

2005 Lesson Plans

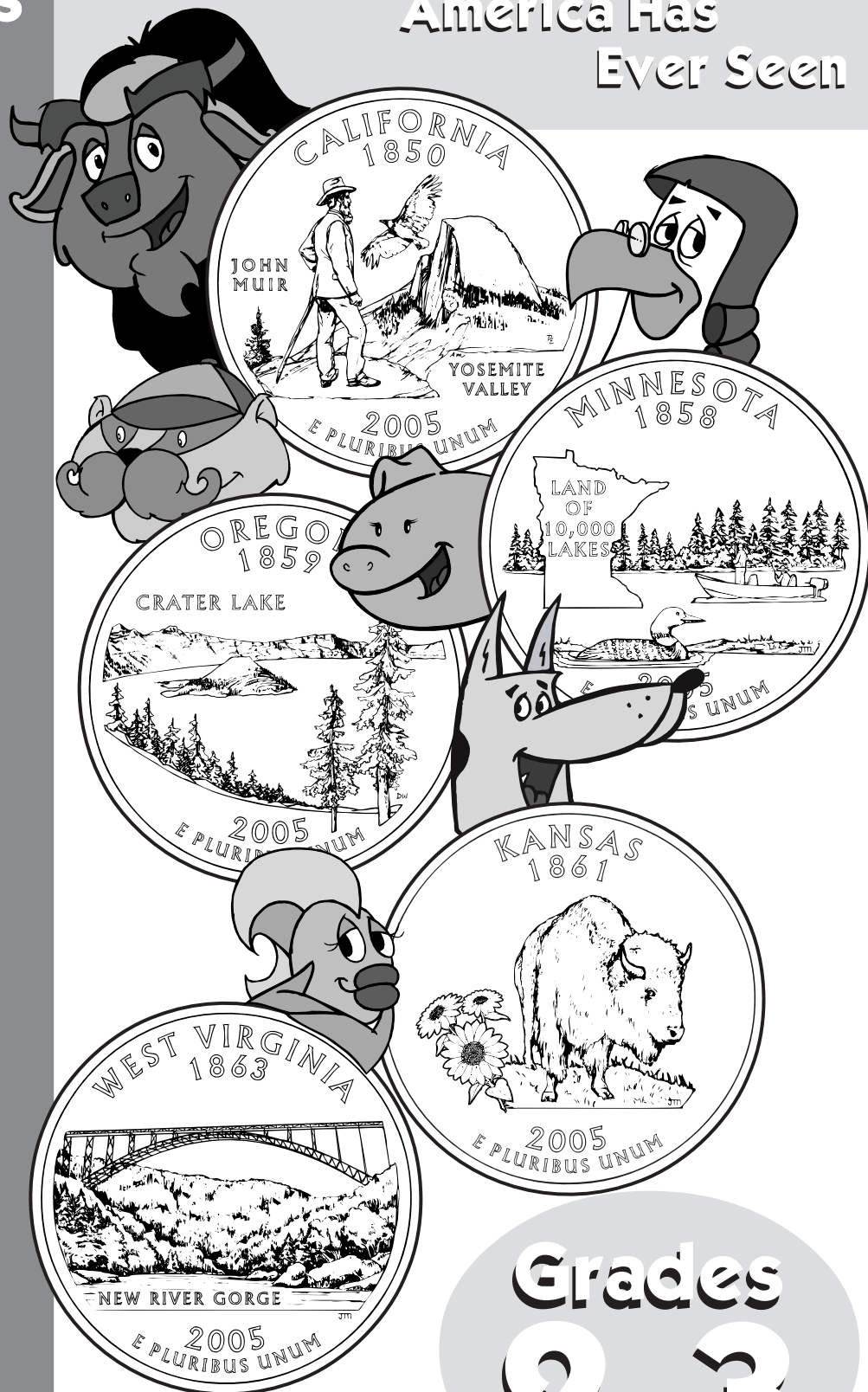


This teaching guide includes:

- ◆ 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



The Greatest
Educational Change
America Has
Ever Seen



Grades
2-3



The United States Mint Has Big Plans for You!

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). Sets of free plans for grades 7–8 and 9–12 are also available. 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 2005 50 State Quarters Program lesson plans, you will also notice a strong connection to the United States Mint H.I.P. Pocket Change™ 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.



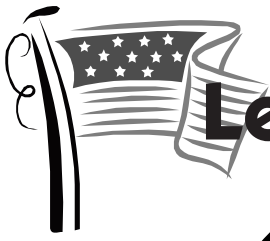
Visit us online at
www.usmint.gov/kids



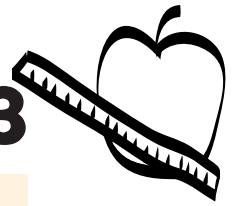
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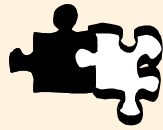
The Greatest Educational Change America Has Ever Seen



Lesson Plans for Grades 2-3



Objective



Connections



Groupings



Class Time



Page

1: You Can Depend on Me (California)

Learning about depending on others

- Science
- Social Studies
- Language Arts
- Art

- Whole group
- Small group
- Individual work

Five 30- to 45-minute sessions

2

2: What's in a Name? (Minnesota)

Finding American Indian words in place names

- Language Arts
- Social Studies
- Art

- Whole group
- Individual work

One 30- to 45-minute session

10

3: Let's Look at Legends (Oregon)

Comparing legends and learning about volcanos

- Language Arts
- Social Studies
- Science

- Whole group
- Pairs

Four 30- to 45-minute sessions

16

4: Kansas Clues (Kansas)

Getting facts about bison and American Indians

- Social Studies
- Language Arts
- Art

- Whole group
- Pairs
- Individual work

Four 30- to 45-minute sessions

24

5: Letters from the Road (West Virginia)

Telling city from country from suburbs

- Social Studies
- Language Arts

- Whole group
- Pairs
- Individual work

Two 30- to 45-minute sessions

30

6: Simple Strategies

Solving mathematical word problems, budgeting, and spending

- Mathematics

- Whole group
- Pairs
- Individual work

Three 30- to 45-minute sessions

36

Additional Resources

State Information Pages: 50 State Quarters® Program Coins Released in 2005

California, Minnesota, Oregon, Kansas, West Virginia

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United States of America Map

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50 State Quarters Program Designs

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Reproducible Coin Sheet

64

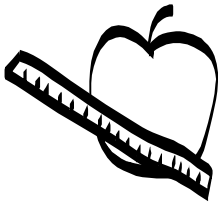
50 State Quarters Program® Release Schedule

66

Lesson plans and other related 50 State Quarters® Program materials are provided solely for teaching purposes.

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1: You Can Depend on Me

Based on the California quarter reverse



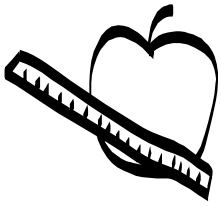
OBJECTIVE

Students will identify how they depend on others. Students will investigate what plants and animals depend on to survive.



MATERIALS

- Chalkboard/chalk
- Chart paper/markers
- Lined paper
- Pictures of forest habitats, available on Web sites such as:
 - www.butterfly-guide.co.uk/survival/habitat/forest.htm
 - www.seattleaudubon.org/Conservation/CampaignsProjects/ForestHabitat.html
 - www.gatewest.net/~cwhp/habitat/rbf.html
- Pictures of desert habitats, available on Web sites such as:
 - www.naturesimage.net/images/DesertHabitat.html
 - www.ice.mpg.de/tmo/wild/hab/desert_1.htm
 - www.ecoscene.com/eco_habitat.html
- 1 overhead projector (optional)
- “California Quarter Reverse” page
- 1 class map of the United States
- Pictures of the Yosemite Valley, available on Web sites such as:
 - pangea.stanford.edu/~juanes/images/YosemiteValley.jpg
 - www.usatourist.com/slideshows/california/pages/Yosemite%20Valley.html
 - home.wanadoo.nl/mdalvoorde/images/YosemiteWindow.jpg
- 1 copy of an age-appropriate text about plants and wildlife like those found in Yosemite Valley, such as:
 - *Yosemite National Park (A New True Book)* by David Petersen
 - *Forest Explorer: A Life-Size Field Guide* by Nic Bishop
 - *Hidden Life of the Forest* by David Schwartz
 - *Forest Plants* by Ernestine Giesecke and Eileen Mueller Neill
 - *How a Seed Grows* by Helene J. Jordan
 - *A Log’s Life* by E. Wendy Pfeffer
- Sticky notes
- A model diorama with labeled parts



You Can Depend on Me

- “Habitat Research” page
- Appropriate research materials of all reading levels including books, encyclopedias, bookmarked websites, magazines, etc.
- A computer lab for student research (optional)
- Boxes for dioramas
- Crayons, markers
- Glue
- Small slips of paper
- Construction paper
- Scissors



PREPARATIONS

- One week before Session 1, ask students to bring in boxes for dioramas.
- Make copies of the “Habitat Research” page (1 per student).
- Make an overhead transparency (or photocopy) of the “California Quarter Reverse” page.
- Assemble pictures of forest and desert habitats (see examples under “Materials”).
- Assemble pictures of the Yosemite Valley (see examples under “Materials”).
- Locate an age-appropriate text relating to plants and wildlife like those found in the Yosemite Valley (see examples under “Materials”).
- Assemble appropriate research materials of all reading levels including books, encyclopedias, bookmarked websites, magazines, etc.
- Reserve a computer lab for student research (optional).
- Create a model diorama.
- Cut unlined paper into small strips for diorama labels (several per group).



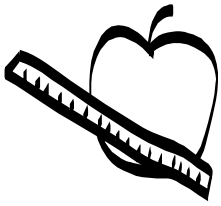
GROUPINGS

- Whole group
- Small group
- Individual work



CLASS TIME

Five 30- to 45-minute sessions

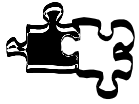


You Can Depend on Me



CONNECTIONS

- Science
- Social Studies
- Language Arts
- Art



TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Habitat
- Dependence



BACKGROUND KNOWLEDGE

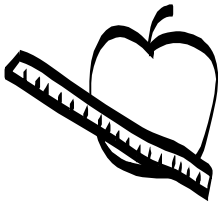
Students should have a basic knowledge of habitats.



STEPS

Session 1

1. Write the word “depend” on the board. Have the students repeat after you as you say the word aloud. Ask students if they recognize this word.
2. Have the students discuss what it means to depend on someone. Ask the students to give examples of when they have depended on someone. List student responses on chart paper. Examples may include that students have depended on their parents for food and shelter, depended on their friends to keep secrets, depended on their teacher to help them learn, etc.
3. On the board, write the following prompt: “Write about a time when you depended on someone to do something for you.”
4. Distribute one piece of lined paper to each student. Direct the students to respond to this prompt on the lined paper.
5. Allow five to ten minutes for student writing.
6. Allow student volunteers to share their responses. List additional ways that students depend on people or communities on the piece of chart paper. Answers may include firefighters, police, doctors, hospitals, etc.
7. Explain to the students that things in nature depend on each other, too. Ask the students if something found in nature (like a plant) might depend on the same things that we do (like a



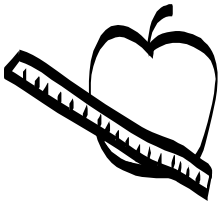
You Can Depend on Me

grocery store). Students should respond with the idea that plants may depend on different things than people do.

8. Have the students guess what kinds of things a plant depends on to survive (live). Write the responses on a new piece of chart paper. Students responses may include: sunlight, water, soil, time, etc.
9. Introduce the idea that there are many different types of plants living in many different types of environments or habitats.
10. Review the term “habitat.” Remind the students that a habitat is made up of food, water, shelter, and space. As an example, display a picture of a forest habitat and a picture of a desert habitat. Ask the students to guess what kinds of plants they would find in the forest habitat. Students may respond that they would find trees, flowers, grasses, etc.
11. Have the students discuss how plants in the desert habitat would be different from those in the forest. Responses may include that plants in the desert would need less water than plants in the forest, while plants in the forest may need less sunlight than those in the desert.
12. Display the picture of the forest habitat again and explain to the students that they will be further investigating the kinds of plants that live in this environment and what they depend on to survive.

