## 2002

 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 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 ${ }^{\circledR}$ 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 limitededition 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 $\mathrm{K}-1,2-3$, and $4-6$ ) that 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 200250 State Quarters Program lesson plans, you will also notice a strong connection to the United States Mint H.I.P. Pocket Change ${ }^{\text {TM }}$ Web site ("HPC"). Appearing on the cover as well as within the plans themselves, the coin-loving HPC Pals will show you ways to supplement the quarter activities with all of the fun and educational resources available on the site!

The United States Mint 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, HPC introduces students to what's H.I.P. about coins-they're "History In your Pocket."

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

## Visit us online at www.usmint.gov/kids

The United States Mint does not endorse any individual provider of goods or services, including authors and publishers. All text references are merely illustrative and should not be deemed to be recommendations of the United States Mint.

## The Greatest Educational Change America Has Ever Seen



## Additional Resources

State Information Pages: 50 State Quarters ${ }^{\circledR}$ Program Coins Released in 2002 ..... 47
Ohio, Mississip pi, Tennessee, Louisia na, and India na
United States of America Map ..... 49
Reproducible Coin Sheet ..... 50
50 State Quarters ${ }^{\circledR}$ Program Release Schedule ..... 52


1: Musical Change

## Based on the Tennessee quarter reverse OBJ EC TIVES:

Students will carefully make and record observations about different coin denominations. They will use their observations to work in groups and create a song about coins.


## MATERIALS:

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Tennessee quarter reverse
- 1 class map of the United States of America
- Chart paper
- Markers
- 1 enlarged image of a cent (penny)
- "Coin Parts" sheet
- Student observation sheet
- 1 overhead transparency of the observation sheet
- Cents, nickels, dimes, quarters, half dollars, dollar coins (1 coin per student)
- Magnifying glass (1 per small group)
- Copies of "The Coins in My Hands" verses
- Dictionaries, thesauruses, and rhyming dictionaries (if available)



## PREPARATIONS:

- Make an overhead transparency (or photocopy) of the Tennessee quarter reverse and both sides of the one cent coin.
- Make an overhead transparency (or write on chart paper) "The Coins in My Hands" cent (penny) verse.
- Gather several nickels, dimes, quarters, half dollars, and dollar coins (to randomly distribute, 1 coin per student).
- Make an overhead transparency of the student observation sheet.
- Make copies of student observation sheet (1 per student).
- Make copies of "Coin Parts" sheet (1 per student).
- Cut out and enlarge verses 2 to 6 of "The Coins in My Hand" song (1 verse per small group)
- Visit the glossary on the U.S. Mint H.I.P. Pocket Change ${ }^{\mathrm{TM}}$ Web site (http:// www.usmint.gov/kids/index.cfm?fileContents=/kids/campcoin/glossary.cfm) to familiarize self with coin terminology .


## GROUPINGS:

- Whole group
- Small groups


## CLASS TIME:

2 or 330 - to 45-minute sessions

## CONNECTIONS:

- Language Arts
- Music
- Social Studies
- Science



## TERMS AND CONCEPIS:

- Cent
- Half Dollar
- Relief
- Reverse (back)
- Nickel
- Dime
- Dollar Coin
- Mint mark
- Musical heritage
- Quarter
- Coins
- Edge
- Value
- Obverse (front)


## BACKGROUND KNOWEDGE:

Students should have basic knowledge of:

- Circulating coins and their value
- The traditional children's song "The Wheels on the Bus"



## STEPS:

## Session 1

1. Describe the 50 State Quarters ${ }^{\circledR}$ Program for background information, if necessary, using the example of your own state if available. Then introduce the Tennessee quarter reverse, using an overhead transparency or photocopy. On a class map, have a pair of students locate Tennessee.
2. Direct the students to examine and discuss the design of the Tennessee quarter in small groups, and share what they see. On chart paper, list the comments of each group.
3. Ask students why they think Tennessee put musical instruments on their quarter. Discuss the words "Musical Heritage." Build on their responses, but convey the idea that music and song writing are both important to that state.
4. As a class, discuss common song topics (reflect on a song that all students are familiar with). Ideas discussed should include things that are important to the writer, that interest the writer, and that the writer knows about. Explain that, as a group and in teams, they will write a song about money.
5. Use a real coin as well as an enlarged or overhead version to introduce both sides of the cent.


Musical Change
6. Distribute a "Coin Parts" sheet and "Observation Sheet" to each student. Introduce the coin terms on the "Coin Parts" sheet and post the term definitions for reference.
7. Use the observation sheet to guide the students in examining the physical characteristics and value of a cent.

