiment before Session 3 begins. You'll want to prepare an area with newspaper spread on the floor, where wet sand can be shoveled back into bags, and paper towels or a sink so the assistants can clean their hands. You might also apply the coffee filter and newspaper in advance (see step 8).

- 1. Review the material covered in the first two sessions.
- 2. Tell the students that they will be conducting an investigation to learn more about water



- erosion and how it can affect landforms. Tell the students they will need to compare the results of the "Wind Blown" experiment with today's "Go With the Flow" experiment.
- 3. Display the "Go With the Flow" overhead transparency and distribute a "Go With the Flow" worksheet to each student.
- 4. Review the worksheet and the steps for the investigation with the students.
- 5. Have the students make their initial predictions based on class discussions and prior knowledge.
- 6. As a class, conduct the experiment, allowing sufficient time for the students to record their observations.
- 7. Ask for a couple of student volunteers to assist with this experiment. (This activity will be demonstrated by the teacher with two student assistants. Have the assistants write "assistant" on their worksheet for exemption or watch a videotape of the experiment later and fill out their worksheets. The other students watch with their copies of the worksheet.)
- 8. Tape the coffee filter to the inside of the planter box over the hole to keep the sand from running out. Place some newspaper on the experiment table to protect it from spills.
- 9. Have one assistant fill the planter with sand to just below the hole. Have both assistants press on the sand to pack it down. Place the planter so that the end with the hole is in the baking pan (to catch the water) and the other is on a pile of books 3 inches high.
- 10. Have the other assistant pour one cup of water onto the sand at the raised end of the planter box. Observe what happens. (Water creates channels in the sand.) Have the students record and draw their observations on the worksheet. Have them check whether their prediction was correct.
- 11. Have the second assistant smooth out the sand, add books to the stack under the planter box until the upper end is 6 inches high, empty the baking pan, and replace it under the planter box.
- 12. Have the first assistant pour one cup of water onto the sand at the upper end of the box. Observe what happens. (Water moves faster and channels are deeper.) Have the students record and draw their observations on the worksheet. Have them check whether their prediction was correct.
- 13. Continuing to alternate the assistants, have them smooth out the sand, push a rock into the sand near the middle of the planter box, empty the pan, and replace it.
- 14. Pour two cups of water on the sand. Observe what happens. (Rock diverts the water. The stream is divided into two channels. Erosion is occurring around the rock.) Have the students record and draw their observations on the worksheet. Have them check whether their prediction was correct.
- 15. While the assistants empty the planter of the wet sand, have the other students predict what will happen when you use rough gravel or smooth pebbles instead of sand. Repeat the experiments for each substance.



- 16. Allow sufficient time for the students to complete their investigation worksheets and the assistants to clean up the experiment table.
- 17. Display the color images of the Badlands again. As a class, summarize the findings of the two experiments and how they relate to the Badlands and other areas. In the Badlands, the difference is not so much between sand and rock as between harder and softer rocks. One type of rock is called "sandstone." Sandstone can be hard, but it can also be very soft—soft enough to erode much more quickly than other types of rock.
- 19. Collect the students' worksheets.



ASSESSMENT

- Take anecdotal notes about the students' participation in class discussions.
- Evaluate the students' worksheets and lab worksheets for their achievement of the lessons objectives.



ENRICHMENTS/EXTENSIONS

- Have students create a watercolor painting showing the beauty of the Badlands.
- Have students research details of Teddy Roosevelt's views on conservation and the Badlands of North Dakota.
- Have students build a mountain made to hold up when a large container full of water is
 poured over it. Students can build their mountains out of sand, pebbles, gravel, or a
 combination of two substances.



DIFFERENTIATED LEARNING OPTIONS

- Allow students to work with partners to complete their lab sheets.
- Allow students to dictate their written responses to a scribe.
- Videotape the experiments for the students who are absent or need to watch them again to accurately record their observations.



CONNECTION TO WWW.USMINT.GOV/KIDS

Invite students to visit "Coin of the Month" and look at other coins that feature bison such as:

- Kansas quarter at www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/2005/ 09.cfm.
- American Bison Nickel at www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/ 2005/03.cfm.
- Indian Head/Buffalo Nickel (1913–1937) at www.usmint.gov/kids/ index.cfm?fileContents=coinNews/cotm/2001/06.cfm.



Badlands Background Fact Sheet

"This broken country has been called always—by Indians, French voyagers, and American trappers alike—'the bad lands.'"

—Teddy Roosevelt

he Badlands, partly located in southwestern North Dakota, are known for their beauty and ruggedness. The Badlands were formed by erosion when bursts of heavy rain were followed by periods of drought.

The Badlands first began forming about 60 million years ago when streams carried eroded materials eastward from the Rocky Mountains and deposited them on the Great Plains. Warm, rainy periods followed and dense vegetation grew, fell into swamp areas, and was later buried by new layers of sediment. Some of this plant life became petrified. (Today, considerable amounts of petrified wood can be seen in the Badlands.) Sediments were being deposited, and streams were starting to cut through and sculpt the land, forming these typical Badlands features:

- **Buttes** (pronounced BYOOTS)—isolated hills or mountains with steep sides, usually having smaller tops than mesas have.
- Mesas, plateaus, or tablelands—broad, level, elevated areas with one or more cliff-like sides. "Mesa" is Spanish for "table." "Plateau" is French for "platter."
- Valleys—large depressions in the earth, usually between ranges of hills or mountains.

Yearly **precipitation** in the Badlands averages 15 inches. Rain, though infrequent, usually comes in hard downpours that cause erosion. Running water is still changing the Badlands. Water runs down slopes and causes gullies; some of it soaks into clay-rich rocks and soil, weakening them and eventually making them flow downhill. As a result, the soil is very loose and crumbly. The rivers and streams cut into cliff sides and carry away sand and silt brought in by smaller tributaries.

The Badlands are home to a great variety of creatures and plants. Rainfall, although light, does nourish the grasses that cover the land. Wildflowers can be founds here as well as over 180 species of birds, many of them songbirds. Mule deer, white-tail deer, prairie dogs, bison, and elk also live here.

Erosion is the process that shapes the Earth by moving rock and soil from one place to another. One of the major causes of erosion is running water. Rainwater collects in channels on the steep slopes of mountains. These channels become streams and rivers, which cut into the surface of the rock. The rivers then carry particles or rock and soil downstream. Because some rocks are harder than others, the rivers wear the rock away unevenly. Over time, the rivers can form deep valleys and canyons.



Name _____

Badlands

Student Notes

Directions: Review and highlight key parts of the vocabulary. Answer the questions based on the class discussion and the available resources.



VOCABULARY

Badlands: Deeply eroded, barren land

Terrain: Any piece of land

Drought: A prolonged period of dryness

Geology: The scientific study of the origin, history, and structure of the earth

Erosion: A general term applied to the wearing away and movement of earth materi-

als by gravity, wind, water, and ice

Dense: Marked by compactness or crowding together

Sediment: The matter that settles to the bottom of a liquid

Butte: An isolated hill or mountain with steep sides usually having a smaller summit

area than a mesa

Mesa, plateau, or tableland: Broad, level elevated area

Precipitation: A deposit on the earth of hail, mist, rain, sleet, or snow

Tributaries: Small streams that lead to a river

Weathering: The breakdown of solid rock at or near the Earth's surface

1.	In what part of North Dakota are the Badlands located?
2.	When did the Badlands first began forming?
3.	How did the Badlands begin to form?
4.	As sediments were being deposited, what landforms did streams begin to form?
-	
5.	How many inches of rain fall in the Badlands yearly?
6	What continues to change the shape of the Badlands?



