

2: Flying High in Ohio

Based on the Ohio quarter reverse



OBJECTIVES:

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 space-craft, 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:

4 30- to 45-minute sessions



CONNECTIONS:

- Language Arts
- Social Studies
- Science



TERMS AND CONCEPTS:

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



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 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® 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 **k**now and **w**ant to know about these pioneers. Leave the **l**earn 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 <u>l</u>earned 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.



DIFFERENTIATED LEARNING OPTIONS:

- 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.



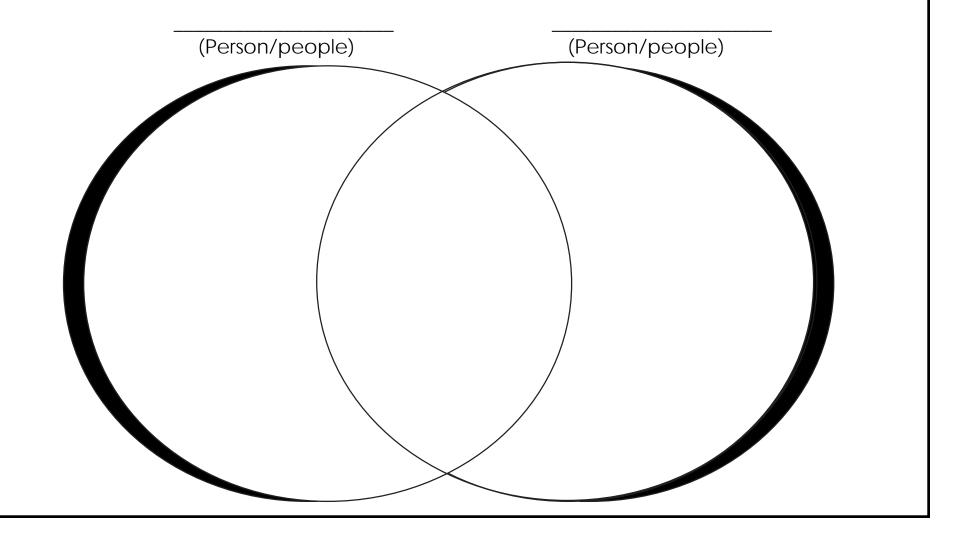
HPC CONNECTIONS

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.

Venn Diagram

DIRECTIONS:

Write or draw the names of the people being compared on the lines below. Fill in the Venn diagram with similarities and differences.





Ohio Quarter Reverse