## Session 2 (and 3 if necessary)

1. Introduce "The Coins in My Hand" song. On an overhead projector or chart paper, have students use the class observations to fill in the blanks in the cent (penny) verse. Note: Remember to respect and comply with our nation's copyright laws when you do this project, especially if you plan to use copyrighted editions, arrangements, or recordings.
2. Distribute a different coin and an observation sheet to each student. Instruct the class to begin by observing their coin and filling in the blanks on the observation sheet.
3. After an allotted time, divide students into five teams (students with the same coins should be grouped together). Distribute the appropriate "The Coins in My Hand" verse to each group. Instruct the groups to complete the verse about their coin to add to the song that was begun earlier. This verse should draw on the coin observations that the students will make. Provide students with these tips:

- Pay attention to the rhythm used in the song that the class is writing.
- Use dictionaries, thesauruses, and rhyming dictionaries if available.

4. When finished, have each group sing their verse for the rest of the class!


## ENRICHMENT/EXTENSIONS:

Perform the entire song for other classes in the school. Prepare props, such as enlarged coins, to use when performing the song. Invite students to incoporate musical instruments into their performance.

Invite students to try to create their own song about a coin of their choice.


## DIFFERENTIATED LEARNING OPIONS:

- Allow students to present their observations through a variety of genres (drawings, raps, poems, etc.).
- Review terms independently with students who require more guidance.
- Draw corresponding pictures to accompany text listed on observation sheets.

- Record the performance and place a typed copy of the completed song with the recording in the class listening center to practice reading skills.


## HPC CONNECTIONS

Want to learn more about the Tennessee quarter? Visit the February 2002 Coin of the Month in the "Coin News" area.


Mint marks are small letters that show where a coin was made.
For example:
D: Denver
P: Phila delphia

## Musical Change

Sing to the tune of "The Wheels on the Bus" and "This Is the Way We Wash Our Clothes."




## 2: Flying High in Ohio

## Based on the Ohio quarter reverse

## OBJ EC TIVES:

Students will use a graphic organizer to explore the similarities and differences between two sets of "Aviation Pioneers." Students will also read age appropriate texts related to the design of the Ohio quarter reverse.


## MATERIALS:

- 1 overhead projector (optional)
- 1 large brightly colored box
- 1 sign reading "Mystery Box"
- Box contents relating to aviation and space travel (such as pictures of air or spacecraft, toy planes or space ships, or airline tickets) as well as an Ohio quarter.
- 1 class map of the United States of America
- 1 photocopy (or overhead transparency) of the Ohio quarter reverse
- 1 copy each of an age appropriate text that relates to the Wright brothers and a text that relates to one of Ohio's famous astronauts, such as:
- Taking Flight: The Story of the Wright Brothers (Ready-To-Read) by Stephen Krensky
- First Flight: The Story of Tom Tate and the Wright Brothers by George Shea
- One Giant Leap: The Story of Neil Armstrong by Don Brown
- Man on the Moon by Anastasia Suen
- Moonwalk: The First Trip to the Moon by Judy Donnelly
- 1 piece of chart paper
- Markers
- Copies of the Venn diagram worksheet
- 1 overhead transparency of the Venn diagram worksheet



## PREPARATIONS:

- Locate a text that relates to the Wright brothers and another that relates to an astronaut from Ohio (see suggestions under "Materials").
- Make an overhead transparency (or photocopy) of the Ohio quarter reverse.
- Make copies of the Venn diagram worksheet (1 per student).
- Make an overhead transparency of the Venn diagram worksheet.



## GROUPING:

- Whole group
- Small groups


# - Learning about Exploration and Flight 

## CLASS TIME:

430 - to 45 -minute sessions

## CONNECTIONS:

- Language Arts - Social Studies - Science


## TERMS AND CONCEPIS:

- Quarter
- Reverse (back)
- Symbol
- Mysteries
- Aviation
- Pioneer
- Compare


## BACKGROUND KNOWEDGE:

The students should have basic knowledge of:

- Air and space travel
- Preview and prediction skills (reading)



## STEPS:

## Session 1

1. Place in plain view of the students a box labeled "Mystery Box." Examine the box periodically throughout the morning. When students ask you what's in it, respond with "You'll have to wait and see."
2. When you're ready for the lesson, bring the box to the front of the classroom and ask the students if they noticed the box. What made them curious? Tell the students that they can look into the box, but first ask "Who would look into this box if they thought it might have something spooky in it? Who would look into the box if they thought it might have something dangerous in it?"
3. Introduce the Ohio quarter by taking it out of the Mystery Box. Tell them that this coin highlights some people who were curious about the unknown, just like they were with the Mystery Box.
4. Describe the 50 State Quarters ${ }^{\circledR}$ Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the Ohio quarter reverse.

Flying High in Ohio
5. As a class, discuss the symbols on the coin's reverse. Ask the students what types of things they think interested the people on the quarter. (They should guess that these people were interested in exploring ideas relating to flight.) Explain that these people knew that flight and space travel were dangerous, things that no one had ever done before, but they were brave and still wanted to learn all they could about these topics.
6. Ask if your students know of any aviation pioneers. Briefly introduce the Wright brothers, John Glenn, and Neil Armstrong to your students as "aviation pioneers" who came from Ohio (Orville Wright was born there, both worked on flight there). Support this step with visuals from inside the Mystery Box (items related to aviation and space travel).