Session 2

1. Ask the students to review with a partner what the word “depend” means and how it relates to plants. Have the students recall what types of things a plant depends on for survival.
2. Display the picture of a forest and ask students to identify the habitat. The students should identify the habitat as a forest.
3. Repeat Step 2 with the picture of a desert habitat.
4. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the California quarter reverse. Locate California on a classroom map. Note its position in relation to your school’s location.
5. Have the students identify various elements on the coin. The students should identify a mountain, a tree, a man, and a bird. Ask them to guess the name of the man on the coin. Accept all student responses.
6. Identify the man on this coin as John Muir. Explain that John Muir had a special relationship with California. He loved nature and wanted to conserve (save) the trees, mountains, lakes, plants, and animals so that they would be around for a long time.
7. Display several pictures of the Yosemite Valley. Explain to students that this is the area of land depicted on the coin and is part of the Yosemite National Park in California.



You Can Depend on Me

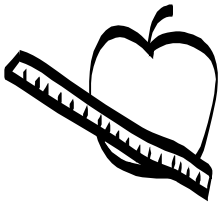
8. Ask the students to look at the coin and determine if the scenery looks more like a forest or a desert. Have students discuss what led them to their decision. Students should respond that the trees in the background suggest that this habitat is a forest.
9. Explain to the students that they are going to investigate and learn more about the forest habitat in the Yosemite Valley.
10. Introduce the students to the selected text. Ask the students to pay special attention to all of the living things one can find in a forest habitat like the Yosemite National Park. Read the story aloud.
11. Have the students generate a list of some of the living things that can be found in a forest like the Yosemite National Park and Yosemite Valley. Record student responses on sticky notes and place them on the board.
12. Arrange the students into small groups of three or four.
13. Read down the list as a class and sort the sticky notes on the board into two columns: plants and animals.
14. Explain to the students that they will be creating a habitat diorama for their selected plants or animals. Each diorama will include everything that the plant or animal depends on to survive (live).
15. Using the example diorama, model what the student dioramas will look like when completed. Point out the labels that identify each element in the habitat that the plant or animal depends on to survive (live).
16. Invite one or two groups at a time up to the board and direct them to select one of the sticky notes (plant or animal) from the list. Explain that this plant or animal will be the focus of the group's diorama.

Session 3

1. Distribute one "Habitat Research" worksheet to each student. Explain to the students that, in order to create their dioramas, they must first research their selected plant or animal and list what the plant or animal depends on for survival.
2. Provide appropriate research materials on a variety of reading levels, such as books, encyclopedias, bookmarked websites, magazines, etc.
3. Allow an appropriate amount of time for student research.

Sessions 4 and 5

1. Using the example diorama, model once again what the student dioramas will look like when completed. Point out the selected plant or animal that is the focus of the habitat. Then, point out all of the labels which identify elements in the habitat that the plant or animal depends on to survive (live).



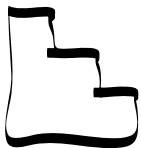
You Can Depend on Me

2. Explain that the students will use their “Habitat Research” worksheets as checklists to make sure that each of these elements is included in each diorama.
3. Distribute one box to each group and make crayons, glue, small slips of paper for labels, markers, construction paper, and scissors available to the whole class.
4. Allow an appropriate amount of time for students to create dioramas.
5. When finished, have each group confirm that all needed elements are included and labeled in its diorama.
6. Distribute one piece of lined paper to each student. Direct the students to individually write a paragraph describing the life needs of his or her group’s plant or animal as depicted in the group’s diorama. Collect this paragraph for individual assessment.
7. Conduct a show-and-tell activity in which students present and explain their dioramas.



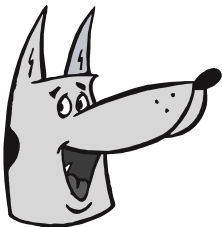
ENRICHMENT/EXTENSIONS

Create a “Museum Day” in your classroom by displaying all of the dioramas and having another class in to visit. As students from the visiting class walk around the room, direct the groups to explain their dioramas. Have each group identify what its plant or animal needs for survival and where in their habitat they can find it.



DIFFERENTIATED LEARNING OPTION

Allow students to draw or dictate responses to the writing assignments in session one and sessions four and five.



CONNECTION TO WWW.USMINT.GOV/KIDS

Yosemite isn’t the only national park featured on a coin design. In August of 1999, the United States Mint H.I.P. Pocket Change™ Web site saluted the Yellowstone National Park Commemorative Silver Dollar as its coin of the month. (www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/1999/08.cfm)



NAME _____

Habitat Research

Directions: Make a list of everything that your selected plant or animal needs to survive (live).

1. _____

2. _____

3. _____

4. _____

5. _____

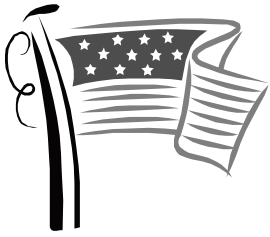
6. _____

7. _____

8. _____

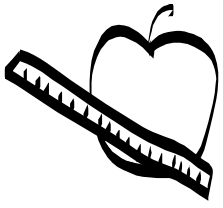
9. _____

10. _____



California Quarter Reverse





2: What's in a Name?

Based on the Minnesota quarter reverse



OBJECTIVE

Students will examine state names that are derived from American Indian words and phrases. They will effectively communicate ideas through the use of clear descriptive writing.



MATERIALS

- 1 overhead projector (optional)
- “Minnesota Quarter Reverse” page
- 1 class map of the United States
- Index cards
- 1 brown paper bag
- Writing paper
- 1 pen
- An assortment of classroom items such as ruler, chalk, pencil
- “Descriptive Coin” page
- Crayons
- Chart paper/markers



PREPARATIONS

- Make copies of the “Descriptive Coin” page (1 per student).
- Make an overhead transparency (or photocopy) of the “Minnesota Quarter Reverse” page.
- Gather at least six classroom items (such as ruler, chalk, pencil) for the students to describe.



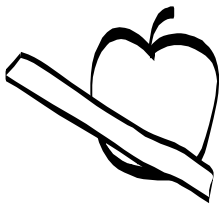
GROUPINGS

- Whole group
- Individual work

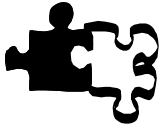


CLASS TIME

One 30- to 45-minute session



What's in a Name?



CONNECTIONS

- Language Arts
- Social Studies
- Art



TERMS AND CONCEPTS

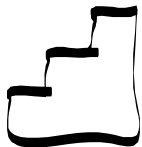
- Quarter
- Reverse (back)
- Descriptive writing



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

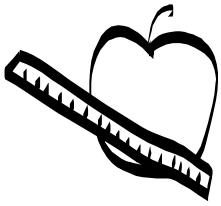
- American Indians
- Written language



STEPS

Session 1

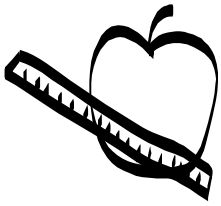
1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the Minnesota quarter reverse. Locate Minnesota on a classroom map. Note its position in relation to your school's location.
2. With the students, examine the coin's reverse. Have the students point out the elements of this design, including the outline of the state of Minnesota, the pine trees, the water, the bird (loon), the individuals fishing, and the words "Land of 10,000 Lakes."
3. As a class, discuss what the students can infer about the state of Minnesota by looking at this coin. They should be able to note that the state has many lakes and that people participate in outdoor activities, including fishing.
4. Direct the students to look closely at the name "Minnesota."
5. Explain that the name of the state doesn't come from an English word. Ask the students where they think this state's name may have come from. Ask the students to consider who may have lived in this part of the country when it became part of the United States. If necessary, explain that this word comes from an American Indian word.
6. Explain that many of our state names come from American Indian words or phrases, and usually these phrases are very descriptive. Ask students what it means to say something is



What's in a Name?

descriptive; the students should understand that descriptive writing is written to help the reader see, hear, smell, taste, and feel the concept.

7. Explain that the name “Minnesota” comes from Native American words that mean “Sky-tinted water.” Show students a map of the United States and have them point out Minnesota. Have the students consider the meaning of “sky-tinted water.”
8. Have students expand on the “descriptions” using examples with sensory information. Write responses on chart paper.
9. Explain that the name “Michigan” comes from a word meaning “great water,” “Wyoming” means “large prairie place,” and Wisconsin means “grassy place.” These names give a good description of the state’s landscape. Have the students infer information about these states.
10. Explain to the students that they are going to use descriptive language like the American Indians used to describe classroom items.
11. Hold up a pen and explain that the word “pen” doesn’t tell you what this item does. Ask the students to come up with some more descriptive names for this item. An idea could include “ink-spitting writing tool.”
12. Repeat this activity with a different item found in the classroom, such as chalk, a map, or a book. Record student descriptions on chart paper.
13. Introduce a class game called “verbal charades.” Distribute five index cards to each student.
14. Show the students an item and direct them to write the English word for this item on an index card. Underneath the English word, the students should write a descriptive phrase for this item.
15. Repeat this activity with four more items. Direct the students to write the English word and a descriptive phrase for each item on a different card.
16. Collect the index cards and place them into a paper bag.
17. Pull an index card from the bag and read the descriptive phrase to the students. Direct the students to guess what the item is.
18. Repeat this with the rest of the index cards.
19. Distribute a “Descriptive Coin” page to each student.
20. Direct the students to write their name at the top of the page.
21. At the bottom of the page, the students should write a descriptive phrase about themselves.
22. In the center of the coin outline, allow the students to draw a self-portrait.

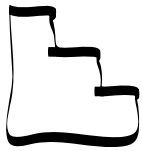


What's in a Name?



ENRICHMENT/EXTENSIONS

Encourage your students to explore the history and traditions of the Sioux Indians, who were responsible for the name “Minnesota.”



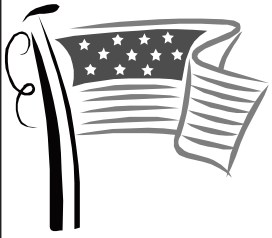
DIFFERENTIATED LEARNING OPTION

Let students with special needs dictate their descriptions of the classroom items, rather than writing them independently.



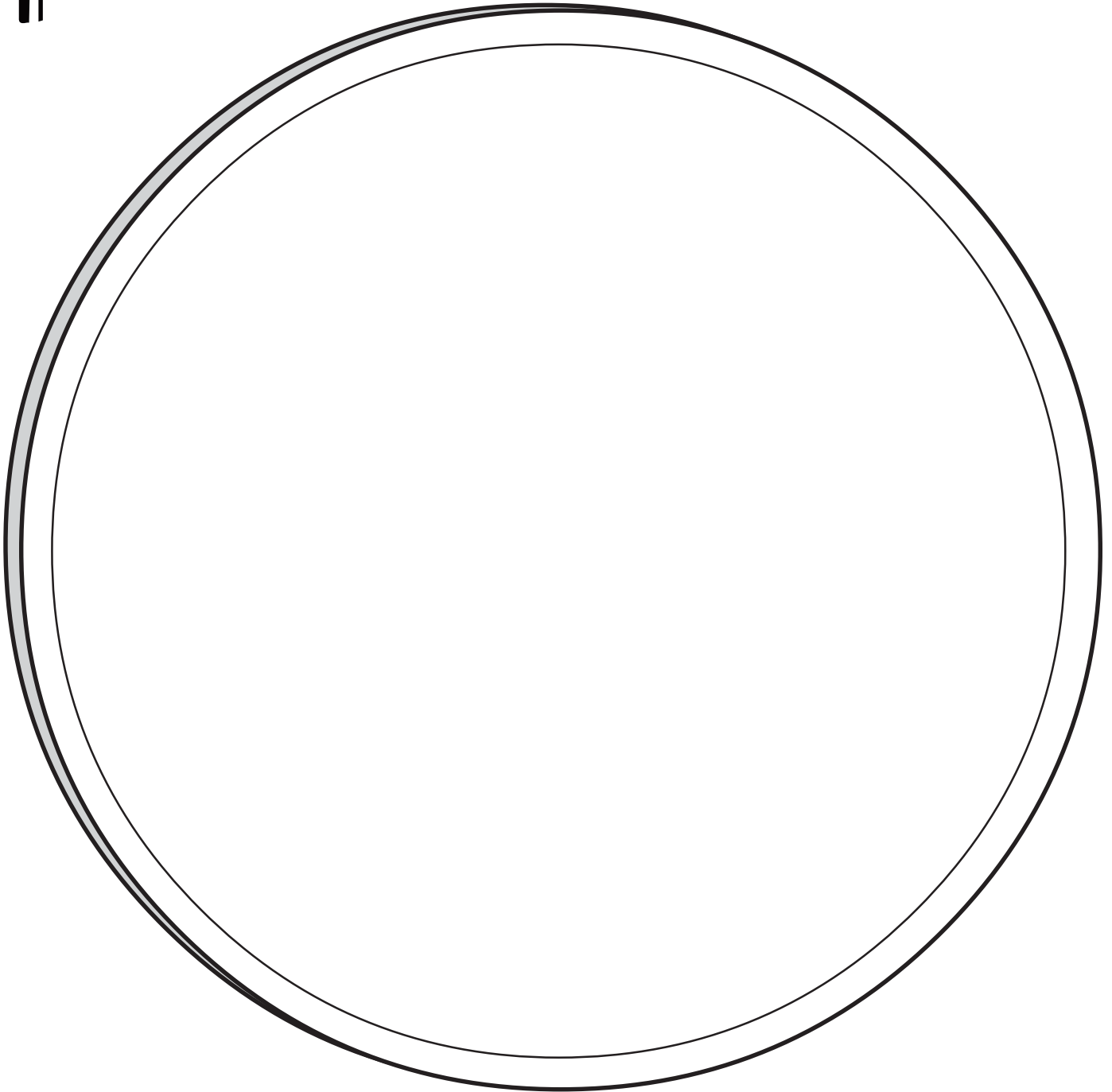
CONNECTION TO WWW.USMINT.GOV/KIDS

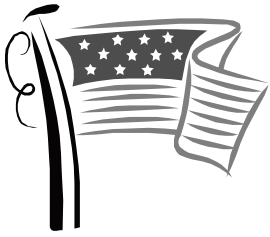
Let your students get more practice with deciphering descriptions by letting them try their hands at the United States Mint H.I.P. Pocket Change™ game, Collector’s Crossword. (www.usmint.gov/kids/index.cfm?fileContents=games)