Badlands

Student Notes—Key

Directions: Review and highlight key parts of the vocabulary. Answer the questions based on the class discussion and the available resources.



VOCABULARY

Badlands: Deeply eroded, barren land

Terrain: Any piece of land

Drought: A prolonged period of dryness

Geology: The scientific study of the origin, history, and structure of the earth

Erosion: A general term applied to the wearing away and movement of earth materi-

als by gravity, wind, water, and ice

Dense: Marked by compactness or crowding together

Sediment: The matter that settles to the bottom of a liquid

Butte: An isolated hill or mountain with steep sides usually having a smaller summit

area than a mesa

Mesa, plateau, or tableland: Broad, level elevated area

Precipitation: A deposit on the earth of hail, mist, rain, sleet, or snow

Tributaries: Small streams that lead to a river

Weathering: The breakdown of solid rock at or near the Earth's surface

- 1. In what part of North Dakota are the Badlands located? Southwestern
- 2. When did the Badlands first began forming? About 60 million years ago.
- 3. How did the Badlands begin to form? <u>Streams carried eroded materials eastward</u> <u>from the Rocky Mountains and deposited them on the Great Plains.</u>
- 4. As sediments were being deposited, what landforms did streams begin to form?

Buttes, tablelands, and val-

- 5. How many inches of rain fall in the Badlands yearly? 15 inches.
- 6. What continues to change the shape of the Badlands? Running water.
- 7. Name three animals that can be found in the Badlands. <u>Mule deer, white-tail deer, bison, prairie dogs, and elk</u>

leys.



Name					
------	--	--	--	--	--

Wind Blown

Directions: Answer these questions based on the experiments done in class.	
Define "prediction":	
Define "observation":	
What happens when a little bit of air blows on the sand:	
Predict what will happen as more air blows on the sand:	
Note what you observe:	
Predict the outcome when using pebbles:	
Note what you observe:	
Predict the outcome when using gravel:	
Note what you observe:	-
Explain what happened as more air blew over the sand:	
Explain what happened when pebbles replaced the sand:	
Explain what happened when gravel replaced the sand:	
Note which your predictions were correct:	
Summarize the results and what you learned about wind erosion:	

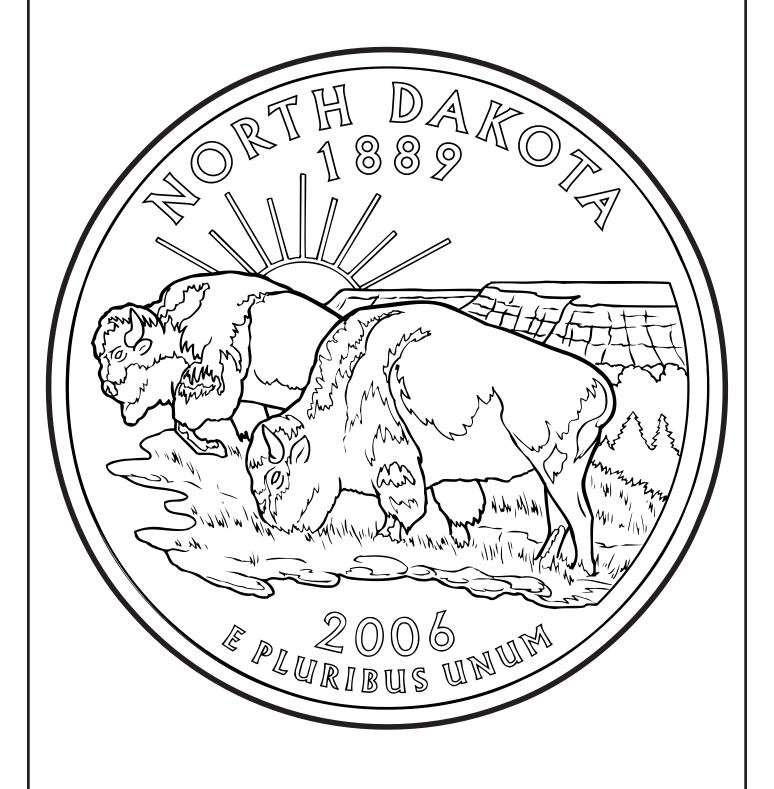


Name		
IVALLO		

م	Go With the Flow					
	Erosion Investigation					
Diı	rections: Answer these questions based on the experiments done in class.					
1.	What happens when the water moves across the surface of the sand?					
2.	What do you think will happen as you raise one end of the pan higher (angle of the mountain)?					
3.	How would the slope of a mountainside affect erosion?					
4.	Do you think the rock will have an affect on the water?					
5.	How do you think another substance like dirt or small pebbles would affect the outcome?					
6.	How is this experiment similar to what happens when water shapes the Badlands?					
7.	In these boxes, illustrate the three stages of the investigation.					
8.	Two types of erosion were investigated in class. Which type do you think would erode landforms, like the Badlands, at a faster rate? Explain your answer.					



North Dakota Quarter Reverse





Based on the South Dakota quarter reverse



OBJECTIVES

Students will understand the difference between fact and opinion. Students will understand and apply the basic tools of historical research and how to collect, interpret, and use the information. Students will understand the accomplishments of various United States Presidents in history.



MATFRIALS

- 1 overhead projector
- 1 overhead transparency (or photocopy) of the "South Dakota Quarter Reverse" page
- 1 overhead transparency of the "Essay Rubric"
- Copies of the following worksheets:
 - "Is That a Fact?"
 - "Who Is That Man?"
 - "Essay Outline"
 - "Essay Rubric"
- 1 class map of the United States
- Chart paper
- Markers
- Locate copies of texts about Mount Rushmore, such as:
 - Mount Rushmore (Cornerstones of Freedom) by Andrew Santella
 - Mount Rushmore: Historic Monuments by Julia Hargrove
 - Mount Rushmore (American Moments) by Rachel A. Koestler
 - M Is For Mount Rushmore: A South Dakota Alphabet by William Anderson
 - Mount Rushmore (American Moments) by Rachel A. Koestler
 - Mount Rushmore by Judith Jango-Cohen
- Locate copies of texts about American presidents, such as:
 - So You Want To Be President? by Judith St. George
 - Don't Know Much About the Presidents by Kenneth C. Davis
 - Presidents by Jerry G. Aten
 - The Look-It-Up Book of Presidents by Wyatt Blassingame





PREPARATIONS

- Make copies of the following worksheets:
 - "Is That A Fact?" (1 per student)
 - "Who Is That Man?" (1 per student)
 - "Essay Outline" (1 per student)
 - "Essay Rubric" (1 per student)
- Make an overhead transparency of each of the following worksheets:
 - "South Dakota Quarter Reverse" (or photocopy)
 - "Essay Rubric"
- Locate texts about Mount Rushmore (see examples under "Materials").
- Locate texts about American presidents (see examples under "Materials")
- Bookmark Internet sites about Mount Rushmore.
- Bookmark Internet sites about American Presidents.
- Arrange to use the computer lab for two sessions.