## Session 2

1. Introduce the students to the two stories that they will be reading and comparing on the Wright brothers and one of Ohio's famous astronauts (suggested titles are listed under "Materials").
2. With the entire reading group, create a K-W-L chart to examine what students $\underline{k}$ now and want to know about these pioneers. Leave the learn column empty for now.
3. As a group, preview the text and illustrations to generate predictions about the selected story on the Wright brothers.
4. Read this story as a group. During the reading, attend to any unfamiliar vocabulary. After reading, fill in the "L" column with all they learned about the Wright Brothers.

## Session 3

1. In small groups, have your students repeat steps 3 and 4 from session 2 with the selected book on an Ohio astronaut.
2. Have the groups share what they learned. Add this to the "L" column of the chart.

## Session 4

1. Divide students into small groups and distribute a "Venn Diagram" sheet to each group. The groups will use the Venn diagrams to compare the lives and experiences of the Wright Brothers and an Ohio astronaut.
2. On the lines above the ovals, have the students write the names of the pioneers being compared. Together, find at least one similarity and one difference between these aviation pioneers.
3. Have students continue to add information to their Venn diagrams.
4. As a class, using an enlarged or overhead version of the Venn diagram, have the students share and record the similarities and differences that they noticed.


Flying High in Ohio


## ENRICHMENT/ EXTENSIONS:

Challenge interested students to write a letter to one of these men asking a question that was not answered in the books. Have these students trade letters with a partner, research the answers to the questions, and write a letter back sharing the answer.

To further use Venn diagrams, students can compare all the existing state quarters according to different rules that they develop (such as "people vs. trees").

Have students research other flight or space pioneers and share the information with the rest of the class.


## DIFERENIIATED LEARNING OPIIONS:

- Provide students with abbreviated versions of texts by photocopying only certain pages or condensing them yourself.
- Use a K-L chart rather than a K-W-L chart with your students.



## HPC CONNECTIONS

It takes a lot of spirit to explore unknown areas. But long before the aviation pioneers represented on the Ohio quarter tested new waters, a group of daring pioneers traveled west in search of a new life. Read more about the coin that commemorates the route these pioneers traveled, the Oregon Trail. It's the Coin of the Month for January, 2000, in the "Coin News" area.




3: Mapping America

## Based on the Louisiana quarter reverse

## OBJ ECTIVES:

Students will demonstrate map skills focusing on elements such as title, key, compass rose, and date. Students will also describe our nation as composed of states, and will locate and identify selected states on the map.


## MATERIALS:

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Louisiana quarter reverse
- Copies of the "Louisiana Purchase" map
- Copies of the "United States of America" map
- Colored pencils



## PREPARATIONS:

- Make an overhead transparency (or photocopy) of the Louisiana quarter reverse.
- Make copies of the "Louisiana Purchase" map (1 per student).
- Make copies of the "United States of America" map (1 per student).



## GROUPINGS:

- Whole group
- Individual work


## CLASS TIME:

145 -minute session

## CONNECTIONS:

- Social Studies



## TERMS AND CONCEPIS:

- The Louisiana Purchase
- Map key
- Compass rose
- Map title
- Border


## BACKGROUND KNOWEDGE:

Students should have basic knowledge of:

- Map elements
- Cardinal directions



## STEPS:

1. Describe the 50 State Quarters ${ }^{\circledR}$ Program for background information, if necessary, using the example of your own state, if available. Then display the overhead or photocopied image of the Louisiana quarter reverse.
2. Explain to students that the design was specially chosen to represent the state of Louisiana, its history, and its contribution to the United States of America.
3. Lead a class discussion about the elements in the Louisiana quarter design. Focus on the central, shaded Louisiana Territory area. Conduct a think-pair-share session asking students to consider:

- What pictures appear on the coin and what might they represent?
- What words appear prominently on the coin and what might they mean?
- Why were the pictures and words on the coin chosen? What things or events might the coin be representing? What aspects might be important about Louisiana?

4. Give students a brief background of the Louisiana Purchase including information such as when it happened and how it affected the size and boundaries of the United States. Point out the shaded area on the Louisiana quarter reverse. Explain that this area was once not a part of the United States but was added as the nation grew.
5. Tell students they are going to practice mapping skills on two different maps, past vs. present - one map that shows what the United States looked like the year of the Louisiana Purchase and the second map showing what the United States looks like today.
6. Distribute "The Louisiana Purchase" map, one per student. Also, hand out colored pencils.
7. Review the map as a class. Take time to review the compass rose, the map key, the title, etc. Point out areas on the map such as territories, states in the union, etc.
8. As a class, work with the students to complete the directions provided.
9. As students complete the "Louisiana Purchase" map, give each a copy of the "United States of America" map. Have students work individually to complete this map according to the directions, providing guidance when necessary. If necessary, unfinished work may be completed at home.
10. Check the students' maps for completion. Discuss what was learned, referring again to the transparency or photocopy of the Louisiana quarter reverse.


Mapping America

## ENRICHMENTS/EXTENSIONS:

Students can create a map of their home state, including a compass, labeling the bordering states, identifying the capital city and the city or town where the school is located. A corresponding map key should be provided by the student as well.