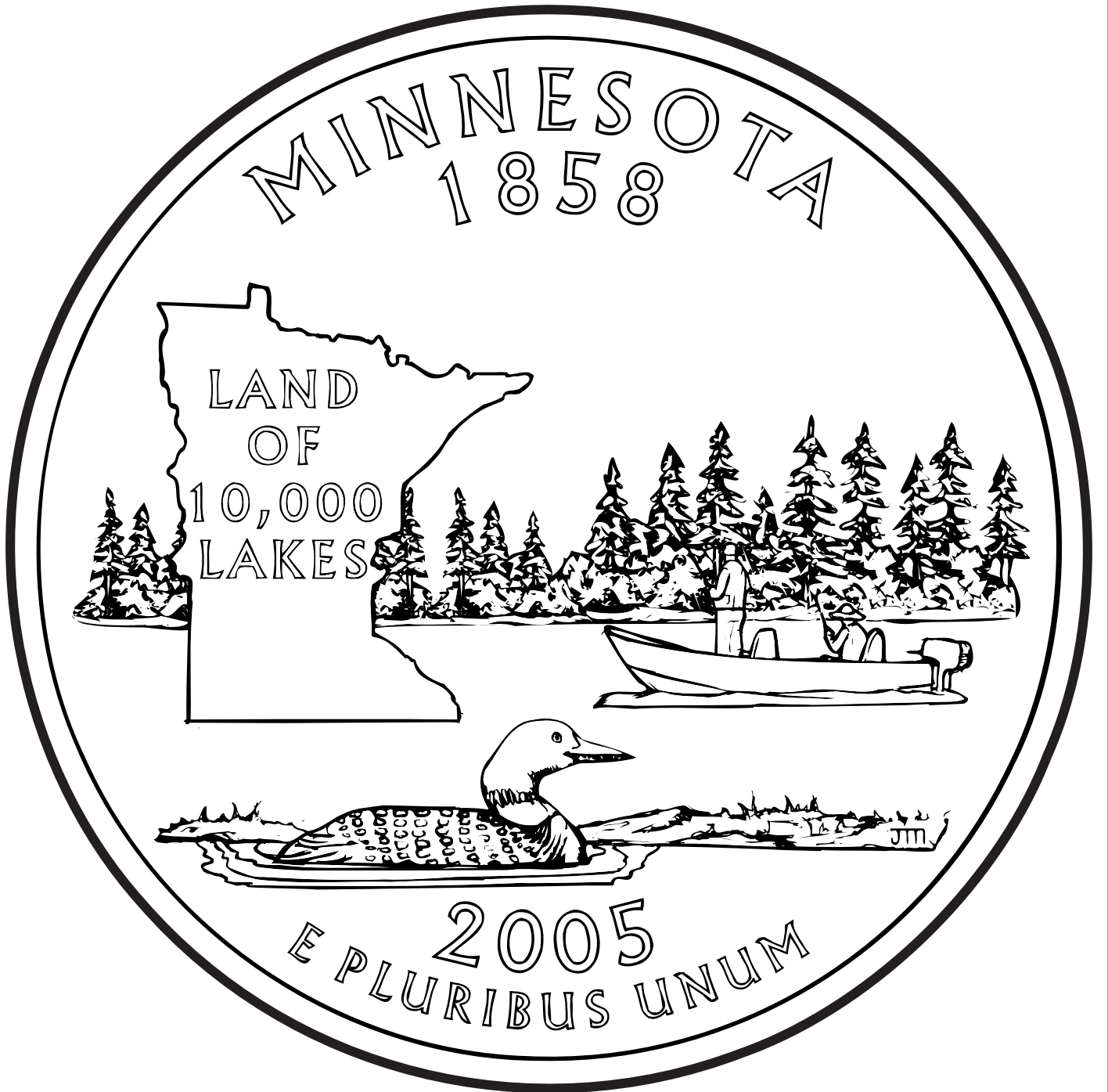
NAME _____

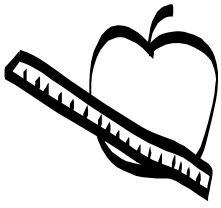
Descriptive Coin





Minnesota Quarter Reverse





3: Let's Look at Legends

Based on the Oregon quarter reverse



OBJECTIVE

Students will use a Venn diagram to compare two historical legends relating to volcanoes.



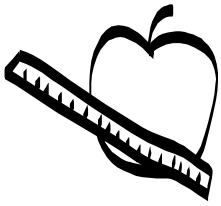
MATERIALS

- 1 overhead projector (optional)
- “Oregon quarter reverse” page
- 1 class map of the United States
- “Lake Explosion” page
- 1 copy of an age-appropriate legend about the creation of Crater Lake, such as:
 - *Coyote in Love* by Mindy Dwyer
 - *Legends of Landforms: Native American Lore and the Geology of the Land* by Carole Garbury Vogel
- Variations on a Klamath Indian legend such as those available at:
 - www.craterlake.wr.usgs.gov/history.html
 - www.nps.gov/crla/notes/vol2-3a.htm
 - www.nps.gov/crla/hrs/hrsae.htm
- “Break It Down” graphic organizer
- Overhead transparency markers
- 1 copy of an age-appropriate legend about Hawaiian volcanoes, such as:
 - *Volcanoes* by Seymour Simon
 - *The Volcano Goddess Will See You Now* by Don Greenburg
 - *Mt. Kilauea: Home of the Hawaiian Goddess of Fire* by Kathy Furgang
- Butcher paper



PREPARATIONS

- Make copies of the “Break It Down” graphic organizer (1 per student).
- Make an overhead transparency of each of the following:
 - “Oregon Quarter Reverse” page (or photocopy)
 - “Lake Explosion” page
 - “Break It Down” graphic organizer
- Locate an age-appropriate text that relates to the creation of Crater Lake (see examples under “Materials”).
- Locate an age-appropriate text that relates to Hawaiian volcanoes (see examples under “Materials”).



Let's Look at Legends



GROUPINGS

- Whole group
- Pairs



CLASS TIME

Four 30- to 45-minute sessions



CONNECTIONS

- Language Arts
- Social Studies
- Science



TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Volcanoes
- Legends
- Venn diagram
- Comparisons



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

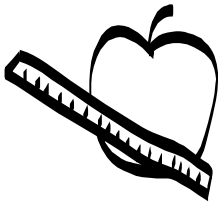
- Venn diagrams
- Compare and contrast
- Volcanoes



STEPS

Session 1

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



Let's Look at Legends

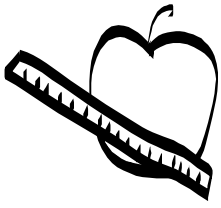
2. With the students, examine the coin design. Have the students identify the images and writing in this coin design, including the words “Crater Lake,” the water, the trees, and the land.
3. Ask the students why they think that this lake might be important to Oregon, and accept all responses.
4. Ask the students how they think that this lake was formed. Display a copy of the “Lake Explosion” overhead transparency. Read the passage aloud, having the students follow along.

Crater Lake is actually the deepest lake in the United States and one of the deepest lakes in the world. Scientists say that, a very long time ago, a volcano stood where Crater Lake is now.

The rocks deep in the ground under the mountain got very hot and pushed upward in an eruption. When the volcano erupted, the explosion was so great and threw out so much material that the mountain collapsed!

Once the eruption was over and the hot rocks (or lava) cooled off, the mountain looked like a deep bowl. Over the years, this bowl filled up with rain and melting snow, creating Crater Lake.

5. Explain that many people had ideas about how this lake was originally formed. Tell the students that, long ago, people would often make up stories to explain things that they didn't understand. They would tell these stories to explain things that occurred in nature like big storms and, in this case, volcanoes. Some of these stories are called “legends.” A legend is a story handed down from the past. The story can't be proven, but it's sometimes based on historical events.
6. Introduce the students to the selected text. Explain that the story is an American Indian legend about how Crater Lake was formed. Explain that this legend comes from the American Indians who lived in the area in Oregon near where Crater Lake is located. Preview the text and illustrations and allow students to generate observations and predictions about what is happening at each point in the text.
7. Read the selected text to the class. Attend to any unfamiliar vocabulary.
8. After reading the selection, display the overhead transparency of the “Break It Down” graphic organizer.



Let's Look at Legends

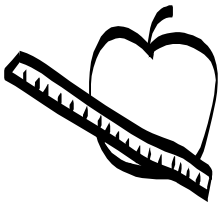
9. As a class, discuss how to organize information from the text into the different rows of the graphic organizer.
10. Work with your students to complete the first column of the chart as a class.
11. Before Session 2, fill in the chart and make copies.

Session 2

1. Revisit the image of the Oregon quarter and ask the students to recall what they discussed relating to the coin's design.
2. Display the overhead transparency of the "Break It Down" graphic organizer complete with the information from the last session. Ask the students to recall the basic story that they heard about the creation of Crater Lake.
3. Explain that today they are going to hear a legend about volcanoes that comes from a different group of people.
4. Introduce the students to the selected text about Hawaiian volcanoes. Explain that this legend comes from the native people of Hawaii. Use a map of the United States and show the location of Hawaii. Preview the text and illustrations and allow the students to generate observations and predictions about what is happening at each point in the text.
5. Read the selected text to the class. Attend to any unfamiliar vocabulary.
6. After reading the selection, distribute a copy of the "Break It Down" graphic organizer to each student.
7. Divide the students into pairs and direct them to complete the second column of the chart based on the story that they just heard.
8. As a class, discuss the legend that they heard about the Hawaiian volcanoes.
9. As a group, complete the second column on the overhead transparency and direct the students to fill in their individual graphic organizers.

Session 3

1. Display the overhead transparency of the "Break It Down" graphic organizer complete with the information from the first and second sessions.
2. Introduce the students to the concept of a Venn diagram by drawing two interlocking circles on the chalk board. Explain that a Venn diagram is used to compare two things.
3. Explain that the students will work with a partner to use a Venn diagram to compare the two stories that they heard. In the overlapping space, the students will record the similarities in the two stories. In the outer parts of the circles, the students will record the parts of the stories that are different.



Let's Look at Legends

4. Explain that, rather than just writing about the similarities and differences between the two stories, the students will be creating an illustrated Venn diagram that they will share with the class. They will draw images to accompany the information that they included in the Venn diagram.
5. Model writing a piece of information and then drawing a picture that relates to this story fact.
6. Direct the students to pair up. Distribute a large piece of butcher paper to each pair of students.
7. Allow an appropriate amount of time for the pairs to work on their Venn Diagrams and to present them to the class.



ENRICHMENT/EXTENSION

Direct the students to examine other types of legends from around the world and make comparisons between these different stories. What differences do the students notice between legends that come from countries with different climates?