GROUPINGS

- Whole group
- Small groups
- Pairs
- Individual work



CLASS TIME

Four 45- to 60-minute sessions



CONNECTIONS

- Language Arts
- Social Studies



TERMS AND CONCEPTS

Monument

Fact

- Mount Rushmore
- Opinion

Theodore Roosevelt





BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- Presidents
- George Washington
- Thomas Jefferson
- Abraham Lincoln
- Research techniques
- Government
- Writing process



STEPS

- 1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate South Dakota on a classroom map. Note its position in relation to your school's location.
- 2. Display the "South Dakota Quarter Reverse" transparency or photocopy. Have the students identify the images, including Mount Rushmore, George Washington, Thomas Jefferson, Theodore Roosevelt, and Abraham Lincoln.
- 3. Lead a class discussion regarding the images and explain to the students that the image of the presidents on the coin is part of a "monument" (a reminder of someone or something notable or great or a memorial stone or a building erected in remembrance of a person or event) called "Mount Rushmore." Write the name "Mount Rushmore," the term "monument," and the term's definition on chart paper.
- 4. Ask the students what all of these men have in common. Students should respond that they were all Presidents of the United States. Briefly discuss each president. Talk about when they were in office (Washington 1789–1797, Jefferson 1801–1809, Lincoln 1861–1865, and Theodore Roosevelt 1901–1909). Ask the students how they know this information to be factual. Student responses may include they learned it in another class, read about it, or heard it on the news. Discuss what each man was best known for, such as:
 - Washington helped the nation achieve its independence from England.
 - Jefferson was responsible for the Louisiana Purchase, which doubled the size of the nation.
 - Roosevelt oversaw the completion of the Panama Canal, which connected the waters of the Atlantic and Pacific Oceans.
 - Lincoln saw the nation through the Civil War and helped to keep the states together as a Union.



- 5. On chart paper, record the terms and definitions "fact" (something that can be proven) and "opinion" (something a person thinks or believes). Discuss with the students the importance of knowing whether information you learn about an event or person is a fact or an opinion.
- 6. Write the following sentences on a piece of chart paper. "Today is (insert the day of the week and the date)." "I think the best day of the week is Friday." Read the first sentence aloud and ask the students if the first sentence is a fact or an opinion. Ask students to explain their answer. Explain that the first sentence is a fact because it can be proven.
- 7. Read the second sentence aloud and ask the students if it is a fact or an opinion. Ask students to explain their answer. Explain that the second sentence is an opinion because it is what someone thinks, but may not be true apart from those thoughts.
- 8. Explain to the students that dates, numbers, and events are usually provable. Phrases like "In my point of view," "best," "worst," and "always" are words that usually show that an opinion is being expressed. Also, adjectives like "beautiful" and "boring" tend to be opinions, while adjectives like "longest" and "oldest," which can be measured and compared, tend to be facts. Even so, facts can be misstated. "President Lincoln was born in 1999" is stated as a fact, but is not factual. Opinions are often stated as facts as well, as in a statement like "That movie was great."
- 9. Discuss places where knowing the difference between a fact and an opinion is important. Student responses may include magazine and newspaper articles, the Internet, and news reports on television. Tell the students that, at times, they hear information about people, such as the President of the United States. They may also read information about them in newspapers or magazines. This information could be in the editorial section or on the front page. It's important to distinguish whether this information is fact or opinion.
- 10. Distribute an "Is That a Fact?" worksheet to each student. Allow time for the students to complete the worksheet.
- 11. Review the answers as a class, then collect the worksheets.
- 12. Have the students get into small groups. Have them brainstorm current events as a class to generate ideas for statements that are either fact or opinion. Have each group write down 4 to 6 sentences as examples of facts and opinions.
- 13. Ask for student volunteers to role play a reporter and give a statement to the class from the small group. The class then decides whether the statement is a fact or an opinion and explain the reasons why.

Sessions 2 and 3

1. Display the "South Dakota Quarter Reverse" transparency or photocopy. Review the material covered in the first session.



- 2. Ask the students what they know about Mount Rushmore. Create a K-W-L chart on chart paper.
- 3. Introduce the students to the selected text about Mount Rushmore. Read the selected text or excerpts of a chosen text to the class. Add any new information to the chart.
- 4. Explain to the students that the four presidents shown on Mount Rushmore are part of a symbol. Remind the students that we have had many presidents in this country, but only four are shown on the monument. Ask the students why were those four presidents might have been chosen. Discuss their answers and add them to the K-W-L chart.
- 5. Tell the students that they will each be conducting research to find factual information about one of the four presidents and about Mount Rushmore. They will be looking for the background and presidential accomplishments of the four men to understand why they may have been chosen to be part of the monument in South Dakota. Ask each student which president he or she would like to research, to make sure all four presidents are covered.
- 6. Distribute a "Who Is That Man?" worksheet to each student. Explain that this is their research outline. They can use available resources to complete the outline.
- 7. Take the students to the computer lab. Allow them access to bookmarked Web sites and time to do their research.
- 8. Collect the students' worksheets.

Sessions 4 and 5

- 1. Redistribute the "Who Is That Man?" worksheet to the students and discuss their findings. Create a class chart with the students' responses, emphasizing the accomplishments of each president.
- 2. Display the K-W-L chart and add any new information about Mount Rushmore based on the students' research.
- 3. Tell the students they will be writing a five-paragraph essay about their president and Mount Rushmore. Distribute an "Essay Outline" worksheet to each student. Explain to the students that they will need to provide information on Mount Rushmore, describe the background and presidential accomplishments of the president, and explain why they think he was chosen to be one of the four faces on the monument. Tell the students they also need to think about and state what message they think is given to the people of the United States by showing the four presidents together and explain why they feel that way.
- 4. Display the "Essay Rubric" overhead transparency. Review the criteria for the essay with the students.
- 5. Direct the students to begin writing their outline and rough draft of their essay.
- 6. Allow time for the students to complete their essay using the writing and editing process.



- 7. Allow the student to share their writing with others.
- 8. Collect the essays and worksheets.



ASSESSMENT

- Take anecdotal notes about the students' participation in class discussions.
- Evaluate the students' research outlines for achievement of the lesson's objectives.
- Evaluate students' essays and rubric for integration of the historical information.



ENRICHMENTS/EXTENSIONS

- Have students write a newspaper article explaining the significance of the presidents shown on Mount Rushmore.
- Have students use modeling clay to create their own masterpiece of their favorite president.
- Have students debate why another president of their choice should be featured on Mount Rushmore.
- Have students reply to the question "What would the presidents on Mount Rushmore say if they came to life?" Invite students to act out their responses for the class.
- Have the students research other monuments or items around the nation that commemorate the presidents on Mount Rushmore.



DIFFERENTIATED LEARNING OPTIONS

- Allow students to work with partners to complete their research outlines.
- Allow students to dictate their essay to a scribe.
- Add other theme-related books about the presidents of the United States and Mount Rushmore to the class library.