Have students hypothesize and write about what life would be like if the United States had never acquired the Louisiana Territory.


## DIFERENIIATED LEARNING OPIONS:

- Use peer tutoring when completing the map sets.
- Make personal connections for students about land ownership such as: If you go to the pet store to buy a dog, the store owner owned the dog until (s)he sold it to you.
- Make a literature connection to "map elements" by reading map-related texts such as Me on the Map by Joan Sweeney, or North, South, East, and West by Allan Fowler.



## HPC CONNECTIONS

When President Jefferson wanted to expand the United States, from whom did he purchase the Louisiana Territory? Why, France, of course! Check out "Coins of the World" to learn more about the United States' French connection. It's in the "Cartoons" area.

Or take a trip back in the HPC time machine to explore the Louisiana Territory with Lewis and Clark and their guide, Sacagawea.

## Louisiana Purchase Map

## "LOUISIANA PURCHASE" MAP INSTRUCTIONS:

1. In the blank in the "Louisiana Purchase" map'stitle, write the year that the Louisiana Temitory was purchased.
2. Look at the compass. What do the letters stand for?
$\qquad$ S E $\qquad$ W $\qquad$ .
3. Pick a color and color in the Louisiana Tenitory.
4. Use the same colorto color in the "Louisiana Teritory" box in the map key.
5. Was your state owned by the United States in 1803?

Put an " X " where your state is located. Using the same color, trace the " $X$ " on the map key and write the name of your state in the blank next to it.


## United States of America Map

## "UNITED STATES OF AMERICA" MAP INSTRUCTIONS:

1. In the blank in the map's title, write the current year.
2. In the lower right box, draw a compass rose and label it.
3. Trace the United States of America as it is today (don't forget Alaska and Ha waii). Using the same color, color in the "United States of America" box in the map key.
4. Pick a nother color. Trace the state where you live, then color it in. Color in the second box in the map key and write the name of your state in the blank next to it.
5. Pick a third color. Trace all the other states that border your state. How many other states border yours? $\qquad$
6. Write the na mes of all the states that border your state.
$\qquad$
$\qquad$
$\qquad$
$\qquad$




## 4: The Great States Race

## Based on the Indiana quarter reverse

## OBJ ECTIVES:

Students will research state information and write the answers to questions for a racetrack game. This game will consist of questions relating to the 50 State Quarters ${ }^{\circledR}$ Program and other states, particularly Indiana.


## MATERIALS:

- 1 toy race car
- 1 class map of the United States of America
- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Indiana quarter reverse
- Enlarged copies of the game board
- Question cards
- Blank question cards
- Dice (1 die for every group of four students)
- Copies of the "Luck of the Draw" cards
- Sets of four different state quarters (1 set for each group)
- Copies of the "Reproducible Coin Sheet" (optional)
- An assortment of grade appropriate coin and state reference resources
- Access to computers with Internet capabilities (bookmark www.usmint.gov/kids).



## PREPARATIONS:

- Make enlarged copies of the game board (1 per group of four students)
- Make copies of question cards ( 1 complete set per group)
- Make copies of "Luck of the Draw" cards (2 sheets per group)
- Make copies of the "Reproducible Coin Sheets" (pages 49 and 50) (1 of each sheet per group)
- Gather grade appropriate coin and state reference resources for classroom use
- Make an overhead transparency (or photocopy) of the Indiana quarter reverse.



## GROUPING:

- Whole Group
- Small Groups


## CLASS TIME:

3 30- to 45-minute sessions

## CONNECTIONS:

\author{

- Social Studies • Language Arts • Technology
}


## TERMS AND CONCEPIS:

- Quarter
- Reverse (back)
- Symbol



## BACKGROUND KNOWEDGE:

Students should have basic knowledge of:

- Use of reference resources
- Writing answers in complete sentences



## STEPS:

## Session 1

1. Hold up a toy race car and explain that your next activity has something to do with cars like this and the number 500. Explain that you'll be continuing your study of the state quarters with the Indiana quarter.
2. Describe the 50 State Quarters ${ }^{\circledR}$ Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the Indiana quarter reverse. As a class, locate Indiana on the class map.
3. Discuss the coin's symbols. Responses should include the mention of race cars and the Indianapolis 500.
Note: Teacher may need some prior knowledge of the Indy 500.
4. Introduce the students to the "Great State Race" game, which looks like a race track. Explain that the students will create this game about the 50 State Quarters ${ }^{\circledR}$ Program as a class.
5. Create a K-W-L chart to examine what students know and want to know about the 50 State Quarters Program. Leave the learn column empty until after the students have conducted their research.

## Session 2

1. Break students into groups of four. Distribute 1 copy of the "Great States Race" questions to each group. Direct the students to use the K-W-L chart and other classroom and Internet resources to answer all the questions listed. (A good resource would be the State Quarter Information from the 1999-2000, 2001, and 2002 lesson plans.) Each group's recorder must use complete sentences and proper grammar, spelling, and punctuation.