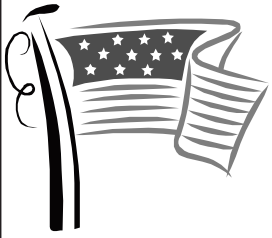
DIFFERENTIATED LEARNING OPTION

Record the information paragraphs on tape for later use.



CONNECTION TO WWW.USMINT.GOV/KIDS

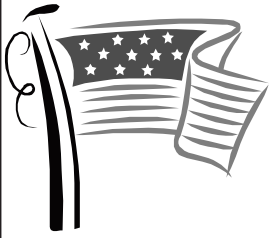
Help your students explore another well known volcano when they watch Plinky the Mint Pig's adventures at Mount Fuji in the Japanese segment of the United States Mint H.I.P. Pocket Change™ cartoon, *Coins of the World*. (www.usmint.gov/kids/index.cfm?fileContents=cartoons)



NAME _____

Break It Down

NAME OF STORY		
CENTRAL CHARACTER(S)		
DESCRIPTION OF CENTRAL CHARACTER(S)		
PROBLEM OR SITUATION THAT ARISES		
RESOLUTION		

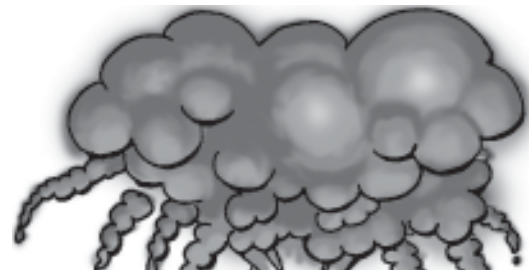


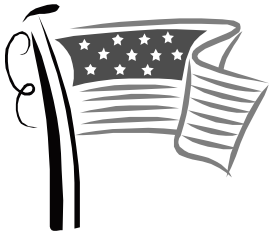
Lake Explosion

Crater Lake is actually the deepest lake in the United States and one of the deepest lakes in the world. Scientists say that, a very long time ago, a volcano stood where Crater Lake is now.

The rocks deep in the ground under the mountain got very hot and pushed upward in an eruption. When the volcano erupted, the explosion was so great and threw out so much material that the mountain collapsed!

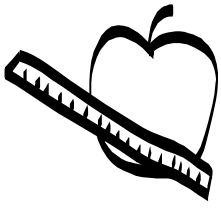
Once the eruption was over and the hot rocks (or lava) cooled off, the mountain looked like a deep bowl. Over the years, this bowl filled up with rain and melting snow, creating Crater Lake.





Oregon Quarter Reverse





4: Kansas Clues

Based on the Kansas quarter reverse



OBJECTIVE

Students will be able to extract key information from and analyze a selected non-fiction text. Students will describe the relationship between the bison (or American buffalo) and American Indians.



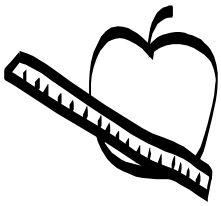
MATERIALS

- Chalkboard/chalk
- Several pictures of bison, like those found at:
 - www.dlia.org/atbi/species/animals/vertebrates/mammals/Images/Bison_bison_RB640.jpg
 - www.nature.ca/notebooks/english/bison.htm
 - www.gpnc.org/bison.htm
- “Kansas Quarter Reverse” page
- 1 overhead projector/markers
- 1 class map of the United States
- Chart paper/markers
- United States Mint H.I.P. Pocket Change™ June 2001 Coin of the Month page, found at www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/2001/06.cfm
- Highlighters
- 1 copy of an age-appropriate text relating to bison and American Indians, such as:
 - *Animal Lore and Legend: Buffalo* by Tiffany Midge, Diana Magnuson, Vic Warren
 - *Bison* by Lynn M. Stone
 - *Buffalo Hunt* by Russell Freedman
 - *The Moon of Falling Leaves: the Great Buffalo Hunt* by Cary B. Ziter and Gretchen Will Mayo
- Index cards
- Lined Paper
- Construction paper
- Markers/crayons



PREPARATIONS

- Make copies of the United States Mint H.I.P. Pocket Change™ June 2001 Coin of the Month page (1 per student).



Kansas Clues

- Make an overhead transparency of each of the following:
 - “Kansas Quarter Reverse” page
 - June 2001 Coin of the Month page (<http://www.usmint.gov/kids/index.cfm?fileContents=coinNews/cotm/2001/06.cfm>)
- Locate several pictures of bison (see examples under “Materials”).
- Locate an age-appropriate text relating to bison and American Indians (see examples under “Materials”).



GROUPINGS

- Whole group
- Pairs
- Individual work



CLASS TIME

Four 30- to 45-minute sessions



CONNECTIONS

- Social Studies
- Language Arts
- Art



TERMS AND CONCEPTS

- Quarter
- Freeze Frames
- American Indians
- Kansas
- Reverse (back)
- Acrostic
- Bison (American buffalo)



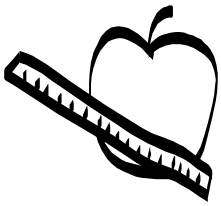
BACKGROUND KNOWLEDGE

Students should have a basic knowledge of acrostics and American Indians.

STEPS

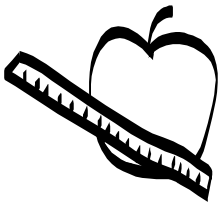
Session 1

1. Write the following question on the board: “Why are bison important in the United States?”



Kansas Clues

2. Explain to the students that they will become detectives today, trying to find clues to help answer this question.
3. Have the students brainstorm what they know about bison. Show several pictures of bison. Lead a class discussion on the difference between a buffalo and a bison. Include the idea that buffalo are the cousin to the bison, but only the bison are found in the United States. Explain that bison are often referred to as American buffalo.
4. Explain to the students that you found two American coins with bison on them and that you suspect they will provide some hints as to why bison are important in the United States. Display an overhead transparency of the Kansas quarter reverse.
5. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Locate Kansas on a classroom map. Note its position in relation to your school's location.
6. Ask the students to describe what they see on this coin. List student responses on a piece of chart paper titled "Clues." The students should include in their responses that images of a bison and a sunflower appear on the coin as well as the word "Kansas," the year 2005, etc.
7. Explain that the new quarters are designed to describe the history and culture of each state. Have the students consider what this coin design says about Kansas. Add student responses to the "Clues" chart paper.
8. Distribute a copy of the June 2001 Coin of the Month page and a highlighter to each student. Identify the coin pictured on the page as the Buffalo Nickel. Explain that, even though the coin is called the Buffalo Nickel, it's really a bison depicted in the coin design. Explain to the students that this coin is one they would rarely find in their pockets today, but it was minted from 1913 to 1938.
9. Display an overhead transparency of the June 2001 Coin of the Month page. Have students take turns reading the page aloud. While one student reads, the others should highlight on their copies any important information. The students should specifically look for information that provides a clue as to why bison (or buffalo as they are called on this page) are important to America.
10. Have student volunteers identify the information they highlighted. Underline this information on the overhead transparency. The students should identify that the American Indians hunted bison and that the settlers were encroaching upon that hunting land.
11. Add student responses to the "Clues" chart paper.
12. Explain to the students that they will be further exploring the relationship between American Indians and the bison in the following session.



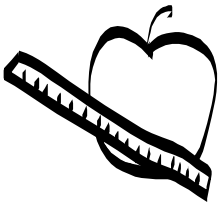
Kansas Clues

Sessions 2 and 3

1. Review the “Clues” chart paper from the previous session. Have the students discuss why bison may have been important to American Indians. List new ideas on this chart paper.
2. Explain to the students that they will be learning more about the relationship between bison and the American Indians.
3. Introduce the selected text. As a group, preview the text and illustrations to generate observations about what might be occurring at different points in the book.
4. Read the selected text aloud.
5. As a class, have the students brainstorm how the bison were important to the American Indians. List these ideas on the board.
6. Explain to the students that, in small groups, they will be creating freeze frames based upon one of the ideas listed on the board. Explain to the students that a freeze frame is a human snapshot of a moment in time. The students will arrange themselves into a position and freeze. The scene that they create should depict some aspect of the relationship between American Indians and bison.
7. Model this process for students by selecting one of the ideas on the board and portraying it (with student volunteers, if necessary) in a frozen pose.
8. Allow an appropriate amount of time for the students to form small groups, select the topic of their freeze frames, and practice them.
9. Invite the groups to perform their freeze frames for the class. Students in the audience will try to guess what the freeze frame is depicting (for example, students might portray the American Indians hunting the bison, using the bison hides for clothing, etc.).
10. Direct students’ attention back to the “Clues” chart paper. Ask the students if they can now explain why bison are on the Kansas quarter. Student responses should include that bison were very important to American Indians and that bison and many tribes of American Indians were found in Kansas.
11. Point out the question that was written on the board at the beginning of Session 1. Distribute an index card to each student and direct the students to answer the question. Students responses should include that the bison is important to the United States because of its relationship with American Indians in United States history.

Session 4

1. Review the “Clues” chart paper from the previous session. Review the discussion about the relationship between American Indians and bison in United States history.
2. Explain to the students that they will be creating an acrostic based on the word “bison” that will explain why bison are important in the United States.
3. Explain, if necessary, that an acrostic is made by using each letter in a word as the first letter of other words or phrases.



Kansas Clues

4. To model this process, write the word “school” vertically on the board. Have the students generate a word or phrase starting with the letter “s” that describes some aspect of school. Write this word horizontally starting with the letter “s” in the word “school.”
5. Continue until the students have generated words or phrases for all of the letters in the word “school.”
6. Have the students brainstorm the words or phrases they will use for their “bison” acrostics on a piece of lined paper. Remind the students that they can use the information on the “Clues” chart for reference.
7. Distribute a piece of construction paper and markers or crayons to each student. Direct the students to illustrate their acrostics once they are done writing it out.
8. Allow an appropriate amount of time for the students to create and illustrate their acrostics.



ENRICHMENT/EXTENSIONS

- Have students analyze your state’s quarter, if available. Students can research the symbols depicted on the quarter reverse design and create an acrostic or pictograph for one of them, explaining the symbol’s importance to your state and/or the United States.
- Instead of an acrostic, have students create a pictograph of the word “bison.” Explain, if necessary, that students create pictographs by transforming each letter of the word “bison” into a picture of something that represents their importance to the United States. For example, the letter “O” in the word “bison” could be drawn to resemble the outer ring of a village of American Indians.



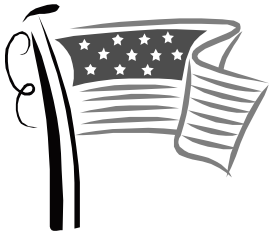
DIFFERENTIATED LEARNING OPTION

Instead of creating an acrostic, students can draw a picture portraying the importance of bison in the United States. Students can use inventive spelling to explain their picture² in one or two sentences.