CONNECTION TO WWW.USMINT.GOV/KIDS

- More Mount Rushmore: Have students read about the commemorative coin honoring this
 national monument. It's the Mt. Rushmore Anniversary \$5 gold coin at www.usmint.gov/
 kids/index.cfm?fileContents=coinNews/cotm/2001/03.cfm.
- Have students learn more about the presidents by visiting the Games page and playing Presidential Portraits at www.usmint.gov/kids/index.cfm?fileContents=games.
- Visit the "Nickel Knowledge" Teacher Feature, where students can learn more about the accomplishments of Thomas Jefferson. Go to www.usmint.gov/kids/index.cfm?fileContents=teachers/features/2003/09.cfm.



Is That a Fact?

Directions: Read each sentence below and decide whether it states a fact or an opinion. Write "fact" or "opinion" in the blank beside it. Underline key words in the sentence that helped you make your decision.

 Abraham Lincoln was President from 1861 to 1865. 	
I think the Gettysburg Address is the best speech in history.	
3. The best President of the United States was Theodore Roosevelt.	
 Theodore Roosevelt was born October 27, 1858, in New York, New York. 	
5. Thomas Jefferson's image is the perfect choice for the obverse of the nickel.	
6. I believe Thomas Jefferson' home, Monticello, is magnificent.	
7. George Washington was the first President of the United States.	
8. George Washington was elected to a second term in 1793.	

		MAJOR ACCOMPLISHMENTS	
Name		CURRENT EVENTS WHILE IN OFFICE	
ne T		POLICITAL PARTY	
Name	5	NUMBER PRESIDENT	
		YEARS IN OFFICE	
		HOME STATE	
		DATES OF BIRTH, DEATH	Φ
		PRESIDENT'S NAME	Mount Rushmore

*****	Name	
	Essay Outline	
Preside	nt's Name	
Background informati	ion on Mount Rushmore:	
Describe the backgro	ound of the president:	
Major presidential acc	complishments:	
Why was this presiden	nt chosen to be one of the four faces on the monument?	
What message do yo ing these four pres	u think is given to the people of the United States by show-sidents together?	



Essay Rubric

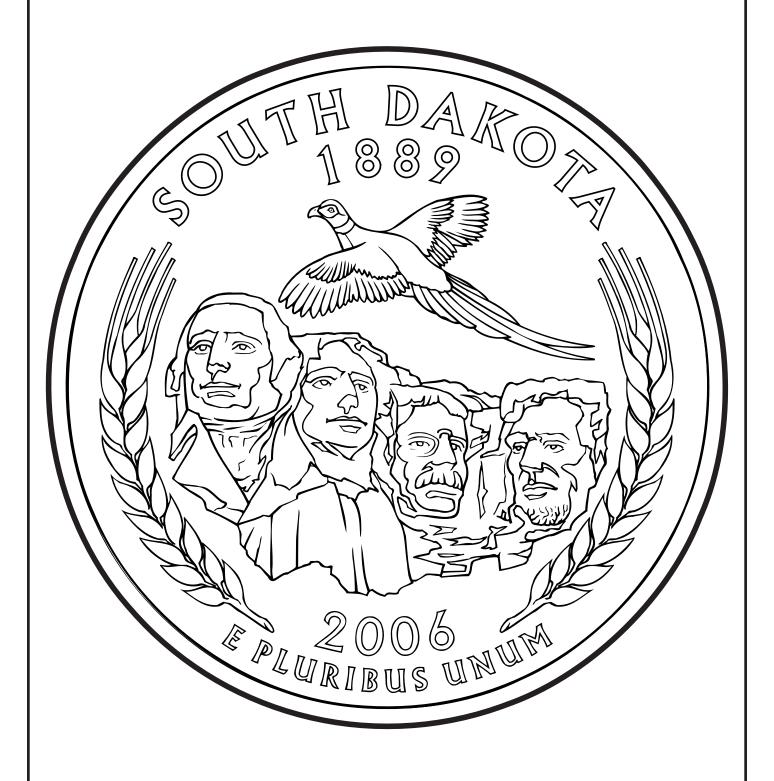
CATEGORY	4	3	2	1	SELF	TEACHER
Introduction (Organization)	States main topic clearly and interestingly.	States main topic, but is not very interesting.	States main topic, but not clearly or interestingly.	The main topic is not clearly introduced.		
Support for Topic (Content)	Details are relevant, give important information.	Details are relevant, but a key element is missing	Most details are relevant, but key details missing.	Most details are unclear, unimportant, or irrelevant.		
Focus on Topic (Content)	Main idea is clear and consistently in focus.	Main idea is mostly in focus.	Focus often wanders from main idea.	Main idea is unclear or often overlooked.		
Conclusion (Organization)	Conclusion is strong and sums up the entire essay.	Conclusion is recognizable and ties up most loose ends.	Conclusion is recognizable, but not conclusive.	Conclusion is lacking; the paper just ends.		
Sentence Structure (Fluency)	All sentences are well-constructed and structures are varied.	Most sentences are well-con- structed and structures varied.	Most sentences are well-con- structed but have similar structures.	Sentence structures are poor, are fragmented, or run on.		
Capitalization and Punctuation (Conventions)	No errors.	One or two errors.	Several errors.	Numerous errors.		
Grammar and Spelling (Conventions)	No errors.	One or two errors	Several errors.	More than 4 errors.		
TOTAL DOINTS						

TOTAL POINTS

TEACHER COMMENTS



South Dakota Quarter Reverse





Based on the Bicentennial Quarter



OBJECTIVES

Students will identify George Washington and his contributions to the United States, including being commander of the Continental Army during the Revolutionary War, leader of the Constitutional Convention, and the first president of the United States. Students will understand that a biography is a type of literary genre.



MATERIALS

- 1 overhead projector
- 1 overhead transparency of each of the following pages:
 - "Bicentennial Quarter Obverse"
 - "Bicentennial Quarter Reverse"
- Copies of the following worksheets:
 - "Biographies of Washington"
 - "George Washington Designs"
- Copies of various texts (1 per student) that give biographical information about George Washington and the American Revolution, such as:
 - A Picture Book of George Washington by David A. Adler
 - When Washington Crossed the Delaware by Lynne Cheney
 - George Washington by Lenny Hort
 - George Washington by Cheryl Harness
- Chart paper
- Markers
- Crayons, colored pencils



PREPARATIONS

- Make copies of the following:
 - "Biographies of Washington" worksheet (1 per student)
 - "George Washington Designs" worksheet (1 per student)
- Make 1 overhead transparency of each of the following:
 - "Bicentennial Quarter Obverse" page
 - "Bicentennial Quarter Reverse" page
- Locate texts about George Washington and the American Revolution (see examples under "Materials").
- Gather texts about George Washington and the American Revolution to use in a classroom library.





GROUPINGS

- Whole group
- Pairs
- Small groups
- Individual work



CLASS TIME

Four 45- to 60-minute sessions



CONNECTIONS

- Social Studies
- Language Arts



TERMS AND CONCEPTS

- Obverse (front)
- Reverse (back)
- Biography
- Biographer
- Bicentennial
- Liberty
- Declaration of Independence



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

- United States of America
- George Washington
- Revolutionary War
- President
- Great Britain



STEPS

- 1. Display the "Bicentennial Quarter Obverse" overhead transparency. Ask the students what they know about the image. Make sure that the students understand the following:
 - The image is the obverse (front) of a quarter, which is worth 25 cents, and four quarters equal one dollar.