The Great States Race
2. Once the students have finished answering the "Great States Race" questions, assign each group 2 "class questions" from the "W" column of the chart. Instruct the groups to research their questions, again making use of classroom resources.
3. Review each group's questions and answers.
4. Once all grammar, spelling, and punctuation have been corrected, instruct the groups to write their "class questions" and answers in the blank "Great States Race" question cards, using their clearest handwriting.
5. Fill in the $\underline{\mathbf{L}}$ column as a class. Discuss the answers to the questions as well as the ways in which students conducted their research.

## Session 3

Before session 3: Photocopy each of the "class questions" written during session 2 (each group will need a complete set of these cards). If possible, laminate and separate all question and "Luck of the Draw" cards.

1. Break students into groups of four. Distribute the game boards to each group. As a class, review the rules of the game as they are written on the game board. Model a round of game play for your class.
2. Give each group a "Great States Race" game board, a complete set of "class question" cards mixed with the group's "Great States Race" question cards, a set of "Luck of the Draw" cards, a die, and four different state quarters.
3. Each student will select a state's quarter as their piece, and will play the game according to the rules.


## ENRICHMENTI EXTENSIONS:

Students could research their home state and also Indiana. Based on their research, they could form comparative questions to add as "stumpers" to their deck of question cards, such as "Which state has a larger population, Indiana or Wyoming?"

Students could research other similar car races in America. They could locate the states where each race is conducted and mark this on a personal map.




| KNOWYOUR QUARIERS! <br> Q: What state has the nickname, "The Crossroads of America?" <br> A: | KNOW YOUR QUARIERS! <br> Q: Which state's quarter features a mounta in and maple trees? <br> A: |
| :---: | :---: |
| KNOWYOUR QUARIERS! <br> Q: Which state's quarter features a Magnolia Blossom? <br> A: | KNOW YOUR QUARIERS! <br> Q: Which two states' quarters feature ships? <br> A: |
| KNOWYOUR QUARIERS! <br> Q: Which state's quarter features a race car? <br> A: $\qquad$ | KNOW YOUR QUARIERS! <br> Q: Which state's quarter features the Statue of Liberty? <br> A: |
| KNOWYOUR QUARTERS! <br> Q: Which state's quarter features a pelican and a trumpet? <br> A: | KNOWYOUR QUARIERS! <br> Q: Which state's qua rter features the "Old Man of the Mountain?" <br> A: |

## KNOWYOUR QUARIERS!

Q: Which two states' quarters feature a bi-plane?
A: $\qquad$
$\qquad$


KNOWYOUR QUARIERS!
Q: Which state's quarter features a trumpet, guitar, and fiddle?
A: $\qquad$
$\qquad$


KNOWYOUR QUARIERS!
Q: Which two states' quarters feature a horse?

A: $\qquad$
$\qquad$


KNOWYOUR QUARIERS!
Q: Which was the first state featured on a new quarter?
A: $\qquad$

| KNOWYOUR QUARIERS! <br> Q: Which state's quarter features the "Charter Oak" tree? | KNOW YOUR QUARIERS! <br> Q: What will be the last year of the 50 State Quarters ${ }^{\circledR}$ Program? <br> A: |
| :---: | :---: |
| KNOWYOUR QUARIERS! <br> Q: Which state's quarter features it's most famous fruit? <br> A: | KNOW YOUR QUARIERS! <br> Q: Which state's quarters tra veled on the Space Shuttle Columbia? <br> A: $\qquad$ |
| KNOWYOUR QUARTERS! <br> Q: Which state's quarter features George Washington on both sides? <br> A: | KNOW YOUR QUARIERS! <br> Q: How many different states' quarters are released each year? <br> A: $\qquad$ |
| KNOWYOUR QUARIERS! <br> Q: Which state's quarter features a Statue named "Commonwealth?" <br> A: | KNOW YOUR QUARIERS! <br> Q: In which two Americ an cities are quarters minted? <br> A: $\qquad$ |



| LUCK OF THE DRAW |
| :--- | :--- |
| You've had a tire blow out Skip |
| your next tum. |


| LUCK OF THE DRAW <br> Put the pedal to the metal and move 6 spaces ahead! | LUCK OF THE DRAW <br> You've become the back marker (you're in last place). Move to the space directly behind the player in last place. |
| :---: | :---: |
| LUCK OF THE DRAW <br> You're losing speed! Move backwards 2 spaces. | LUCK OF THE DRAW <br> You're really cruising now! Move 5 spaces ahead. |
| LUCK OF THE DRAW <br> Your opponents are gaining on you. All other players move forward 3 spaces. | LUCK OF THE DRAW <br> Slow down so you don't become a wall magnet Move backward 1 space. |
| LUCK OF THE DRAW <br> Put the pedal to the metal and move 5 spaces ahead! | LUCK OF THE DRAW <br> Your opponents are gaining on you. All other players move forward 2 spaces. |



## 5: 2002 State Flower Show

## Based on the Mississippi quarter reverse

## OBJ EC TIVE:

Students will use logic, add amounts of money, and make change by using the information chart to solve problems.