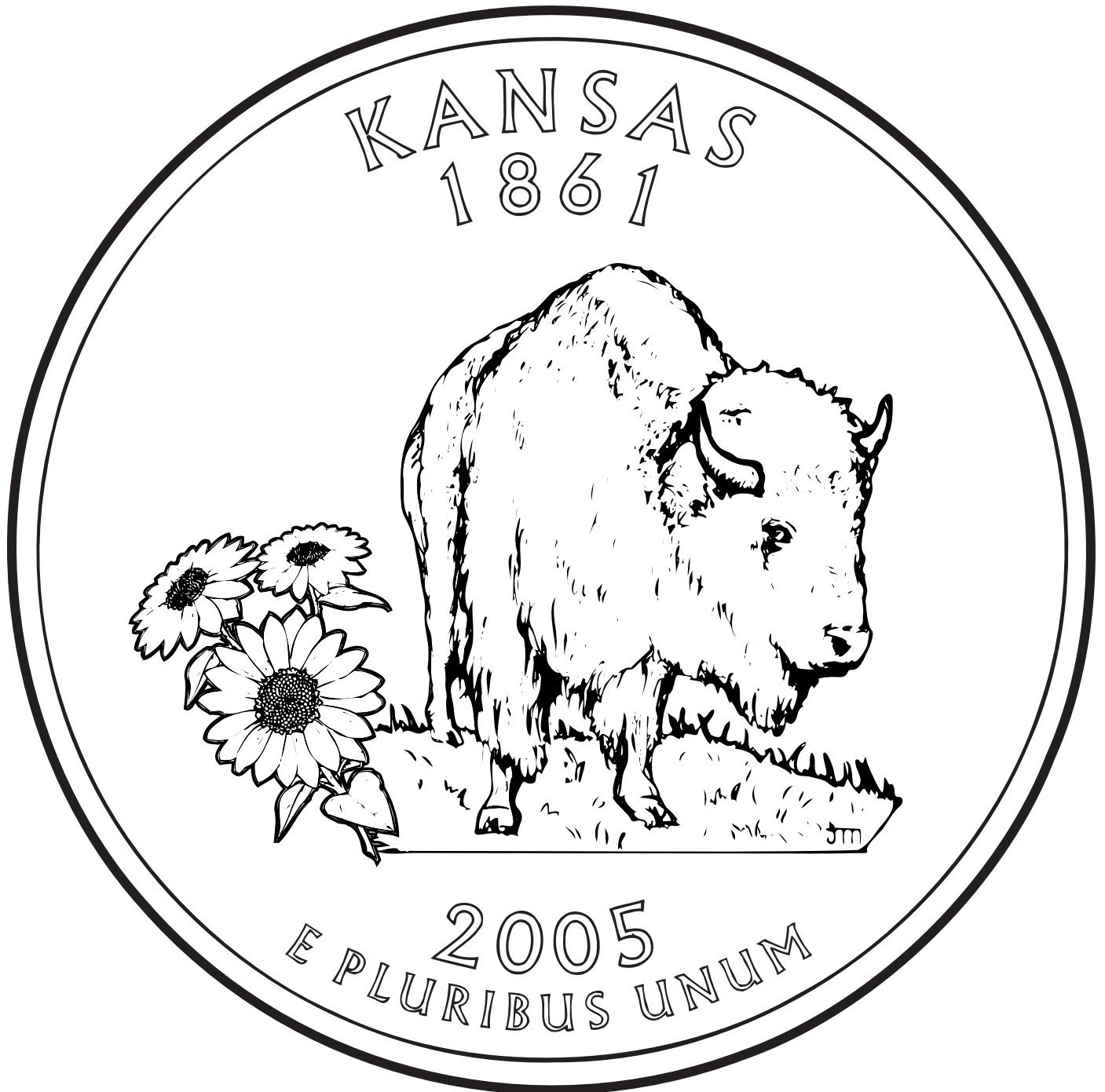


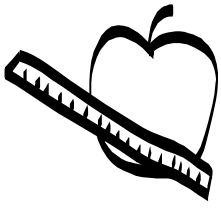
CONNECTION TO WWW.USMINT.GOV/KIDS

Your students can learn more about the American Buffalo commemorative silver dollar by visiting the “Commemorative Coins” page of the United States Mint H.I.P. Pocket Change™ Web site! (www.usmint.gov/kids/index.cfm?FileContents=/kids/coinnews/commemoratives/2001.cfm)



Kansas Quarter Reverse





5: Letters from the Road

Based on the West Virginia quarter reverse



OBJECTIVE

Students will identify and differentiate between rural, urban, and suburban communities. They will also identify the parts of a friendly letter and will compose their own letters based on their new knowledge of rural communities.



MATERIALS

- Chart paper or chalkboard
- Markers or chalk
- Artifacts from rural, urban, and suburban communities (images and concrete materials)
- Sentence strips
- 1 overhead projector (optional)
- “West Virginia Quarter Reverse” page
- 1 class map of the United States
- Copies of an age-appropriate text about rural areas, such as:
 - *Get Around in the Country* by Lee Sullivan Hill
 - *Goodnight, Country* by Susan Verlander
 - *Town Mouse Country Mouse* by Jan Brett
- Writing paper
- Drawing paper
- Letter-size envelopes



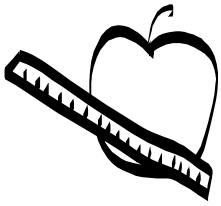
PREPARATIONS

- Make an overhead transparency (or photocopy) of the “West Virginia Quarter Reverse” page.
- Gather an assortment of artifacts from rural, urban, and suburban communities.
- Display the artifacts for the different communities in three corners of the classroom (one corner per community).
- Create labels for each type of community and place them in corresponding corners.
- Locate an age-appropriate text that relates to rural areas (see examples under “Materials”).



GROUPINGS

- Whole group
- Pairs
- Individual work

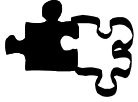


Letters from the Road



CLASS TIME

Two 30- to 45-minute sessions



CONNECTIONS

- Social Studies
- Language Arts



TERMS AND CONCEPTS

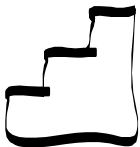
- Quarter
- Reverse (back)
- Rural
- Urban
- Suburban
- Friendly Letter
- Greeting
- Community
- Closing
- Signature



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

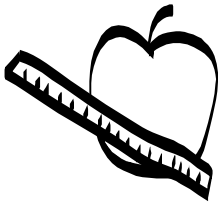
- The community in which they live
- Communities outside their own
- Outdoor activities
- Friendly letter writing



STEPS

Session 1

1. Before the start of class, place an assortment of artifacts (including images and concrete materials) in three corners of the classroom. Each corner should represent a different type of community: rural, urban, and suburban. Place a label for the appropriate community in each corner.
2. Begin this activity with a class discussion of where the students live. Ask the students to describe the local area. Record all responses on a piece of chart paper or on the chalkboard.

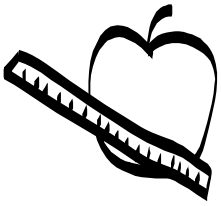


Letters from the Road

3. Explain that there are different types of communities in our country and that the students will get a chance to explore the differences between these communities. Direct the students to take a few minutes to walk around the classroom and explore each corner.
4. Regroup and, as a class, discuss each of the corners of the room. Ask the students to describe what they saw in each corner. The students should be able to accurately describe the characteristics of the three different communities.
5. As the students describe the three communities, record their responses on three different pieces of chart paper, labeling each with the appropriate community name (“urban,” “rural,” and “suburban”).
6. Discuss with the students which type of community they believe they live in. Compare the students’ community chart from step 2 to the three community charts that the students have just developed.
7. Ask the students to consider which type of community they believe has the largest number of people living in it and why. Students should choose urban settings as having the largest populations because there are more jobs in cities, etc. Add this information to the “urban” community chart.
8. Ask the students to consider which type of community would have the fewest people living in it and why. The students should be able to identify that rural settings have the smallest populations. Explain that rural settings are often agricultural communities and that rural populations need land when growing crops and raising animals. Add this information to the “rural” community chart.
9. Ask the students what word they hear in the word “suburban.” The students should hear the word “urban,” which they know means “city.”
10. Explain that suburban communities are towns that are near to, but outside of, cities. Ask the students to discuss why people would choose to live in a suburban community. Some ideas may include that people work in urban communities, but may want more land or less crowding where they live. Add student ideas to the “suburban” community chart.
11. Explain that, in the next session, the students will be looking more closely at one specific type of community.

Session 2

1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the West Virginia quarter reverse. Locate West Virginia on a classroom map. Note its position in relation to your school’s location.
2. With the students, examine the coin design. Have the students point out the elements of this design, including the mountains, trees, and river, and also the words “New River Gorge.”



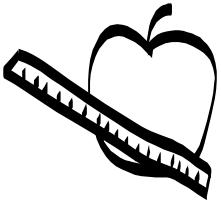
Letters from the Road

3. Based on the class discussion, have the students consider what kind of community they believe is shown on this coin.
4. Have the students discuss what they believe people living in this part of West Virginia would do for work and for fun.
5. Ask the students what kinds of things they think they would do if they were to go on a class field trip to this area. Record student responses. Explain that, throughout the year, people camp and hike along this river, bungee jump and repel from this bridge, go rafting in the water, and enjoy many other outdoor activities.
6. As a class, pretend to go on a field trip to the New River Gorge. Explain that, on this field trip, the students are camping there overnight and want to write a letter to someone special to tell them all about the camping experience.
7. As a class, discuss how one would go about writing a letter to someone. Talk about what kind of letter this would be and what kind of information should be included.
8. Introduce the selected text about rural areas. Preview the text and illustrations and allow the students to generate observations and predictions about what is happening at each point in the text.
9. Read the selected text to the class. Attend to any unfamiliar vocabulary.
10. Discuss the different parts of a letter, including the heading, greeting, body, closing, and signature.
11. As a class, discuss what the students might want to express in the body of the letter that they will be writing. Direct the students to focus on what they previously discussed about rural communities. You may wish to give your students more background information about the New River Gorge area at this point. Record student responses.
12. Direct the students to write their letters, encouraging them to use descriptive writing. Have the students create an illustration based on their imaginary experiences camping near the New River Gorge.
13. Have each student exchange his or her letter with another classmate and point out and name the parts of the classmate's letter.
14. Distribute an envelope to each student. Have each student address the envelope to his or her person of choice, add a return address, and draw a stamp.
15. Collect the letters for assessment. Explain, if necessary, that the addressees will not actually be receiving these letters; this is only a pretend mailing.



ENRICHMENT/EXTENSION

Have students examine the types of communities shown on a variety of new quarter reverses. They could determine what type of community is depicted and write a letter to their teacher based on a fictional visit to that community.



Letters from the Road



DIFFERENTIATED LEARNING OPTION

- Allow students to dictate or type their letters.
- Provide a framework for the letter for students to use as a guide.
- Have students create a postcard of their experience.
- Using index cards, create a concentration game for identification and recognition of the parts of a letter. Cards can include the definition, an example, or picture.



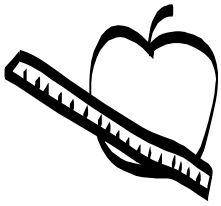
CONNECTION TO WWW.USMINT.GOV/KIDS

While Lewis and Clark weren't able to send letters home, they were able to keep careful journals of the wilderness that they explored as they journeyed west. Take some time to see what these explorers discovered on their three-year camping trip across America when you visit the Lewis and Clark Adventure game on the United States Mint H.I.P. Pocket Change™ Web site. (<http://www.usmint.gov/kids/index.cfm?fileContents=games>)



West Virginia Quarter Reverse





6: Simple Strategies



OBJECTIVE

Students will be able to make a diagram, identify a pattern, and work backwards to solve mathematical word problems. They will also explore money concepts such as budgeting and spending.



MATERIALS

- 1 copy of an age-appropriate text relating to problem solving, such as:
 - *Penny Pot* by Stuart J. Murphy
 - *Chair For My Mother* by Vera B. Williams
 - *The Best Vacation Ever* by Stuart J. Murphy
 - *Upside-Downside, Downside-Upside* by Pat Canady
 - *I Want It* by Elizabeth Crary, Marina Megale
 - *What Do You Think? The Book of Problem Solving* by Jack Wasserman, Selma Wasserman, Dennis Smith
- Chalkboard/chalk
- Chart paper/markers
- 1 overhead transparency of the “Problem Solving Strategies” page
- 1 overhead projector
- “Practice Problem Solving” pages
- “Strategize!” page
- “Strategize! Key” page



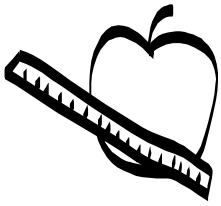
PREPARATIONS

- Make copies of the following:
 - “Practice Problem Solving” packets (1 per student)
 - “Strategize!” page (1 per student)
 - “Strategize! Key” page (1 copy)
- Make an overhead transparency of the “Problem Solving Strategies” page.
- Locate an age-appropriate text relating to problem solving (see examples under “Materials”).



GROUPINGS

- Whole group
- Pairs
- Individual work



Simple Strategies



CLASS TIME

Three 30- to 45-minute sessions



CONNECTIONS

- Mathematics



TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Problem Solving
- Make a Diagram
- Identify Patterns
- Work Backwards



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

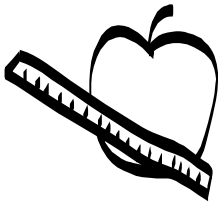
- Addition
- Subtraction
- Patterns
- Coins
- Coin values



STEPS

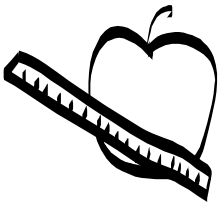
Session 1

1. Discuss problem solving with students. Give a personal account of a time that you have solved a problem in your life. Then, have students share similar stories.
2. Introduce the selected text. Ask the students to generate predictions about what is occurring during different parts of the story.
3. Read the text aloud to the group. During the reading, attend to any unfamiliar vocabulary.
4. Have the students identify different strategies the characters used in trying to solve their problems.
5. Write the following word problem on the board: “Frank and Maureen went to the grocery store. Frank bought four apples. Maureen bought two apples. How many apples did they buy in all?”



