

2: Distinguished Discoveries

Based on the Florida quarter reverse



OBJECTIVES

Students will analyze the importance of selected discoveries. Students will then research the history and impact of historical discoveries, using this information to compare and contrast two.



MATERIALS

- 1 overhead transparency (or photocopy) of the Florida quarter reverse
- 1 overhead projector (optional)
- 1 class map of the United States
- Copies of the “Moon Mania!” research guide
- 1 copy of the “Moon Mania Key”
- Copies of the “Spanish Exploration” research guide
- 1 copy of the “Spanish Exploration Key”
- Overhead transparencies of several state quarters



PREPARATIONS

- Reserve computer lab for session 1 (and any additional time as needed).
- Make an overhead transparency (or photocopy) of the Florida quarter reverse.
- Make copies of the “Moon Mania!” research guide (1/2 class set).
- Make copies of the “Spanish Exploration” research guide (1/2 class set).
- Make overhead transparencies (or photocopies) of several new quarter reverses.



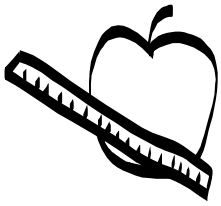
GROUPINGS

- Whole group
- Pairs
- Individual work

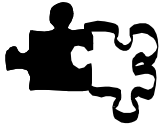


CLASS TIME

Three or four 45- to 60-minute sessions



Distinguished Discoveries



CONNECTIONS

- Social Studies
- Technology
- Science
- Language Arts
- Drama



TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Discovery
- U.S. space program
- Space race



BACKGROUND KNOWLEDGE

Students should have a basic knowledge of:

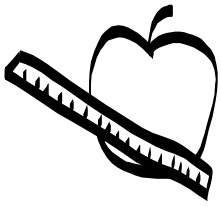
- Research skills
- Venn diagrams



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 Florida quarter reverse. Locate Florida on a classroom map. Note its position in relation to your school's location.
2. Prompt students to discuss what is on the coin. Point out that the ship and the space shuttle are two very different images. Discuss the similarities and differences of the images. Ask students to consider why they think these two images were selected for this coin.
3. Discuss the meaning of the phrase at the bottom of the coin, "Gateway to Discovery". Have students discuss the connection between the images on the coin and this phrase. Ask the students what discoveries are related to the images on this coin.
4. Review with students the definition of discovery (the first person in a group to see, find, or learn something that had been previously unknown).



Distinguished Discoveries

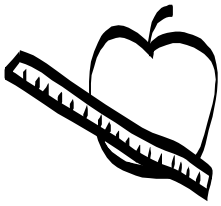
5. Address with students the issue of space travel, specifically traveling to the moon. Ask students why the first successful landing on the moon was a discovery if the moon had already been discovered (by astronomers).
6. Ask students why these two radically different discoveries are on the same coin. Briefly review the reasons behind Florida's selection of these particular images. Explain the symbolism of the ship and space shuttle as discoveries that greatly impacted the world.
7. Separate the class into two halves. Introduce to students the research activity. The first half of the class will be researching the first Spanish exploration of Florida. The second half of the class will be researching the first walk on the moon.

Session 2

1. With your class, visit the school library or computer lab.
2. Distribute the appropriate research guide to each student. Instruct students to use their research guides in directing their research and to answer all of the questions in complete sentences. Before students conduct their research, explain that the information they gather will be used in a later project (so it is important that they do their best research).
3. Allow an appropriate amount of time for students to complete their research.

Sessions 3 and 4

1. When all student research is complete, pair each Spanish exploration researcher with a moon walk researcher.
2. Using the information from their research guides, students should take turns sharing their research findings with their partners.
3. Direct each pair of students to create a Venn diagram in their notes, comparing and contrasting the two researched discoveries.
4. Encourage the pairs to share their responses with the rest of the class. On a piece of chart paper, draw a Venn diagram and record student responses. Instruct students to add any new ideas they see on the class diagram onto their individual diagrams.
5. Lead a class discussion on what would happen if the major players from each discovery were able to meet in real life. Allow students to imagine what these historical figures might talk about, or how their conversation might unfold. Address what the topic, tone, and circumstances of this conversation would be.
6. Challenge each pair of students to create a short (2 minute) skit. Each student will play the role of one of the discoverers and, using accurate information from their research, develop a dialogue with his/her partner. Encourage students to be creative, accurate, and to include humor!
7. Have pairs perform their short skits for the class.