## MATERIALS:

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Mississippi quarter reverse
- "Flower Show Price List"
- "Flower Show" worksheet
- Index cards (1 per student)
- Colored pencils and/or crayons
- Drawing paper
- Calculators (optional)



## PREPARATIONS:

- Make copies of the "Flower Show Price List" (1 per student).
- Make copies of the "Flower Show" worksheet (1 per student).
- Prepare the index cards numerically showing various amounts of money (from $\$ 2.00$ to $\$ 4.50$ choosing increments appropriate for your class).
- Make an overhead transparency (or photocopy) of the Mississippi quarter reverse.



## GROUPINGS:

- Whole group
- Individual work
- Small groups



## CLASS TIME:

230 - to 45 -minute sessions

## CONNECTIONS:

- Math
- Art
- Social Studies



## TERMS AND CONCEPIS:

- State flowers
- Interpreting data
- Cost
- Price



## BACKGROUND KNOWLEDGE:

Students should have basic knowledge of:

- Using calculators with decimals
- Addition and subtraction using dollar signs (\$) and decimal points (.).
- Estimating and rounding using money.



## STEPS:

## Session 1

1. Describe the 50 State Quarters ${ }^{\circledR}$ Program for background information if necessary, using the example of your state if available. Then display the overhead transparency or photocopy of the Mississippi quarter reverse.
2. Explain to students that the design was specially chosen to represent the state of Mississippi. Tell students that all states have state flowers and ask if students know what flower was chosen to represent their home state. (If the home state is Mississippi, give general examples of other states' flowers.)
3. Distribute the "Flower Show Price List" and the accompanying worksheet. Review the information that is given about each state on the price list.
4. As a class, complete Part 1 of the "Flower Show Worksheet." Solve each problem on the board, explaining and giving more examples of mathematical concepts when necessary.

## Session 2

1. Ask students to pretend that they will be constructing their own flower garden using the information they have about the state flowers. Have them choose two flowers from the list that they would like to buy. These may be the same type of flower. Direct them to record their choice in Part 2 of the "Flower Show Worksheet."
2. Put them into groups of two to four. Randomly pass out the index cards. Explain that this is the amount that they may "spend" on flowers and will be combined to create their group garden.


2002 State Flower Show
3. Have students add up the group money and record this number in Part 2.
4. As a group, have the students complete Part 3 on the "Flower Show Worksheet."
5. Check the worksheets for accuracy.


## ENRICHMENTS/ EXTENSIONS:

Have students research the state flowers of their home state or another state that is meaningful to them. Have them create their own State Flower Show information and display their illustrations on a bulletin board.

Have students plant a class flower garden using their state flower, and chart the growth of each flower.


## DIFFERENTIATED IEARNING OPIIONS:

- Ask students to graph the prices and values of each state's flower.
- Adjust the prices on the price list for your students' level and put them on index cards.


## HPC CONNECTIONS

If your students liked the Mississippi quarter, let them examine the Coin of the Month for April 2002 in the "Coin News" area. It's the 1997 U.S. Botanical Garden Commemorative Silver Dollar, which features our national flower, the rose!

For added educational value, check out the related Teacher Feature, "A Financial Flower Garden," as well. Find it in the "Teachers" area.



Use the information on the price list to answer these questions:

1. Which of these flowers is the most expensive? $\qquad$ How many could you buy for $\$ 10$ ? $\qquad$
2. Round the pricesup to the next whole dollar. How much would it cost to buy one of each flower? $\qquad$
3. How much would it cost to buy the flowers for the first three of these states that entered the Union? $\qquad$
4. a. Name two statesthat have the same state bird.
b. How much would it cost to buy one of those state flowers?
5. a. Which two states have the same state flower?
b. How much does this flower cost?


## Flower Show Worksheet

PART2
Buy two flowers for your group garden. You can choose two of the same flower:

Name of flower $\qquad$ cost $\qquad$
Name of flower $\qquad$ cost $\qquad$ Total cost $\qquad$

The a mount you have to spend on flowers: $\qquad$
Did you have enough money?
[ ] Yes, Ihad $\qquad$ left over.
[ ] No, Ineeded $\qquad$ more.

## PART3

The amount your group has to spend on flowers: $\qquad$
The total cost of the group's flower garden: $\qquad$
Did yourgroup have enough money?
[ ] Yes, we had $\qquad$ left over.
[ ] No, we needed $\qquad$ more.



6: Great Graph!

## OBJ EC TIVE:

Students will compare sets of coins and determine which group is greater than, less than, or equal to the other according to the number and value of each set. Students will read and interpret a simple bar graph to answer questions.


## MATERIALS:

- The "Great Graph!" price list and worksheet
- Set of edible items
- Items to compare
- Cents, nickels, dimes, and quarters
- Calculators (1 per student, optional)



## PREPARATIONS:

Make copies of the "Great Graph!" price list and worksheet ( 1 set per student).