Simple Strategies

6. Ask the students to identify the very first thing they need to do in order to solve this problem. Guide the students to respond that they need to read the problem first.
7. Label a piece of chart paper “Steps of Problem Solving.” Underneath the title, write “Step 1: READ the problem.”
8. Read the problem aloud to the class.
9. Explain to the students that the next thing to do in order to solve this problem is to identify the important information that’s been given.
10. On the piece of chart paper, write “Step 2: Underline GIVEN information.”
11. Reread the problem aloud and have the students identify important words or phrases. Student responses should include that Frank has four apples and Maureen has two. Underline the sentences “Frank bought four apples” and “Maureen bought two apples” on the board.
12. Explain to the students that the next thing to do in order to solve this problem is to identify what the problem is asking them to do.
13. On the piece of chart paper, write “Step 3: Circle the QUESTION.”
14. Reread the problem aloud and have the students identify what the problem is asking them to do. The students should respond that the problem is asking them to figure out how many apples Maureen and Frank bought altogether. Circle the question on the board.
15. Explain to the students that the next thing to do in order to solve the problem is to answer the question that the problem is asking.
16. On the piece of chart paper, write “Step 4: Choose a STRATEGY to solve the problem.”
17. Discuss with the students how to solve the problem. Have the students consider whether they need to add or subtract numbers. Guide the students to respond that the words “in all” are a hint that addition is involved. Then, have the students consider what numbers should be added together. Guide the students to respond that Frank’s apples plus Maureen’s apples will give them the total number of apples.
18. Explain to the students that the last thing to do is to solve the problem. On the piece of chart paper, write “Step 5: SOLVE the problem.”
19. Direct the students to find the answer to the question with a partner. Have the students pay close attention to how they solve the problem.
20. Have the students share their answers with the class. Explain, if necessary, that the correct answer is that Maureen and Frank bought six apples in all.
21. Lead a class discussion on the process that the students followed to find their answers. Record the student responses on the board.
22. Explain to the students that there are a lot of different ways to solve any problem. Explain that, in the coming days, the students will experiment with different ways to solve problems.



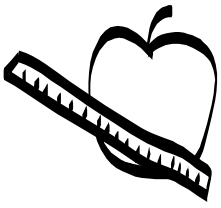
Simple Strategies

Session 2

1. Review the “Steps of Problem Solving” chart paper from the previous session. Ask the students to recall and discuss what each step means.
2. Remind the students of the problem from the previous session. Explain to the students that, in this session, they will be exploring different ways to solve problems.
3. Display an overhead transparency of the “Problem Solving Steps” page. Explain that these are just some of the problem solving strategies that students can use.
4. Read each strategy aloud and have the students predict what each one means.
5. Distribute one “Practice Problem Solving” packet to each student.
6. Read the first strategy aloud. Then, have a student read the word problem aloud. Direct the students to underline the important information and circle the question. Then, explain how to execute this problem solving strategy. Write and draw on the board as necessary as students follow along. Have the students solve the problem and share their answers. Answer student questions.
7. Direct the students to complete the two practice examples for this problem solving strategy individually or with a partner. Review each example as a class.
8. Repeat steps 6 and 7 for each of the problem solving strategies.
9. Explain to the students that, in the following session, they will work together in groups to solve problems by selecting the appropriate problem solving strategy.

Session 3

1. Have the students recall the three problem solving strategies they learned in the previous session. Write each strategy on the board. Have the students discuss all the strategies and how they work.
2. Review the problem solving steps with the students. Keep the chart paper that the steps are listed on visible for the rest of the session.
3. Write the following problem on the board: “There are three coins on a desk. Two are nickels. The total value of the coins is 20 cents. What is the other coin?”
4. Have the class read the problem aloud, underline the important information, and circle the question.
5. Direct the students to select a strategy and solve the problem.
6. Have the students share which strategy they used to solve the problem. Point out that both the “making a diagram” and “working backwards” strategies are effective in solving this problem.
7. Have a student show on the board how each of the strategies could solve the problem.
8. Explain to the students that they will be working in groups to solve word problems using the strategy that makes the most sense to them.



Simple Strategies

9. Distribute one “Strategize!” handout to each student and arrange the class into groups of three or four.
10. Allow an appropriate amount of time for the students to complete the activity in groups.
11. Review the problems as a class, using the “Strategize! Key” if necessary. Have groups come up to the board or overhead projector and write out the strategy and solution to each problem.
12. Allow for student discussion. Explain that there isn’t necessarily one correct strategy to use for any one problem. Different strategies can be used to solve the same problem and will give the same answer.



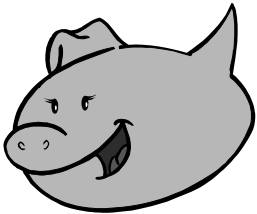
ENRICHMENT/EXTENSIONS

- Direct students to create their own word problems. On a separate piece of paper, students can show which strategy would work for this problem and include the correct answer. Students can then swap problems and challenge each other.
- Groups that finish the “Strategize!” activity early can go back and try to solve the same problems using different strategies.



DIFFERENTIATED LEARNING OPTION

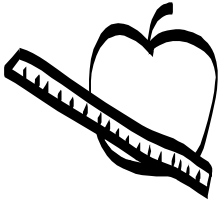
- Students needing extra support with problem solving can practice by visiting one of the following websites:
 - www.abcteach.com/Reading/suess/math1.htm
 - mathforum.org/mathworld/k3newtwo.html
 - www.gouchercenter.edu/jcampf/patterns.htm
 - www.dupagechildrensmuseum.org/aunty/images/4_20_04/challenge_easier.html
- Create a study guide for students, outlining each of the problem solving strategies.



CONNECTION TO WWW.USMINT.GOV/KIDS

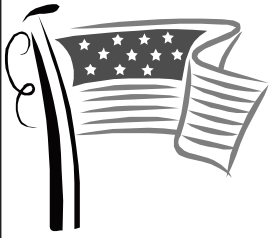
Check out the following lesson plans on the United States Mint H.I.P. Pocket Change™ Web site, all related to mathematical problem solving!

- Can You Make Change For a Dollar? (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=39)
- How Many Months? (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=90)
- That’s A Lot of Coins! (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=91)



Simple Strategies

- Alexander’s Coin Conundrum (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=93)
- In The Bag! (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=10)
- How Tall Are You, Really? (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=154)
- Using Guess, Check, and Revise (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=163)
- Coin Archeology (www.usmint.gov/kids/index.cfm?FileContents=/kids/teachers/LessonView.cfm&LessonPlanId=180)



Problem Solving Steps

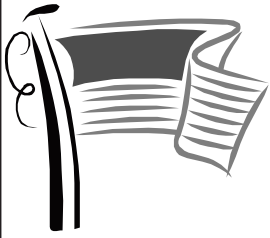
STEP 1: READ the problem.

STEP 2: UNDERLINE the given information.

STEP 3: CIRCLE the question.

STEP 4: CHOOSE a strategy.

STEP 5: SOLVE the problem.



NAME _____

Practice Problem Solving

Making a Diagram (1)

Step 1: **READ** the problem.

Enrique has \$1.75 and Olivia has \$2.25.
How many quarters do they have?

Step 2: **UNDERLINE** the given information.

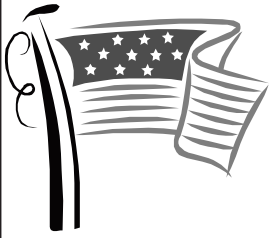
Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (make a diagram).

Draw Enrique and Olivia's quarters in the box
and then count them all up.

Step 5: **SOLVE** the problem.

Enrique and Olivia have _____ quarters.



Practice Problem Solving

Making a Diagram (2)

EXAMPLE 1

Step 1: **READ** the problem.

Ethan had a handful of quarters, but he gave them all away. He gave 2 quarters each to Chloe, Juan, and Dominic. He also gave 4 to Anne. How many quarters did Ethan have at the start?

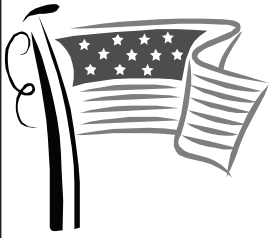
Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (make a diagram).

Step 5: **SOLVE** the problem.

Ethan started with _____ quarters.



Practice Problem Solving

Making a Diagram (3)

EXAMPLE 2

Step 1: **READ** the problem.

One hot summer day, you see this sign:

STRAWBERRY SCOOP	40 CENTS
VANILLA SCOOP	65 CENTS
CHOCOLATE CHIP SCOOP	80 CENTS

You have \$1.30 in your pocket. Is that enough money to buy a cone with one scoop of chocolate chip and one scoop of vanilla? How do you know?

Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (make a diagram).

Step 5: **SOLVE** the problem.

Yes or no? You need \$_____ for the cone.



Practice Problem Solving

Working Backwards (1)

Step 1: **READ** the problem.

Jay has \$1.25 in his pocket. He spent 25 cents on a snack this morning. He later spent 75 cents on a baseball card. How much money did Jay have in the beginning?

Step 2: **UNDERLINE** the given information.

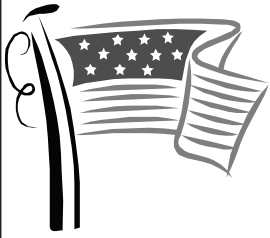
Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (work backwards).

Add the amount Jay spent to the amount he has now to find out how much he started with.

Step 5: **SOLVE** the problem.

Jay started with \$_____.



Practice Problem Solving

Working Backwards (2)

EXAMPLE 1

Step 1: **READ** the problem.

Xavier has double the number of quarters that Erin has.
Erin has 4 more quarters than Colin. Colin has 3 quarters.
How many quarters do Erin and Xavier have?

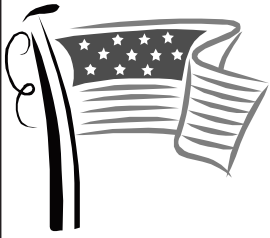
Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (work backwards).

Step 5: **SOLVE** the problem.

Xavier has _____ quarters. Erin has _____ quarters.



Practice Problem Solving

Working Backwards (3)

EXAMPLE 2

Step 1: **READ** the problem.

At the store, Aisha spent twice as much as Sue. Sue spent 25 cents less than Diego. Diego spent half of his \$3.00 allowance. How much did Aisha and Sue spend?

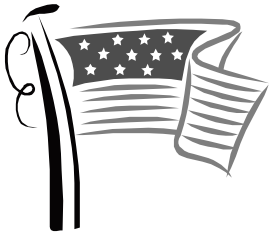
Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (work backwards).

Step 5: **SOLVE** the problem.

Aisha spent \$_____. Sue spent \$_____.



Practice Problem Solving

Identifying Patterns (1)

Step 1: **READ** the problem.

What coin comes next in the sequence?

Quarter

Nickel

Quarter

Nickel



?

Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (identify a pattern).

What is the coin or group of coins that repeats?

Step 5: **SOLVE** the problem.

The next image in the sequence is a _____.



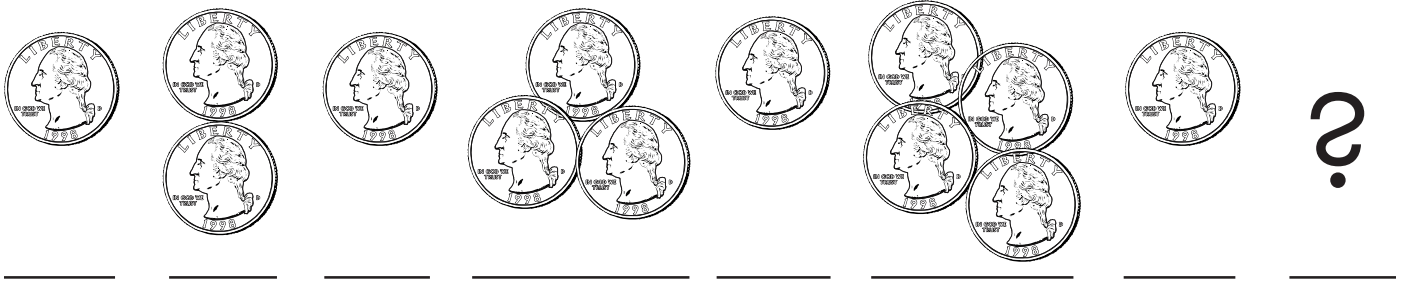
Practice Problem Solving

Identifying Patterns (2)

EXAMPLE 1

Step 1: **READ** the problem.