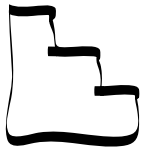


Distinguished Discoveries



ENRICHMENT/EXTENSIONS

- Show students a video of the first successful “moon walk”. Make a list of the major scenes in the film (i.e. the journey, the discovery, the most important moment, the effect). Ask students why there is no such video documentation for the Spaniards’ momentous journey to Florida. As a class, recreate their landing in Florida. Be sure to use similar major scenes in your film. Videotape their performance and enjoy it together as a class!
- Using photocopies of several other new quarter reverses, challenge students to identify any other discoveries depicted in the images on the quarters. As an extra credit assignment, invite students to research these discoveries. Students can present their research and teach the class about the discoveries on other new quarters.



DIFFERENTIATED LEARNING OPTION

Students struggling with the research can work with a partner or a small group in order to use a variety of methods of research and technology.



CONNECTION TO WWW.USMINT.GOV/KIDS

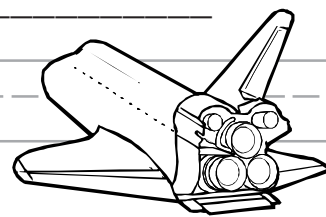
Some special coins have actually made the trip into outer space! Visit the “Coins in Space” Teacher Feature to find a related classroom activity.

NAME _____



Moon Mania!

Research Guide (1)



1. MAJOR PLAYERS: Identify each of the following people or groups. Include background biographical information and how each person or group was involved in this discovery.

John F. Kennedy: _____

Neil Armstrong: _____

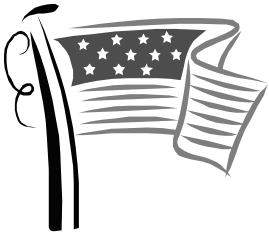
Edwin "Buzz" Aldrin: _____

Michael Collins: _____

NASA: _____

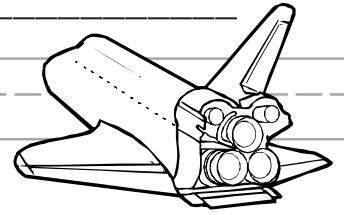
Soviet Space Program: _____

NAME _____



Moon Mania!

Research Guide (2)



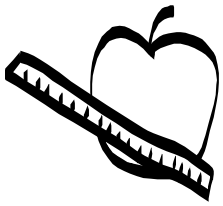
2. CHRONOLOGY: Place the following events in the correct order
- Year _____ The crew of Apollo 11 returns safely to Earth.
- Year _____ President Kennedy promises to have a man on the moon by 1970, marking the beginning of the "Space Race" between the United States and the Soviet Union.
- Year _____ The Apollo program gains momentum, as *Apollo 8* is the first spacecraft to orbit Earth and the moon in the same flight.
- Year _____ John Glenn, an American astronaut, circles Earth 3 times.
- Year _____ A Soviet cosmonaut makes the first successful walk in space during the second Voskhod flight.

3. Who sponsored the discoverer's journey?

4. How was the journey dangerous? What obstacles did the discoverers face?

5. What was the major discovery or discoveries?

6. Why was each discovery important? What was the effect on society?



Moon Mania!

Key (1)

1. MAJOR PLAYERS: Identify each of the following people or groups. Include background biographical information and how each person or group was involved in this discovery.

John F. Kennedy: The President of the United States who promised the world that we would have a man on the moon by the end of the 1960s. He is credited with beginning the space race between the United States and the Soviet Union.