- The name of our country, "The United States of America," is stamped at the top of the quarter.
- "Liberty," which means being free, is also stamped on the coin.
- The man on the quarter is George Washington, who was the first president of the United States of America.
- The quarter is "bicentennial," meaning two hundred years. This coin from 1976 marks
 the two hundredth anniversary of when the American colonies declared together their
 independence from Great Britain in 1776.
- 2. Ask the students to recall any other information they may know about George Washington. Tell the class that they will read a biography of George Washington. Ask the students what a biography is. If necessary, explain that a biography is a book that tells the story of a person's life, written by a different person (as opposed to an autobiography).
- 3. Ask the students what type of information the story of a person's life should include. List their responses on chart paper. Tell the students to listen to the biography and note whether or not it has the type of information they predicted it would have.
- 4. Introduce the students to the selected text about George Washington. As a group, preview the text. Read the text or excerpts aloud to the students. Attend to unfamiliar vocabulary and concepts.
- 5. After reading the selected text, compare the information in the text with the students' predictions on the chart paper.
- 6. Distribute one "Biographies of Washington" worksheet to each student. Tell the students that they will need to think about the biography that they just heard in order to complete the worksheet. They will also need to choose an important fact from each part of George Washington's life and write that fact in the space provided.
- 7. Allow time for the student to complete the worksheet.
- 8. Display the "Biographies of Washington" overhead transparency. Briefly have the students share their responses with the class. Record responses on the transparency. Collect the worksheets.

Note: Before Session 2, you may want to create small reading groups based on reading level and select a text for each group to read.

- 1. Display the "Bicentennial Quarter Obverse" overhead transparency. Briefly discuss the main points about George Washington discussed in the previous session. Review the definition of a biography.
- 2. Tell the students that they will independently read another biography about George Washington, assigned or self-chosen. If having them choose, show and briefly discuss with the students each of the texts from which they can choose.



- 3. Redistribute the students' completed "Biographies of Washington" worksheets. Tell the students that biographers (people who write biographies) do not always agree about which things are important enough to include in their books. Explain to the students that different biographers will emphasize or include different facts about the same person's life. Tell the students that, while they read the second biography, they should look for new information about George Washington that was not included in the biography from the previous session and record this information in the second part of the "Biographies of Washington" worksheets. If they can't find new information for a particular category, they should include something that they did not note in the first part of the worksheet.
- 4. Distribute or allow the students to choose one of the biographies available. Have the students read the text and complete their worksheets for the remainder of the class.
- 5. Collect the worksheets and texts.

- 1. Display the "Bicentennial Quarter Obverse" overhead transparency again. Redistribute the "Biographies of Washington" worksheets. Ask the students to share with a partner what new information they learned about George Washington in their second biography.
- 2. As a class, discuss the information learned about George Washington. From the readings, point out to the students that George Washington lived a very full and exciting life and that there are many things that a biographer could write about him. Lead a brief discussion regarding how a biographer would decide what events were important enough to include in a biography. Guide the students to the conclusion that a biography should include information about both what a person did and about the person's character and personality.
- 3. Explain to the students that an author will sometimes tell a fact or event in the person's life, and leave it up to the reader to decide what that fact says about the character or personality of the person. For example, many biographers note that, when Washington was home on his farm, he got up every morning and rode around the farm to see everything that was going on. Ask the students what they think this says about George Washington. Tell the students that a good biography makes readers feel like they have met the person they are reading about.
- 4. Assign the students to small groups. (If possible, make sure that no two students in the same group read the same biography.) Distribute a poster-sized sheet of chart paper to each group. Have the students review as a group the facts from their completed worksheets and choose five important facts about George Washington's life. Have them list those facts down one side of the chart paper and draw a picture next to each fact that tells more about the fact. The groups should be ready to tell the others what each fact says about George Washington.



- 5. Allow time for the students to complete their charts.
- 6. Have the student groups share their charts with the class and post them in the classroom.

Session 4

- Display the "Bicentennial Quarter Reverse" overhead transparency. Tell the students that
 this is the reverse (back) of a special quarter. This quarter is called "bicentennial," meaning 200 years. It commemorates the 200-year anniversary in 1976 of the year the American colonies declared their independence from Great Britain, 1776. Our Declaration of
 Independence was signed on July 4, which we celebrate each year as Independence Day.
- 2. The images chosen for coins often tell a story or represent a big idea. Ask the students why they think the image of the man was chosen. The students should respond that he represents the soldiers who fought for our nation's independence from Great Britain. Ask the students why they think that 13 stars were chosen. The students should respond that the 13 stars represent the 13 colonies that existed at the time.
- 3. Ask the students to hypothesize why George Washington was on the obverse of the bicentennial quarter. The students should respond that George Washington was the leader of the Continental Army during the Revolutionary War and is called "the father of our country."
- 4. Distribute the "George Washington Designs" worksheet. Tell the students that, before the United States Mint produces a coin, the image is designed as a drawing. Sometimes many designs are suggested before one is chosen.
- 5. Tell the students that their assignment is to think of three designs for the reverse of a new George Washington quarter. Explain to the students that, since his picture is on the obverse of the quarter, they must select something different for the reverses. They may choose to draw an important scene from his life or use symbols to represent his accomplishments or characteristics. Like a biographer, their goal is to present facts about Washington and also something about his personality. Then they are to choose one of the images and write a journal entry (5 to 7 sentences) explaining its importance.
- 6. Allow time for the students to complete the worksheets.
- 7. Collect the worksheets.



ASSESSMENT

- Take anecdotal notes about the students' classroom participation.
- Evaluate the students' worksheets for achievement of the lesson objectives.





ENRICHMENTS/EXTENSIONS

- Have students read other texts on another Revolutionary War figure and write a biography.
- Write the following on the board: "First in war, first in peace, and first in the hearts of his countrymen." Explain to students that this was written about George Washington after his death. Ask students to explain the meaning of the quote.
- Have the students locate other words with the prefix "bi" and "tri" in them and create an illustrated mini-dictionary.
- Have the students look at the reverse of the Virginia quarter, and discuss the meaning of the word "quadricentennial" and its pertinence to the coin. (The Virginia quarter honors the founding of Jamestown, Virginia, our nation's first permanent English settlement, in 1607. Jamestown turns 400 years old in 2007).