What comes next in the sequence?



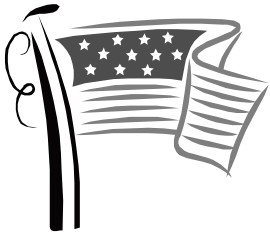
Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (identify a pattern).

Step 5: **SOLVE** the problem.

The next group in the sequence is _____ quarter(s).



Practice Problem Solving

Identifying Patterns (3)

EXAMPLE 2

Step 1: **READ** the problem.

What coin comes next in the sequence?



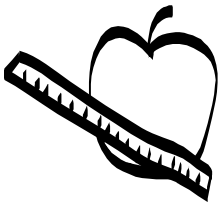
Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy (identify a pattern).

Step 5: **SOLVE** the problem.

The next coin in the sequence is a _____.



Practice Problem Solving

Key

Making a Diagram

Question: Enrique has \$1.75 and Olivia has \$2.25. How many quarters do they have?

Answer: Answers may vary. Acceptable answers include: 16 quarters, 4 quarters (and 3 bills), etc.

EXAMPLE 1

Question: Ethan had a handful of quarters, but he gave them all away. He gave 2 quarters each to Chloe, Juan, and Dominic. He also gave 4 to Anne. How many quarters did Ethan have at the start?

Answer: Ethan started with 10 quarters.

EXAMPLE 2

Question: One hot summer day, you see this sign:

STRAWBERRY SCOOP: 40 CENTS
 VANILLA SCOOP: 65 CENTS
 CHOCOLATE CHIP SCOOP: 80 CENTS

You have \$1.30 in your pocket. Is that enough money to buy a cone with one scoop of chocolate chip and one scoop of vanilla? How do you know?

Answer: No. You need \$1.45 for the cone ($65 + 80$). That is more than the \$1.30 in your pocket.

Working Backwards

Question: Jay has \$1.25 in his pocket. He spent 25 cents on a snack this morning. He later spent 75 cents on a baseball card. How much money did Jay have in the beginning?

Answer: Jay started with \$2.25.

EXAMPLE 1

Question: Xavier has double the number of quarters that Erin has. Erin has 4 more quarters than Colin.

Colin has 3 quarters. How many quarters do Erin and Xavier have?

Answer: Xavier has 14 quarters. Erin has 7 quarters.

EXAMPLE 2

Question: At the store, Aisha spent twice as much as Sue. Sue spent 25 cents less than Diego. Diego spent half of his \$3.00 allowance. How much did Aisha and Sue spend?

Answer: Aisha spent \$2.50. Sue spent \$1.25.

Identifying Patterns

Question: What comes next in the sequence?



Answer: Quarter

EXAMPLE 1

Question: What comes next in the sequence?



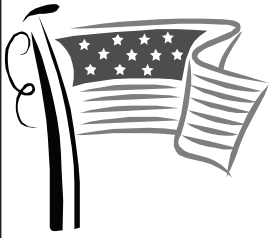
Answer: 5 quarters

EXAMPLE 2

Question: What comes next in the sequence?



Answer: 1 penny



NAME _____

Strategize!

Problem 1

Directions: In your group, see if you can solve this problem.

Step 1: **READ** the problem.

On Monday, Mrs. Johnson gave her daughter Jill one cent. On Tuesday, Mrs. Johnson gave Jill five cents. On Wednesday, Jill received 10 cents. How much did Jill receive on Thursday?

Step 2: **UNDERLINE** the given information.

Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy.

Write your strategy here: _____

Step 5: **SOLVE** the problem.

Jill received _____ cents on Thursday.



NAME _____

Strategize!

Problem 2

Step 1: **READ** the problem.

One pencil and one eraser together cost 3 cents.
One pencil and one pad of paper together cost 4 cents.
One pad of paper and one eraser together cost 5 cents.
How much does one pencil cost by itself?

Step 2: **UNDERLINE** the given information.

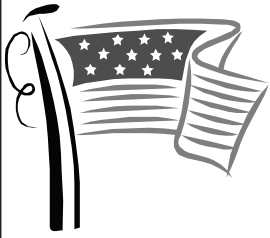
Step 3: **CIRCLE** the (question.)

Step 4: **CHOOSE** a strategy.

Write your strategy here: _____

Step 5: **SOLVE** the problem.

One pencil costs _____ cents.



NAME _____

Strategize!

Problem 3

Step 1: **READ** the problem.

The cash register has 17 coins (quarters, nickels, dimes and pennies) in it. Six of them are quarters. There are two fewer dimes than quarters. There is one less nickel than there are dimes. How many pennies are there?

Step 2: **UNDERLINE** the given information.

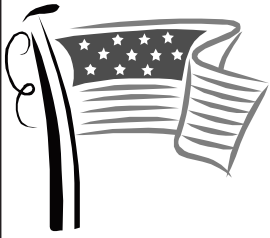
Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy.

Write your strategy here: _____

Step 5: **SOLVE** the problem.

There are _____ pennies in the cash register.



NAME _____

Strategize!

Problem 4

Step 1: **READ** the problem.

Anna spends two quarters every school day on breakfast. If Anna buys breakfast on Monday, Tuesday, and Wednesday, how many quarters does she spend? How much money does Anna need for breakfast for a five-day school week?

Step 2: **UNDERLINE** the given information.

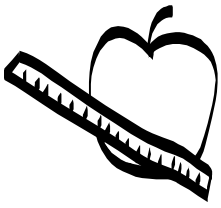
Step 3: **CIRCLE** the question.

Step 4: **CHOOSE** a strategy.

Write your strategy here: _____

Step 5: **SOLVE** the problem.

Anna spends _____ quarters for breakfast on Monday, Tuesday, and Wednesday. Anna needs \$_____ for breakfast for the week.



Strategize!

Key

PROBLEM 1

Question: On Monday, Mrs. Johnson gave her daughter Jill one cent. On Tuesday, Mrs. Johnson gave Jill five cents. On Wednesday, Jill received 10 cents. How much did Jill receive on Thursday?

Answer: Answers will vary. Accept all reasonable responses.

PROBLEM 2

Question: One pencil and one eraser together cost 3 cents. One pencil and one pad of paper together cost 4 cents. One pad of paper and one eraser together cost 5 cents. How much does one pencil cost by itself?

Answer: One pencil costs one cent. (One eraser costs two cents, one pad of paper costs three cents.)

PROBLEM 3

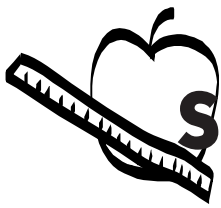
Question: The cash register has 17 coins (quarters, nickels, dimes and pennies) in it. Six of them are quarters. There are two fewer dimes than quarters. There is one less nickel than there are dimes. How many pennies are there?

Answer: There are four pennies in the cash register.

PROBLEM 4

Question: Anna spends two quarters every school day on breakfast. If Anna buys breakfast on Monday, Tuesday, and Wednesday, how many quarters does she spend? How much money does Anna need for breakfast for a five-day school week?

Answer: Anna spends six quarters on breakfast for Monday, Tuesday, and Wednesday. Anna needs \$2.50 for breakfast for a five day school week.



State Information 2005 Quarters

California

The first quarter released in 2005 honors California, and is the 31st in the United States Mint's 50 State Quarters® Program. California was admitted into the Union on September 9, 1850, becoming our Nation's 31st State. Nicknamed the "Golden State," California's quarter depicts naturalist and conservationist John Muir admiring Yosemite Valley's monolithic granite headwall known as Half Dome with a soaring California condor. The coin bears the inscriptions "California," "John Muir," "Yosemite Valley," and "1850."

In 1849, the year before California gained statehood, the family of 11-year-old John Muir emigrated from Scotland to the United States, settling in Wisconsin. In 1868, at the age of 30, Muir sailed up the West Coast and landed in San Francisco. He made his home in the Yosemite Valley, describing the Sierra Nevada Mountains as "the Range of Light... the most divinely beautiful of all the mountain chains I have seen." He devoted the rest of his life to the conservation of natural beauty, publishing more than 300 articles and 10 books that expanded his naturalist philosophy.

In 1890, Congress established Yosemite National Park, and in 1892 John Muir helped form the Sierra Club to protect it, serving as that organization's President until his death in 1914. The California condor, with a wingspan as long as nine feet, is also featured on the coin in a tribute to the successful repopulation of the once nearly extinct bird.



State Capital: Sacramento

State Bird: ... California Valley Quail

State Tree: Redwood and Giant Sequoia

State Flower: California Poppy

State Motto: Eureka

Entered Union (rank): September 9, 1850 (31)

Nickname(s): Golden State

Origin of Name: . Named after Califia, a mythical paradise in a Spanish romance by Montalvo

State Song: I Love You, California

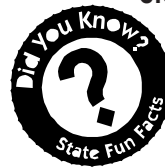
Minnesota

The second quarter released in 2005 commemorates the state of Minnesota, "Land of 10,000 Lakes." On May 11, 1858, Minnesota became the 32nd state admitted into the Union, and as such, it is the 32nd coin to be issued in the United States Mint's popular 50 State Quarters® Program. The design features a tree-lined lake with two people fishing, a loon on the

water, and a textured outline of the state surrounding its nickname, "Land of 10,000 Lakes."

The "Land of 10,000 Lakes" actually contains more than 15,000 such bodies of water whose total shoreline exceeds 90,000 miles—more than California, Hawaii, and Florida combined. Equally renowned as the home of the headwaters of the mighty Mississippi River, the name Minnesota is derived from the Dakota Sioux word for "cloudy water."

The natural beauty of Minnesota is vividly depicted on the reverse of this new quarter-dollar. Lined with Norwegian Pines, many of the lakes throughout the state offer much in the way of outdoor recreation, as well as providing a home for the graceful loon, Minnesota's state bird. Minnesota is also home to the Boundary Waters Canoe Area Wilderness. This one-million-acre wilderness area was established by Congress in 1978 and contains more than 1,500 miles of canoe routes and nearly 2,200 designated campsites.



State Capital: Saint Paul

State Bird: Common Loon

State Tree: Red Pine

State Flower: Pink and white lady's slipper

State Motto: L'Etoile du Nord (the star of the north)

Entered Union (rank): May 11, 1858 (32)

Nickname(s): Land of 10,000 Lakes/North Star State

Origin of Name: Dakota Sioux for "sky-tinted water"

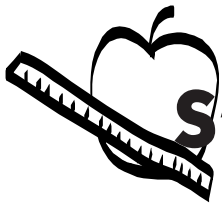
State Song: Hail! Minnesota

Oregon

The state of Oregon is honored with the third quarter to be released in 2005, and the 33rd in the United States Mint's 50 State Quarters® Program. On February 14, 1859, Oregon became the 33rd state to be admitted into the Union. Its coin design features a portion of Crater Lake, the deepest lake in the United States, viewed from the south-southwest rim. The design incorporates Wizard Island, as well as Watchman and Hillman Peaks on the lake's rim, and conifers. The coin bears the inscription "Crater Lake."

Crater Lake is a unique and stunning natural treasure, formed more than 7,700 years ago by the collapse of Mt. Mazama in what is now southern Oregon. At 1,949 feet, it is the deepest lake in the United States and the seventh deepest in the world, and has a record clarity depth of 134 feet. The main cause of Crater Lake's remarkable clarity is its isolation from incoming streams and rivers.

President Theodore Roosevelt established Crater Lake National Park in 1902, with the lake itself as the Park's crown.



State Information 2004 Quarters

jewel. It is the sixth oldest national park in the country. Since its creation, Crater Lake National Park has helped protect both the Native American cultural ties to the area and the natural habitat of the animal and plant life that lies within its boundaries.



State Capital:Salem
State Bird:Western Meadowlark
State Tree: Douglas Fir
State Flower: Oregon Grape
State Motto: Alis Volat Propiis
(She flies with her own wings)

Entered Union (rank): February 14, 1859
(33)

Nickname(s): Beaver State
Origin of Name: Unknown; maybe from French map showing Wisconsin River as "Ouaricon-sint"
State Song:Oregon, My Oregon

Kansas

The fourth quarter released in 2005 commemorates the state of Kansas. On January 29, 1861, the "Sunflower State" became the 34th state to be admitted into the Union. Kansas marks the 34th coin to be issued in the United States Mint's popular 50 State Quarters® Program, and features a buffalo and sunflower motif, emblematic of the state's history and natural beauty.