## GROUPINGS:

- Whole group
- Individual work
- Small groups



## CLASS TIME:

130 - to 45 -minute session


## CONNECTIONS:

Mathematics

## TERMS AND CONCEPIS:

- Cent (penny)
- Nickel
- Dime
- Quarter
- Greater than (>)
- Less than ( $<$ )
- Equal to (=)
- Graph


## -- Charting Coin Values and Quantities



## BACKGROUND KNOWLEDG E:

Students should have basic knowledge of:

- Greater than (>), less than ( $<$ ), and equal to (=).
- Use of dollar sign (\$), decimal point (.), and cent sign ( $\not \subset$ ).
- Reading a bar graph
- Using calculators with decimals



## STEPS:

1. Review the concepts and symbols of "greater than," "less than," and "equal to" by comparing different quantities of the same items (pencils, crayons, etc.).
2. Use a set of edible items such as cookies, and ask students to identify how many items are in each group. Write these numbers on the board.
3. Tell students that there is a way to show which group or number is larger. Ask them which pile of food a really hungry person would want to eat.
4. After students correctly identify the larger group, draw the greater than (or less than) symbol between the two numbers written on the board. Point out to students how the symbol resembles the mouth of a hungry person eating the largest amount.
5. Do several more sets of numbers for practice, varying the use of the "greater than" and "less than" symbols (also incorporate "equal to"). Tell students that almost anything can be compared using this method-even money, specifically coins.
6. Review the value of a cent (penny), nickel, dime, and quarter as a class.
7. Introduce the "Great Graph!" worksheets. Review the directions with the class and model using coins to determine the value of the penny column.
8. Pass out coins and ask students to continue completing the worksheet in small groups or individually as modeled.


## ENRICHMENTS/ EXTENSIONS:

"What's In My Pocket?": Students can take a poll of family members to record how much change is in their pockets, then construct their own graphs based on number of coins and total of each type.


## Great Graph!



## DIFERENIIATED LEARNING OPIIONS:

- Have students orally answer and discuss the questions on the worksheet.
- Allow students to use play money to represent the amounts in the graph.
- Add sublines to the "Great Graph" worksheet to help students better read the graph.


## HPC CONNECTIONS

Were your students captivated by this math activity? Then test out the other coin-related math leasson plans available in HPC's "Teachers" area!

## "GREATGRAPH" ANSWER KEY

1. Pennies: 27 (\$0.27)

Nickels: 19 (\$0.95)
Dimes: 23 (\$2.30)
Quarters: 14 (\$3.50)
2. $\$ 7.02$
3. pennies, 27
4. quarters, $\$ 3.50$
5. 12
6. a. $27>19$
b. $19>14$
c. $23>19$
d. $14<23$
7. a. $\$ 0.27<\$ 0.95$
b. $\$ 0.95<\$ 3.50$
c. $\$ 2.30>\$ 0.95$
d. $\$ 3.50>\$ 2.30$
8. Answers will vary, but an appropriate answer should reflect that in some cases a column with more coins was actually worth less than a column with fewer coins.
9. 27



## Great Graph!

PART 1

1. Add up the value of the coins in each column, then write each total under its c olumn.
2. What is the total a mount of money that Goldie has in her register? $\qquad$
3. What type of coin does Goldie have the most of? $\qquad$ How many does she have of that coin? $\qquad$
4. What type of coin adds up to the greatest value? $\qquad$

What is that total? $\qquad$
5. How many more dimes would Goldie need so that they add up to the highest total? $\qquad$

## DATE

## Great Graph!

## PART2

6. In the blanks below, write the number of each kind of coin. Write the "greater than," "less than," or "equal to" symbol in the space between the pairs to compare the numbers (forexample, pennies 12 [ > ] 3 nickels).
a. pennies__ [ nickels
b. nickels $\qquad$ [ ] $\qquad$ quarters
c. dimes [ ] $\qquad$ nickels
d. quarters $\qquad$ [
] $\qquad$ dimes
7. In the blanks below, write the total value of each kind of coin that Goldie has in her register. Write the "greater than," "less than," or "equal to" symbol in the space between the pairs to compare the values (for example, pennies $\$ 0.12$ [ $>$ ] \$0.05 nickels).
a. pennies \$ $\qquad$ . $\qquad$ [ ] \$ $\qquad$ . $\qquad$ nickels
b. nickels \$ $\qquad$ . $\qquad$ [ ] \$ $\qquad$ qua rters
c. dimes $\qquad$ .___ [ ] \$ $\qquad$ .__ nickels
d. quarters\$ $\qquad$ . $\qquad$ [ ] \$_. .dimes

## CHAШENGE ACTIVITIES

8. What did you notice about your answers to question 6 and 7 ?
$\qquad$
$\qquad$
$\qquad$
9. How many more nickels would Goldie need to equal the value of the dimes?

## $\sim$ <br> State Information 2002 Quarters

## Tennessee

The Tennessee quarter, the first quarter of 2002 and sixteenth in the series, celebrates the state's contributions to our nation's musical heritage. The design uses musical instruments and a score with the inscription "Musical Heritage." Three stars represent Tennessee's three regions and the instruments symbolize each region's distinct musical style.