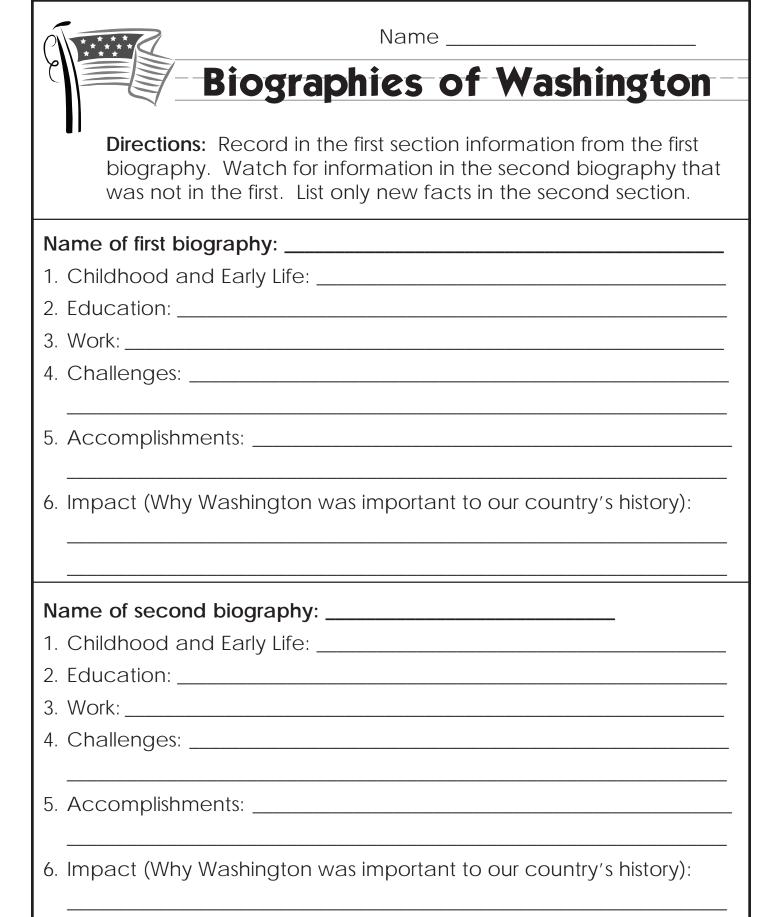
DIFFERENTIATED LEARNING OPTIONS

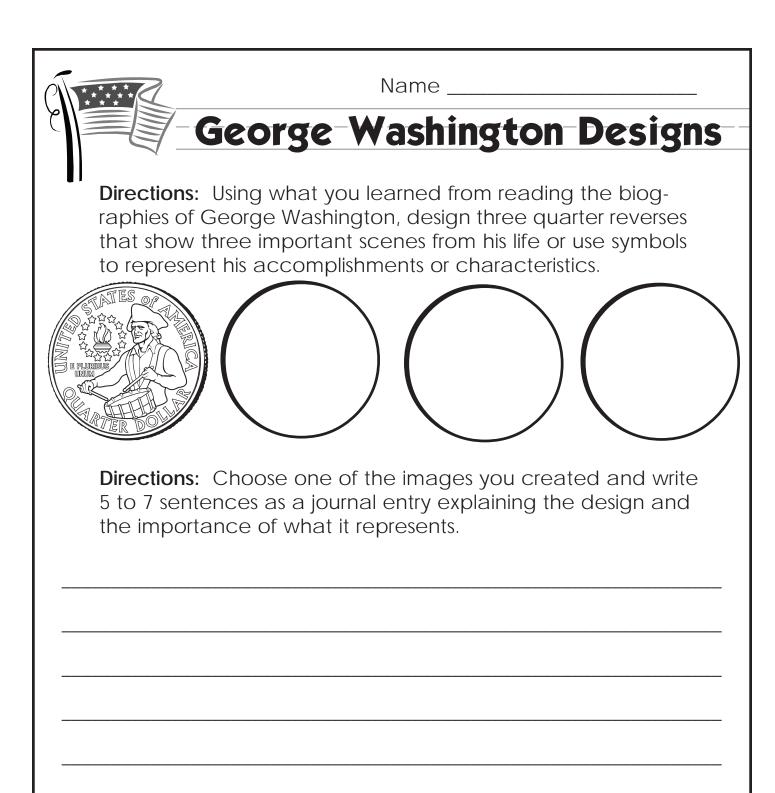
- The teacher may select texts written at the appropriate reading level.
- Allow students to read with a partner.
- Provide books on tape.



CONNECTION TO WWW.USMINT.GOV/KIDS

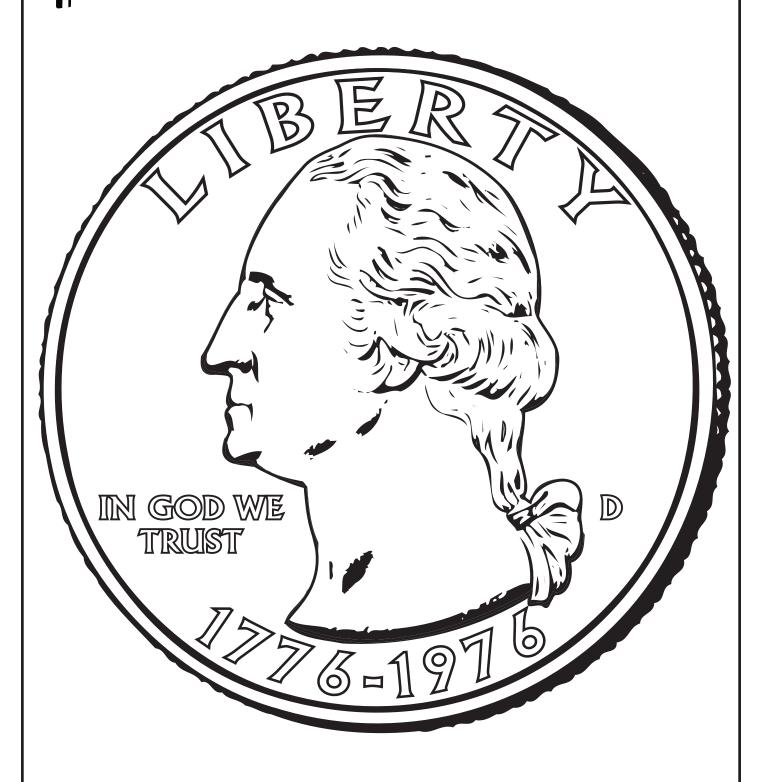
- Visit the July 1999 Coin of the Month and learn about the bicentennial quarter at www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/1999/07.cfm.
- Have students look at other coins that also relate to the Revolution, such as:
 - New Jersey quarter at www.usmint.gov/kids/index.cfm?fileContents=coinnews/50sq/ 1999/nj.cfm.
 - Massachusetts quarter at www.usmint.gov/kids/index.cfm?fileContents=coinnews/ 50sq/2000/ma.cfm.
 - Delaware quarter at www.usmint.gov/kids/index.cfm?fileContents=coinnews/50sq/1999/de.cfm.
 - Connecticut quarter at www.usmint.gov/kids/index.cfm?fileContents=coinnews/50sq/ 1999/ct.cfm.







Bicentennial Quarter Obverse





Bicentennial Quarter Reverse





tate Information 2006 Quarters

Nevada

The first commemorative quarter-dollar coin released in 2006 honors Nevada, and is the 36th coin in the United States Mint's 50 State Quarters® Program. Nevada, nicknamed "The Silver State," was admitted into the Union on October 31, 1864, becoming our Nation's 36th state. Nevada's quarter depicts a trio of wild mustangs, the sun rising behind snow-capped mountains, bordered by sagebrush and a banner that reads "The Silver State." The coin also bears the inscriptions "Nevada" and "1864."

Nevada became a territory in 1861, several years after a Mormon Battalion in the Mexican War discovered gold and silver in the area of Virginia City. This discovery would later be referred to as one of the greatest mineral discoveries, famously known as the Comstock Lode.

Nevada is home to more than 50 percent of the Nation's wild horses. The wild horses dominate the Great Basin in the vast deserts and the more than 150 mountain ranges. The first mention of wild horses was discovered in several journals dating to the 1820s.