The Kansas commemorative quarter incorporates two of the state's most beloved symbols, the state animal and flower, the buffalo and the sunflower. Each of these two design elements is a visual reminder of our nation's heartland. They feature prominently in the history of the territory, and both were found in abundance throughout the state in the middle of the 19th century when Kansas gained its statehood. With its release in the fall of 2005, it is the second United States circulating coin of 2005 to carry an image of the buffalo.



State Capital: Topeka
State Bird:Western Meadowlark
State Tree: Cottonwood
State Flower: Sunflower
State Motto: Ad astra per aspera
(To the stars through difficulties)

Entered Union (rank):January 29, 1861
(34)

Nickname(s): Sunflower State
Origin of Name: From Sioux for "south wind people"
State Song: Home on the Range

West Virginia

The fifth and final quarter released in 2005 commemorates the state of West Virginia. On June 20, 1863, the "Mountain State" became the 35th state to be admitted into the Union, making this the 35th coin to be issued in the United States Mint's popular 50 State Quarters® Program. This coin captures the scenic beauty of the state with its depiction of the New River and the New River Gorge Bridge. The coin bears the inscription "New River Gorge."

Prior to gaining statehood, the area that is now West Virginia formed the western part of Virginia. Settlers in the western part of the "Old Dominion" began their efforts to join the Union when Virginia announced its secession in 1861. In the western part of the state, the Restored Government of Virginia in Wheeling drafted a state constitution in 1862. The new state called West Virginia applied to Congress for admission into the Union. Congress approved the request with one condition: that the new state abolish slavery. President Lincoln signed the West Virginia statehood bill and on June 20, 1863, West Virginia officially became the 35th state to be admitted into the Union.

The design chosen to represent West Virginia is one that combines the natural physical beauty of the state and the triumph of the human intellect exemplified by the engineering wonder that is the New River Gorge Bridge. At 3,030 feet long and 69 feet wide, the bridge is the world's largest steel span and the second highest bridge in the United States, rising 876 feet above the New River Gorge in southern West Virginia. In 1978, 53 miles of the New River was added to the National Park System as the New River Gorge National River.

For years, crossing the New River Gorge meant long detours along narrow, winding mountain roads. The completion of the bridge in 1977 reduced this dangerous 40-minute trip to a smooth and scenic one-minute drive.

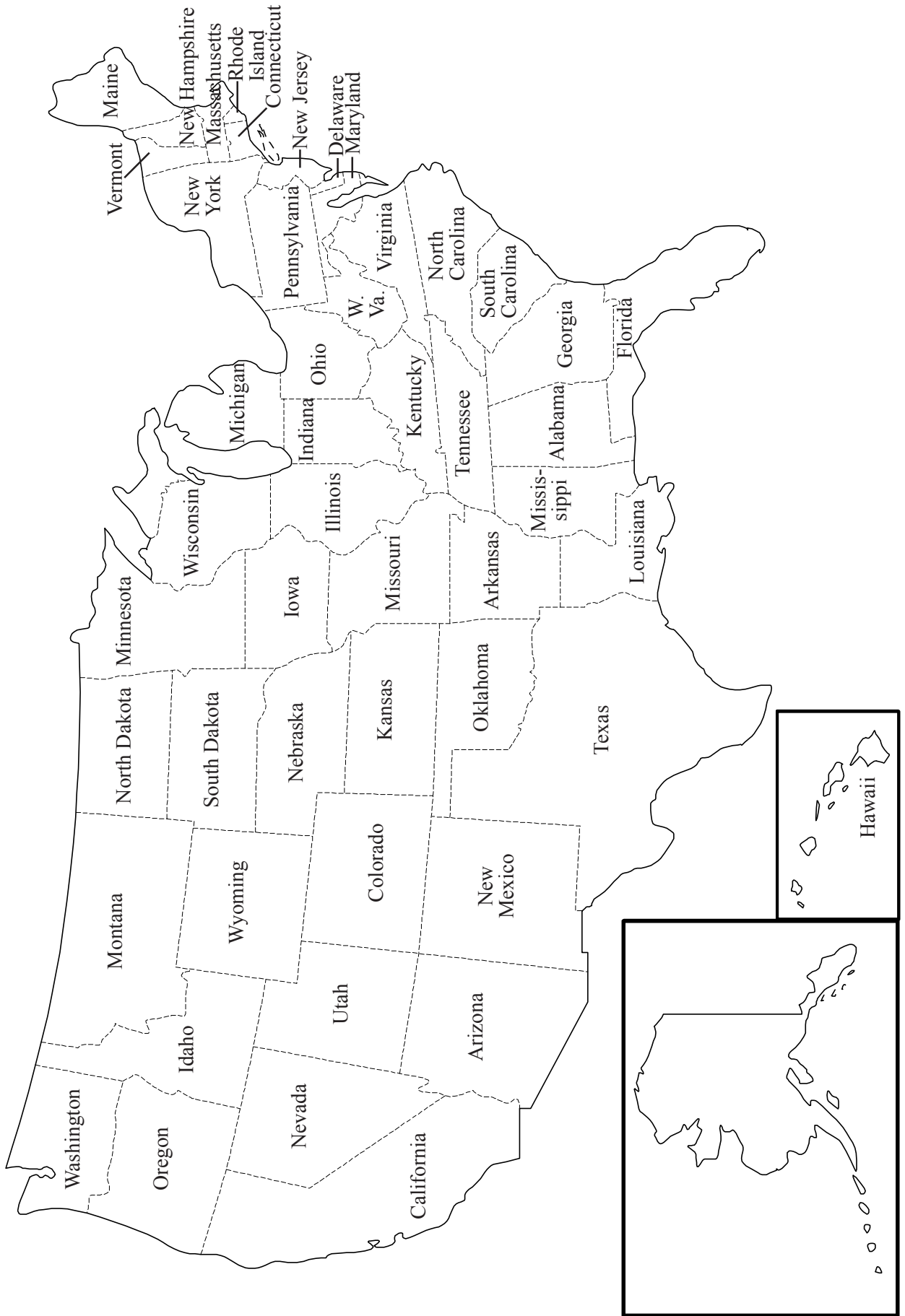
State Capital:Charleston
State Bird: Cardinal
State Tree: Sugar Maple
State Flower: Rhododendron
State Motto: ... Montani simper liberi
(Mountaineers are always free)

Entered Union (rank): June 20, 1863 (35)

Nickname(s): Mountain State
Origin of Name: ... Named after England's Queen Elizabeth I, the "Virgin Queen"
State Song: .. "West Virginia, My Home," "The West Virginia Hills," "This Is My West Virginia"



The United States of America

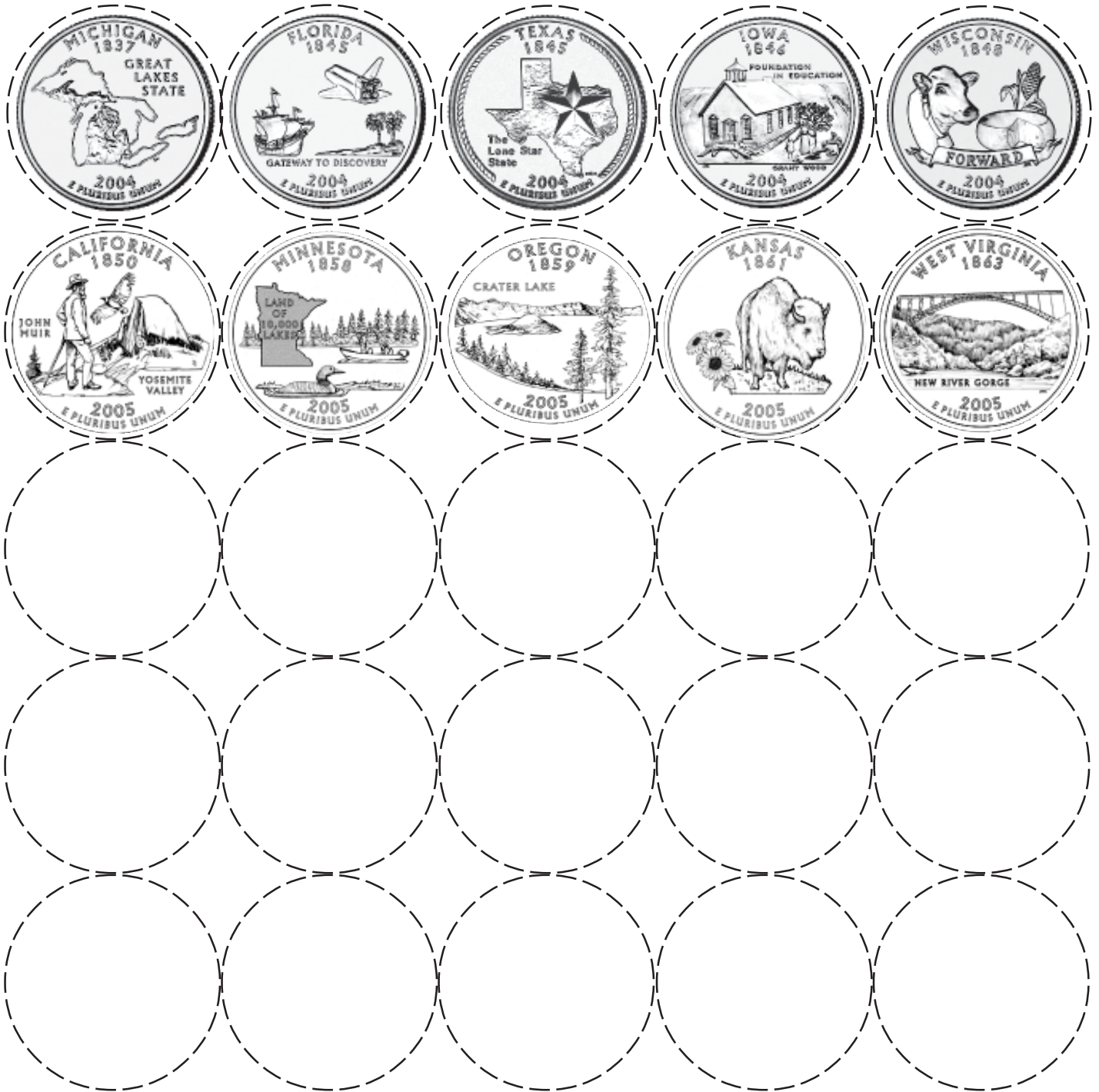


50 State Quarters Program Designs



50 State Quarters Program Designs

Reverse



50 State Quarters Program Designs

Obverse



Reproducible Coin Sheet

Obverse



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Reproducible Coin Sheet

Reverse





The United States Mint

50 State Quarters Program

Release Year/State **Statehood Date**

1999 _____

Delaware December 7, 1787
 Pennsylvania December 12, 1787
 New Jersey December 18, 1787
 Georgia January 2, 1788
 Connecticut January 9, 1788

2000 _____

Massachusetts February 6, 1788
 Maryland April 28, 1788
 South Carolina May 23, 1788
 New Hampshire June 21, 1788
 Virginia June 25, 1788

2001 _____

New York July 26, 1788
 North Carolina November 21, 1789
 Rhode Island May 29, 1790
 Vermont March 4, 1791
 Kentucky June 1, 1792

2002 _____

Tennessee June 1, 1796
 Ohio March 1, 1803
 Louisiana April 30, 1812
 Indiana December 11, 1816
 Mississippi December 10, 1817

2003 _____

Illinois December 3, 1818
 Alabama December 14, 1819
 Maine March 15, 1820
 Missouri August 10, 1821
 Arkansas June 15, 1836

Release Year/State **Statehood Date**

2004 _____

Michigan January 26, 1837
 Florida March 3, 1845
 Texas December 29, 1845
 Iowa December 28, 1846
 Wisconsin May 29, 1848

2005 _____

California September 9, 1850
 Minnesota May 11, 1858
 Oregon February 14, 1859
 Kansas January 29, 1861
 West Virginia June 20, 1863

2006 _____

Nevada October 31, 1864
 Nebraska March 1, 1867
 Colorado August 1, 1876
 North Dakota November 2, 1889
 South Dakota November 2, 1889

2007 _____

Montana November 8, 1889
 Washington November 11, 1889
 Idaho July 3, 1890
 Wyoming July 10, 1890
 Utah January 4, 1896

2008 _____

Oklahoma November 16, 1907
 New Mexico January 6, 1912
 Arizona February 14, 1912
 Alaska January 3, 1959
 Hawaii August 21, 1959