

2: Pioneers in Space

Based on the Ohio quarter reverse



OBJECTIVES:

Students will learn the meaning of the word “pioneer” and will be introduced to some aviation pioneers who came from Ohio. The students will also preview and listen to an age-appropriate text relating to the design of the Ohio quarter reverse.



MATERIALS:

- 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 spacecraft, or airline tickets) as well as an Ohio quarter
- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the Ohio quarter reverse
- 1 copy of an age appropriate text that relates to space travel, such as:
 - *Touchdown Mars! An ABC Adventure* by Peggy Wethered
 - *Zoom! Zoom! I’m Off to the Moon* by Dan Yaccarino
 - *Me and My Place in Space* by Joan Sweeney
 - *Space Race* by Jerry Zimmer
 - *Curious George Gets a Medal* by H.A. Rey
- Picture-story paper
- Crayons
- Pencils



PREPARATIONS:

- Make an overhead transparency (or photocopy) of the Ohio quarter reverse.
- Locate a text that relates to space travel (see suggestions under “Materials”).
- Make copies of the “Pioneers in Space” picture-story paper (1 piece per student).



GROUPING:

Whole group



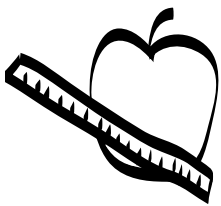
CLASS TIME:

2 20- to 30-minute sessions



CONNECTIONS:

- Language Arts
- Social Studies
- Science



Learning about Exploration and Flight



TERMS AND CONCEPTS:

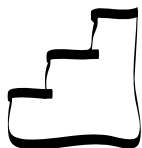
- Pioneer
- Symbol
- Quarter
- Reverse (back)



BACKGROUND KNOWLEDGE:

The students should have basic knowledge of:

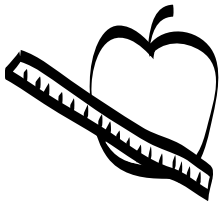
- Air and space travel
- Preview and prediction skills (reading)



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 to begin the lesson, bring the box to the front of the classroom and ask the students if they noticed the box during the day. What made them curious? Tell the students that they can look into the box, but first ask “Who would look in this box if they thought it might have something spooky in it? Who would look in this 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® 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.
5. As a class, discuss the symbols on the coin’s reverse. Ask the students what type 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. Give the students a brief explanation of the accomplishments of the famous aviation pioneers from Ohio: the Wright brothers (developed and flew the first working airplane), John Glenn (the first American to travel around the Earth in a space craft), and Neil Armstrong (the first man to walk on the moon). Support this step with visuals (items related to aviation and space travel).



Pioneers in Space

Session 2

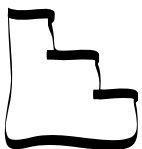
1. Introduce the students to the selected text.
2. As a group, preview the text and illustrations to generate predictions about the story.
3. Read the selected text to the class and see if their predictions were correct.
4. After reading the story, discuss journeys that the students themselves have taken. What did they need to pack for the trip? What did they want to pack? Was there anything they wanted to bring that they were not able to bring?
5. After discussing needs versus wants when preparing for space travel, distribute the “Pioneers in Space” picture-story paper. Ask the students to write and illustrate a response to the question “What would you pack for a trip into space?”



ENRICHMENT/EXTENSIONS:

Explain to the students that, in March 2002, the Space Shuttle Columbia traveled into space carrying brand new Ohio quarters. Ask the students to imagine what would happen if one of the quarters escaped from the space ship. Have your students write and draw what they imagine happening to the escaped coin.

Share additional stories about space travel or other types of pioneers that are age-appropriate for your students.



DIFFERENTIATED LEARNING OPTIONS:

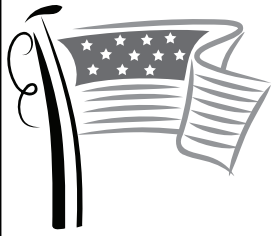
Take students on a teacher-guided virtual field trip to outer space. Be sure to prompt students to offer information learned as they act out their journey.

HPC CONNECTIONS

Are you interested in finding out more about the Ohio quarter? Visit the March 2002 Coin of the Month under “Coin News.”



NAME _____



Pioneers in Space





Ohio Quarter Reverse