LOU Know	State Capital	:	Carson City
	State Bird: .	Mour	itain Bluebird
	State Tree: .	Single	e-Leaf Pinon,
		Bris	tlecone Pine
State Fun	State Flower:		Sagebrush
Sta	ate Motto:	" All for	our country"
Entered Union	n (rank):	October	31, 1864 (36)
Nickname(s)	: Sil∨∈	er State, Sage	ebrush State,
		Batt	tleborn State
Origin of Nar	ne :Sierra N	Nevada mou	ıntains in the
	west, m	eaining "sno	w-covered"
State Song: .		"Home Mea	ans Nevada"

Nebraska

The second commemorative quarter-dollar coin released in 2006 honors Nebraska, and is the 37th coin in the United States Mint's 50 State Quarters® Program. Nebraska, nicknamed the "Cornhusker State," was admitted into the Union on March 1, 1867, becoming our Nation's 37th state. Nebraska's quarter depicts an ox-drawn covered wagon carrying pioneers in the foreground and Chimney Rock, the natural wonder that rises from the valley of North Platte River,

measuring 445 feet from base to tip. The sun is in full view behind the wagon. The coin also bears the inscriptions "Nebraska," "Chimney Rock," and "1867."

Chimney Rock was designated a National Historic Site on August 9, 1956, and is maintained and operated by the Nebraska State Historical Society.

Practically anywhere travelers go in Nebraska they will encounter reminders of America's westward expansion. The state is crisscrossed by the Oregon and Mormon Trails, the Pony Express, the Lewis and Clark Trail, the Texas-Ogallala Trail and the Sidney-Deadwood Trail.

State Funds State State State State State Enter	te Capital: Lincoln ate Bird: Western Meadowlark ate Tree: Cottonwood ate Flower: Goldenrod ate Motto: . Equality before the law red Union (rank): March 1, 1867 (37) e(s): Cornhusker State.
Origin of Name:	Tree Planters State Created by John Fremont based on an Omaha Indian word
State Song:	meaning "broad river" "Beautiful Nebraska"

Colorado

The third commemorative quarter-dollar coin released in 2006 honors Colorado, and is the 38th coin in the United States Mint's 50 State Quarters® Program. The Colorado quarter depicts a sweeping view of the State's rugged Rocky Mountains with evergreen trees and a banner carrying the inscription "Colorful Colorado." The coin also bears the inscriptions "Colorado" and "1876."

Colorado's Rocky Mountains are home to some of the Nation's most majestic natural wonders. Among these, rising approximately 10,000 feet from the valley floor in Northwest Colorado, Grand Mesa is the largest flat-top mountain in the world, and is home to more than 200 lakes and many miles of scenic hiking trails.

Colorado was admitted into the Union on August 1, 1876, becoming our Nation's 38th state. With statehood gained less than one month after the 100th anniversary of the signing of the Declaration of Independence, Colorado is nicknamed the "Centennial State."



tate Information 2006 Quarters

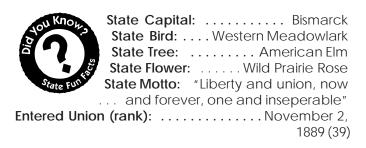
State Capital: Denver
State Bird: Lark Bunting
State Tree: ... Colorado Blue Spruce
State Flower: ... White and Lavender
Columbine
State Motto: Nothing Without the Diety
Entered Union (rank): August 1, 1876 (38)
Nickname: Centennial State

Origin of Name: ... Spanish meaning "colored red" **State Song:** "Where the Columbines Grow"

North Dakota -

The fourth commemorative quarter-dollar coin released in 2006 honors North Dakota, and is the 39th coin in the United States Mint's 50 State Quarters® Program. On November 2, 1889, North Dakota was admitted into the Union, becoming our Nation's 39th state. The North Dakota quarter depicts a pair of grazing American bison in the foreground with a sunset view of the rugged buttes and canyons that help define the State's Badlands region in the background. The coin's design also bears the inscriptions "North Dakota" and "1889."

President Theodore Roosevelt founded the United States Park Service and signed the Antiquities Act in 1906, which was designed to preserve and protect unspoiled places such as his beloved North Dakota Badlands, now known as Theodore Roosevelt National Park. Herds of American Bison thundered across the Badlands through the 1860s. The park is now home to more than 400 wild buffalo, an animal once on the brink of extinction.



South Dakota

The fifth and final commemorative quarter-dollar coin released in 2006 honors South Dakota, the "Mount Rushmore State," and is the 40th coin in the United States Mint's 50 State Quarters® Program. Admitted into the Union on November 2, 1889, South Dakota became the Nation's 40th state. The release of this quarter signals the end of the eighth year of the 50 State Quarters Program.

The South Dakota quarter features an image of the State bird, a Chinese ring-necked pheasant, in flight above a depiction of the Mount Rushmore National Monument, featuring the faces of four American Presidents: George Washington, Thomas Jefferson, Theodore Roosevelt and Abraham Lincoln. The design is bordered by heads of wheat. The coin's design also bears the inscriptions "South Dakota" and "1889."

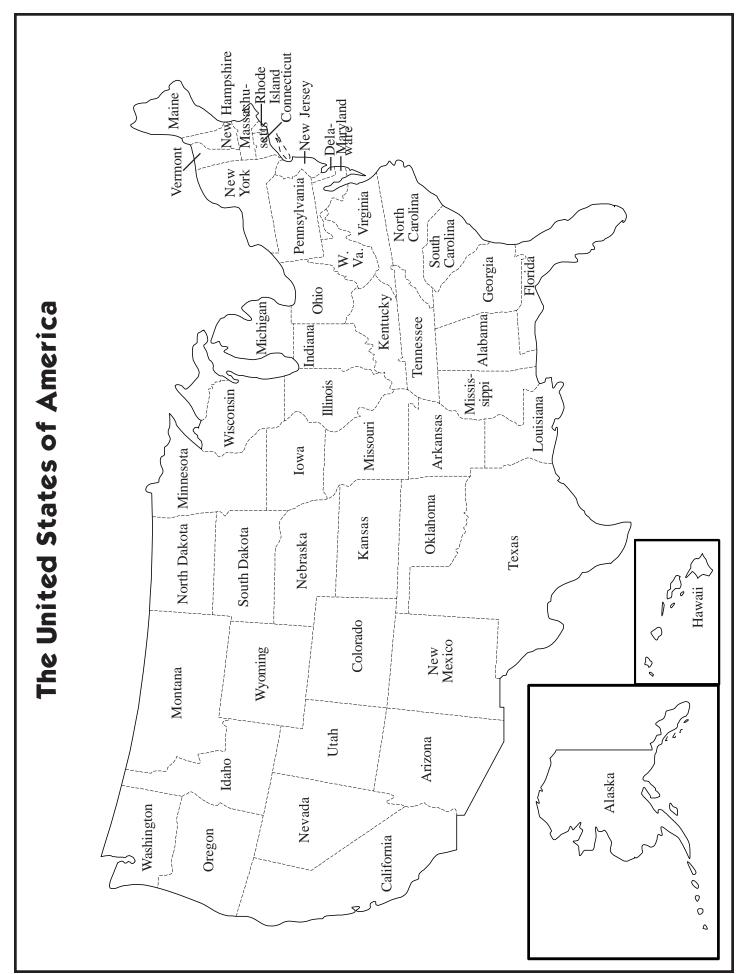
Sculptor Gutzon Borglum began drilling into Mount Rushmore, the 5,725-foot peak rising above Harney National Forest, in 1927. Creation of the "Shrine of Democracy" took 14 years and cost approximately \$1 million, though it is now deemed priceless.