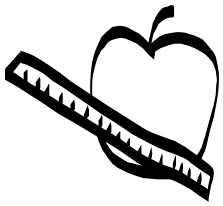
Neil Armstrong: Neil Armstrong was a U.S. Navy fighter pilot during the Korean War. As commander of the Apollo 11 mission, he was the first person to step onto the moon. He gave us the famous quote, "That's one small step for man, one giant leap for mankind."

Edwin "Buzz" Aldrin: Buzz Aldrin was also a pilot during the Korean War. He was an expert in orbital mechanics and walked in space for 5 1/2 hours during the Gemini 12 mission. Buzz Aldrin acted as the lunar module pilot for the Apollo 11 mission. He became the second person to walk on the moon.

Michael Collins: Michael Collins came to America from Italy as a child. He joined the American Air Force and attended the Military Academy. Michael Collins was the command module pilot during the Apollo 11 mission. While Neil Armstrong and Buzz Aldrin became the first people to walk on the moon, Collins stayed in the moon's orbit and piloted the space shuttle.

NASA: NASA stands for National Aeronautics and Space Administration. The three goals for NASA are to research and develop programs in space exploration, rocketry, and artificial satellites. NASA's mission is very expensive; their annual budget in 1995 was \$14.2 billion!

Soviet Space Program: During the 1960s, the United States and the U.S.S.R. embarked on a "space race" to see which country could get a person on the moon first. This led to an astonishing push for advancements in space exploration technology. The Soviets were able to orbit the first man around the earth in 1961. They also achieved the first walk in space.



Moon Mania!

Key (2)

2. CHRONOLOGY: Place the following events in the correct order and provide dates for each.

- President Kennedy promises to have a man on the moon by 1970, marking the beginning of the "Space Race" between the United States and the Soviet Union. **(1961)**
- John Glenn, an American astronaut, circles Earth three times. **(1962)**
- A Soviet cosmonaut makes the first successful walk in space during the second Voskhod flight. **(1965)**
- The Apollo program gains momentum, as *Apollo 8* is the first spacecraft to orbit Earth and the moon in the same flight. **(1968)**
- Armstrong reports, "The Eagle has landed." **(1969)**
- The crew of Apollo 11 returns safely to Earth. **(1969)**

3. Who sponsored the discoverer's journey?

NASA (funded by the American government) sponsored the Apollo 11 mission. The combined cost of all of the Apollo missions was \$20 billion.

4. How was the journey dangerous? What obstacles did the discoverers face?

Though astronauts had left the space shuttle in order to walk in space, no person had ever stepped on the surface of the moon. What weather conditions the astronauts would find on the moon's surface and how their bodies would be affected was largely unknown. Some were afraid that the space shuttle would sink into the surface of the moon. Once the astronauts were safely back in the command module after exploring the moon's surface, the danger was not over. The "splashdown" (landing) followed a reentry into Earth's atmosphere at incredible speeds. In a small spacecraft, the 3 astronauts were hurtled into the Pacific Ocean, where they were picked up by the Armed Forces. Despite the successful journey, they were placed in quarantine for several days. Doctors wanted to make sure that the astronauts did not bring back any harmful microorganisms from the moon!

5. What was the major discovery or discoveries?

The major discoveries were moon rock, the soil on the surface of the moon, the results of several experiments to record the weather conditions on the surface of the moon, in addition to all of the space shuttle design discoveries and advancements that eventually allowed for the moon exploration in Apollo 11.

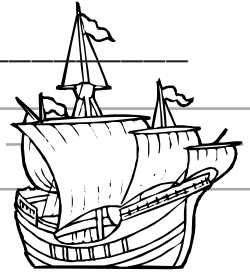
6. Why was each discovery important? What was the effect on society?

These discoveries were important because the United States was able to meet our goal of being the first country to have a person walk on the moon. This led to a surge in patriotism. These discoveries were important because they led to a global interest in space exploration.