The fiddle represents the Appalachian music of east Tennessee, the trumpet stands for the blues of west Tennessee for which Memphis is famous, and the guitar is for central Tennessee, home to Nashville, the capital of country music.


## Ohio

The Ohio quarter, the second quarter of 2002 and seventeenth in the series, honors the state's contribution to the history of aviation, depicting an early aircraft and an astronaut, superimposed as a group on the outline of the state. The design also includes the inscription "Birthplace of Aviation Pioneers." The claim to this inscription is well justified - the
history making astronauts Neil Armstrong and John Glenn were both born in Ohio, as was Orville Wright, co-inventor of the airplane. Orville and his brother, Wilbur Wright, also built and tested one of their early aircraft, the 1905 Flyer III, in Ohio.


## Louisiana

The Louisiana quarter, the third quarter of 2002 and eighteenth in the series, displays the image of Louisiana's state bird - the pelican, a horn with musical notes, and the outline of the Louisiana Purchase territory, along with the inscription "Louisiana Purchase."

Thomas Jefferson bought the Louisiana Territory from Napoleon Bonaparte in 1803 for $\$ 15$ million. Dubbed the "greatest real estate deal in history" the Louisiana Purchase added thirteen new states to the Union, nearly doubling its size and making it one of the largest countries in the world.

The horn on the coin is a tribute to the state's heritage of jazz music, a genre heard and played by millions of enthusiasts around the globe. Jazz was born in New Orleans over a hundred years ago, a combination of elements from blues, ragtime, and marching band music. A multitude of musicians
propelled jazz from New Orleans’ French Quarter onto the world stage, making the style a dominant force in 20th Century music.


State Capital: ........ Baton Rouge<br>State Bird:<br>. Brown Pelican<br>State Tree: . ......... Bald Cypress<br>State Rower:<br>Magnolia<br>State Motto: . . . . . . Union, justic e and confidence April 30, 1812 (18) . Pelican State Origin of Name: . . . . . . Named in honor of France's King Louis IV<br>$\qquad$ "Give Me Louisiana" and "You Are My Sunshine"

Entered Union (rank):
Nickname:

State Song:

## Indiana

The Indiana quarter, the fourth quarter of 2002 and nineteenth in the series, represents the state pride in the famous Indianapolis 500 race. The design features the image of a racecar superimposed on an outline of the state with the inscription "Crossroads of America." The design also includes 19 stars signifying Indiana as the 19th state to ratify the Constitution.

The Indianapolis Motor Speedway is a 2.5 mile track built in 1909 for automotive research purposes. While the track was and is used for research, it is best known for hosting auto races, most famously, the Indy 500. The oldest auto race in the world, the Indy 500 has been run every year since 1911, except during the two World Wars.

The winner of the first Indy 500 was Ray Harroun whose car, the Marmon Wasp, is thought to have been the first to have a single seat and to use a rearview mirror. In the time since Harroun's victory, the Indy 500 has become an international event, synonymous with auto racing.


State Capital: .......... India na polis
State Bird: . . . . . . . . . . . . . . Ca Cdinal State Tree: . . . . . . . . . . . . . . Tulip Tree State Rower: . . . . . . . . . . . . . . Peony State Motto: . . . . . . The c rossroads of Americ a Entered Union (rank): . . . . December 11, 1816 (19) Nickname: . . . . . . . . . . . . . . . . . . . . . . . Hoosier State Origin of Name: . . . . . Means "Land of the Indians" State Song: . ........ "On the Banks of the Wabash, FarAway"

## Mississippi

The Mississippi quarter, the last quarter of 2002 and 20th in the series, combines two elegant magnolias with the inscription "The Magnolia State."

The magnolia (Magnolia grandiflora), named for the French botanist Pierre Magnol, is strongly associated with the South, where the popular flower was introduced from Asia. This association helped Mississippi to adopt it as the state flower in 1952.

In 1900, when Mississippi schoolchildren were asked to vote for a state flower, they chose the magnolia over cape jasmine, yellow jasmine, cotton, and others. The selection remained unofficial, however, until February 26, 1952, when the Mississippi legislature finally adopted the magnolia as the state flower, opposed by only one vote. A similar election for state tree in 1935 gave the magnolia a landslide victory, made official on April 1, 1938.


State Capital: $\qquad$ State Bird: Mockingbird State Tree: . . . . . . . . . . . . . . Magnolia State Rower: ...............Magnolia State Motto: Virtute et a mis (By valor and a ms)
Entered Union (rank): . . . . . Dec ember 10, 1817 (20) Nickname: . . . . . . . . . . . . . . . . . . . . . Magnolia State
Origin of Name: . ... Possibly based on Chippewa "micizibi," loosely meaning "great river"
State Song:
"Go Mississippi"


## Reproducible Coin Sheet



## Reproducible Coin Sheet



## The United States Mint

## State $\mathbf{5 0}$ State Quarters Program QUARTERS