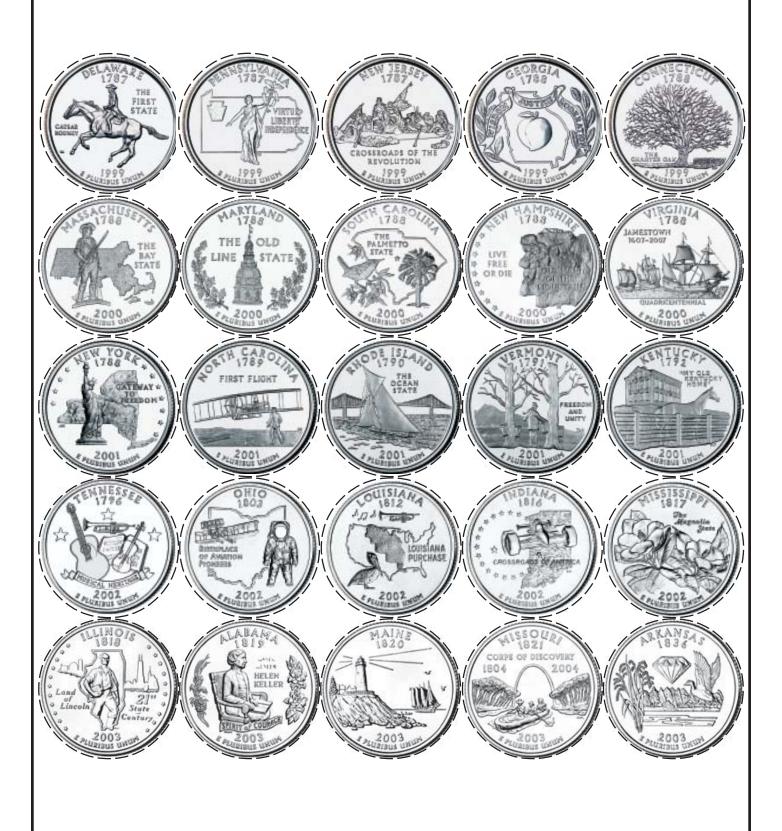
people rule

Entered Union (rank): November 2, 1889 (40)
Nickname: Mount Rushmore State
Origin of Name: Named after the Dakota Indian
tribe that lived in the area

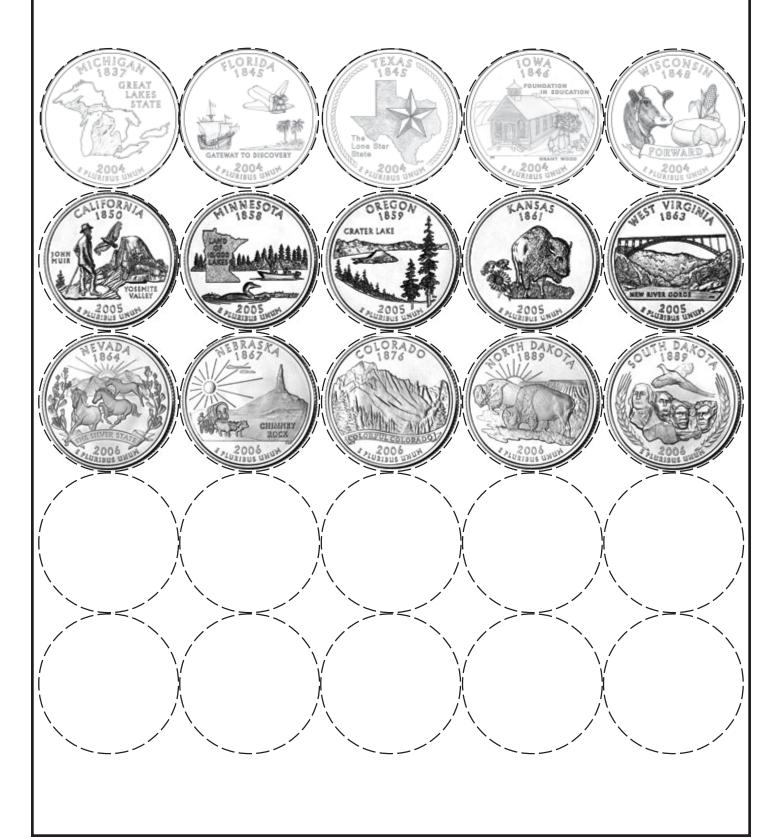
State Song: Hail, South Dakota!



50 State Quarters Program Designs Reverse



50 State Quarters Program Designs Reverse



50 State Quarters Program Designs Obverse



Reproducible Coin Sheet Obverse



TO MAKE DOUBLE-SIDED COINS

- 1. Print this page and the following page (reverses).
- 2. Put the two pages back-to-back and hold them up to a strong light to line up the dotted lines on all the coins.
- 3. Clip the pages together to keep them in position with two clips at the top.
- 4. Apply gue or glue stick to the backs, especially in the areas where the coins are printed. After pressing the pages together, check the alignment by holding them up to the light again, adjusting the alignment if possible.
- 5. When the glue dries, cut out the "coins."

Reproducible Coin Sheet Reverse















The United States Mint

50 State Quarters Program

Release Year/State Statehood Date 1999	Release Year/State Statehood Date 2004
Delaware December 7, 1787 Pennsylvania December 12, 1787 New Jersey December 18, 1787 Georgia January 2, 1788 Connecticut January 9, 1788	Michigan January 26, 1837 Florida March 3, 1845 Texas December 29, 1845 Iowa December 28, 1846 Wisconsin May 29, 1848
2000 ———	2005 —
MassachusettsFebruary 6, 1788MarylandApril 28, 1788South CarolinaMay 23, 1788New HampshireJune 21, 1788VirginiaJune 25, 1788	CaliforniaSeptember 9, 1850MinnesotaMay 11, 1858Oregon.February 14, 1859KansasJanuary 29, 1861West VirginiaJune 20, 1863
2001 ————	2006 —————
New York July 26, 1788 North Carolina November 21, 1789 Rhode Island May 29, 1790 Vermont March 4, 1791 Kentucky June 1, 1792	NevadaOctober 31, 1864Nebraska March 1, 1867Colorado August 1, 1876North DakotaNovember 2, 1889South DakotaNovember 2, 1889
2002 ————	2007 —
Tennessee June 1, 1796 Ohio March 1, 1803 Louisiana April 30, 1812 Indiana December 11, 1816 Mississippi December 10, 1817	Montana November 8, 1889 Washington November 11, 1889 Idaho July 3, 1890 Wyoming July 10, 1890 Utah January 4, 1896
2003 —	2008 —
Illinois December 3, 1818 Alabama December 14, 1819 Maine March 15, 1820 Missouri August 10, 1821 Arkansas June 15, 1836	Oklahoma November 16, 1907 New Mexico January 6, 1912 Arizona February 14, 1912 Alaska January 3, 1959 Hawaii August 21, 1959