NAME _____



Spanish Settlement Research Guide



1. MAJOR PLAYERS: Identify the following person. Include background biographical information and how this person was involved in the first Spanish exploration of Florida.

Ponce de Leon: _____

2. CHRONOLOGY: Place the following events in the correct order.

Year _____ Ponce de Leon names a discovered land *Pascua Florida* or "Flowery Easter" and spends several years exploring the new territory.

Year _____ Ponce de Leon claims the island Borinquen (now known as Puerto Rico) for Spain.

Year _____ Ponce de Leon searches for Bimini (the Bahamas) but lands on Florida's west coast and is besieged by Native American warriors.

Year _____ Ponce de Leon sails on Christopher Columbus' second trip to the Americas.

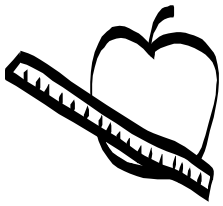
Year _____ Ponce de Leon becomes the first European person to discover Florida.

3. Who sponsored the explorer's journey?

4. How was the journey dangerous? What obstacles did the explorer face?

5. What was the major discovery or discoveries?

6. Why was each discovery important? What was the effect on society?



Spanish Settlement

Key

1. MAJOR PLAYERS: Identify the following person. Include background biographical information and how this person was involved in the first Spanish exploration of Florida.

Ponce de Leon: a Spanish explorer who claimed several lands for the Spanish throne. He was often a savage ruler of these new territories and did not make many efforts to make peace with native peoples in these new lands. His original goal was to find the Fountain of Youth, though this search was fruitless. He died in a battle with Native Americans, after discovering and claiming Puerto Rico and Florida for Spain.

2. CHRONOLOGY: Place the following events in the correct order.

- Ponce de Leon sails on Christopher Columbus' second trip to the Americas. **(1493)**
- Ponce de Leon claims the island Borinquen (now known as Puerto Rico) for Spain. **(around 1506)**
- Ponce de Leon becomes the first European person to discover Florida. **(April 1513)**
- Ponce de Leon names a discovered land *Pascua Florida* or "Flowery Easter" and spends several years exploring the new territory. **(1513 to 1521)**
- Ponce de Leon searches for Bimini (the Bahamas) but lands on Florida's west coast and is besieged by Native American warriors. **(last)**

3. Who sponsored the explorer's journey?

The King of Spain sponsored Ponce de Leon's journey, in the hopes of conquering new lands and adding to the foreign land belonging to the Spanish crown.

4. How was the journey dangerous? What obstacles did the explorers face?

Any trip across the sea was dangerous. Weather was a huge danger factor; sailors had to fight storming seas which could damage and even sink their galleon ships. Disease was also a problem on board the ships; many sailors died from simple illnesses due to the lack of hygiene and medical knowledge. In the new land, explorers often confronted angry native peoples who wanted to defend their land against invasion. And once the journey was over, the sailors had to turn around and return home, facing the same dangers as on their trip to the new land.

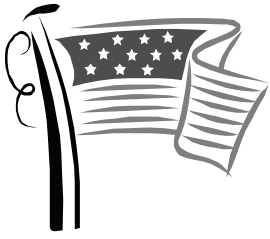
5. What was the major discovery or discoveries?

Ponce de Leon was trying to find the Fountain of Youth, a mythical fountain whose waters provide the drinker with eternal life. Instead, he discovered (for Spain) Florida. He also discovered Puerto Rico and claimed it for the King of Spain.

Note: It may be worthwhile to remind students that Ponce de Leon discovered these lands only because they had not been previously found by other Spanish explorers. Other people had found these lands, including the natives living there upon Ponce de Leon's arrival.

6. Why was each discovery important? What was the effect on society?

Ponce de Leon's discoveries were important because they symbolized the era in which he lived. Spain was not the only country paying explorers to risk their lives to claim new colonial lands. Many countries were racing to stake their claims as well. And many indigenous people paid a hefty price for this imperialism.



Florida Quarter Reverse

