

Apollo 11 Mission

Secondary

Key Inquiry Questions

1. What is Apollo?
2. What does a space mission consist of?

Learning Outcomes

1. Students will be able to develop and answer interview questions for the people involved in the mission Apollo by the end of the lesson.
2. Students will be able to draw back their previous knowledge of space missions within a KWL chart by the end of the lesson.
3. Students will be able to answer guiding questions about the article What was the Apollo Program by the end of the lesson.

Overview

In this lesson, students will be looking deeper into the Apollo 11 mission: the first moon landing. At the beginning of the lesson, students will begin the process of filling out a KWL chart for the mission Apollo 11. In this portion, they will only be completing the “K” and the “W” of the chart. Next students will get into pairs and complete two short article readings. Along with these readings is a guiding questions worksheet. After students have read about the Apollo 11 mission, students will pick one of the astronauts involved and plan interview questions. Students will write 10 interview questions they would want to ask the astronaut and answer these questions as if they were the astronaut being interviewed. Students will turn in these questions and answers for a grade on the lesson. After the lesson is completed, students will complete their “exit ticket”. In their exit ticket, they will fill out the last portion of the KWL chart. Once students have filled out the last part, the “L”, they will turn these in to show the teacher what they have learned from the lesson.

Materials

SolarSPELL Resource:

1. “First Pacific Islands > Science > Earth and Space > First Moon Landing
2. “Apollo 11 Mission Overview” (Science > Earth and Space > Space Travel > Apollo 11 Mission Overview)
3. “What was Apollo Program” (Science > Earth and Space > Space Travel > What was Apollo Program)
4. “Apollo 11” worksheet (included below)

Other:

1. Paper
2. Writing Utensil

Suggested Procedure

For teachers please read the source: Apollo Mission Overview and What was the Apollo Program for background knowledge.

Before Lesson:

- Begin by giving each student their own piece of paper.
 - Ask students to write their name at the top.
 - Tell students to draw three equal columns on the piece of paper.
 - Tell students to label the columns like:

K	W	L
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- Tell students they are going to fill out the “K” part of the chart.
 - The “K” stands for: What do you know?
 - Ask students what they know about the topic Apollo 11.
 - As students are stating what they already know, tell students to fill out this information under the “K” column.
 - Allow students to comment for the column “K” for 5 minutes.
- After column “K” has been filled, begin the column labeled “W”.
 - The “W” stands for: What do you want to know?
 - Ask students what they want to know about Mission Apollo 11.

- Allow students to comment for the column “W” for 5 minutes.
- After column “W” has been filled, ask students to set this paper aside for later.

During Lesson:

- Tell students to grab a partner.
- Give each student a copy of the articles and worksheet named: What was the Apollo Program, Apollo 11 Mission Overview, and Apollo 11 Guiding Questions.
- **If you cannot print:**
 - Ask students to take out a piece of paper and write the following questions:
 - What was the purpose of Apollo 11?
 - Facts about Command Module:
 - Facts about Lunar Module:
 - Which spacecraft sent astronauts to the moon? Why didn’t the original models work?
 - Name, Date, and astronauts to first land on the moon:
 - Where did each astronaut go and do during the mission?
 - What is the significance of the Apollo program?
 - Four interesting facts about Apollo 11:
 - Have students access the article on the SolarSPELL
 - (Insert instructions of where to find the article on the SolarSPELL)
- Explain to students they will read the article with their partner and answer the guiding questions along with it.
 - Give students 20 minutes to read the article and answer the questions.
- After students have read and answered the questions for the article, go over the answers to the questions as a class.
 - Go through the questions one by one, but have the students say/explain the answers.
 - Check each answer with the answer sheet that is attached to the guiding questions worksheet.

After Lesson:

- Explain to students they are now going to imagine they are interviewers in the 1960’s, when the first moon landing took place.
- Tell students they choose one of the three astronauts who were a part of the Apollo 11 mission to interview.
- Explain the instructions to the students.
- **Instructions:**
 - Students will choose one astronaut from the Apollo 11 mission.

- Once they have chosen the astronaut they want to interview, they will write down 10 questions they would want to ask the astronaut.
 - Remind students that interview questions are open-ended: they cannot be answered with a “yes” or “no”.
- After writing their 10 interview questions, explain to students they are now going to answer their interview questions the way they think the astronaut they chose would answer it.
 - Each answer should be 2 to 3 sentences long.
- Explain to students they are welcome to refer back to the article to help them form answers to their interview questions.

Assessment:

- Once students have finished with their interview questions and answers, ask students to turn them in for a grade.
- By the end of the lesson, if students would like to see a video of the first moon landing, let them know there is a video they can watch:
<https://www.youtube.com/watch?v=RMINSD7MmT4>

Exit Ticket:

- After all portions of the lesson are completed ask students to take out their KWL chart.
- Ask students to now take 5 minutes and individually fill out the “L” portion of the chart.
 - The “L” stands for: What did you learn?
 - In this case the students would be answering, what did you learn about Apollo 11.
- Once students have filled out the “L” portion, ask students to turn in their KWL chart.

Apollo 11 Guiding Questions

1. What was the purpose of Apollo 11?
2. Facts about Command Module:
3. Facts about Lunar Module:
4. Which spacecraft sent astronauts to the moon? Why didn't the original models work?
5. Name, Date, and astronauts to first land on the moon:
6. Where did each astronaut go during the mission?
7. What is the significance of the Apollo program?
8. Four interesting facts about Apollo 11 :

Apollo 11 Guiding Questions

Answers

1. What was the purpose of Apollo 11?

John F. Kennedy wanted to successfully perform a landing on the moon and return to Earth.

2. Facts about Command Module:

Used to travel to the moon and back to Earth for the three astronauts.

3. Facts about Lunar Module:

Used for landing and orbiting the moon.

4. Which spacecraft sent astronauts to the moon? Why didn't the original models work?

They used the spacecraft Saturn V (5). The other Saturn's were not built to withhold Earth's atmosphere to the moon.

5. Name, Date, and astronauts to first land on the moon:

Apollo 11. July 16th, 1969. Commander Neil Armstrong, Command Module Pilot Michael Collins and Lunar Module Pilot Edwin "Buzz" Aldrin.

6. Where did each astronaut go during the mission?

Neil Armstrong and Michael Collins went on the moon while Buzz Aldrin stayed orbiting the moon.

7. What is the significance of the Apollo program?

John F. Kennedy made it a challenge to land on the moon by the end of the Decade. NASA created the Apollo program to make that happen.

8. Four interesting facts about Apollo 11 : (not limited to)

Medallions of the three astronauts who died in Apollo 1 were left on the moon. Took one day to leave Earth's orbit. They spent 36 minutes on the Earth's surface.