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The History of

THE FIRST MOON LANDING

Dividing Decimals



Nicole Sipe

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Mission to the Moon

The ground is soft under the **astronaut's** feet. He takes one step and then another. The dust on the ground sticks like gray chalk to the sides of his large boots. Every step he takes is in slow motion. Each step requires careful thinking. His body feels **weightless** each time he moves and even when he is still.

In the **distance**, a bright orb shines in the black velvet sky. The astronaut looks at the familiar sphere that he calls home. Earth looks so different from 238,855 miles (384,400 kilometers) away. It looks like a brilliant jewel when looking at it from the moon.



Buzz Aldrin's footprint on the moon's surface

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History in the Making

The first moon landing was an important event in history. Men had already been to space. But, no one had ever landed on the moon until the U.S. Apollo 11 mission. Astronauts Neil Armstrong, Buzz Aldrin, and Michael Collins landed on the moon. The Apollo 11 mission to the moon was a big **accomplishment**. It was a victory for Americans. And, it was a victory for people all around the world.



This postage stamp honors Neil Armstrong.

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NASA mathematician Katherine Johnson checked the calculations for Apollo 11's flight path to the moon.

Out to Launch

People wondered for many years what it would be like to visit the moon. Then, in 1961, President John F. Kennedy had an idea. His idea was to land a crew of people on the moon and return them safely to Earth. No other country in the world had landed on the moon. The United States would be the first.

One government group was given the job of coming up with a way to send people to the moon. This group is called the National Aeronautics and Space Administration (NASA). They were in charge of the **technology** and science of airplanes and outer space. For eight years, NASA made plans and experimented. They were focused on the goal of putting a man on the moon.

Finally, in 1969, NASA's hard work paid off. They were ready to make the **lunar** landing a reality. All they needed was to find the right crew. But, who would be ready for the important job? Who would want to be the first people on the moon?

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President John F. Kennedy learns about the *Saturn* spacecraft from Dr. Wernher von Braun during a tour at Cape Canaveral.

The spacecraft used for the Apollo 11 mission is set up to launch at NASA's Kennedy Space Center.



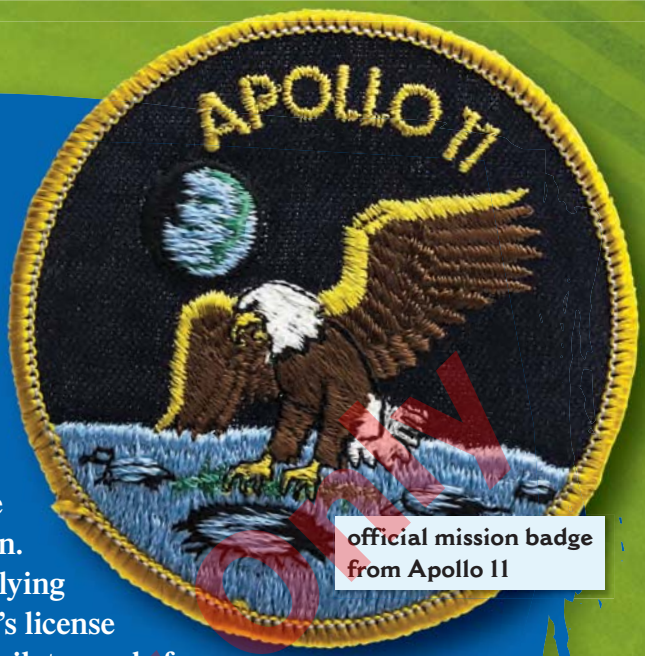
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Meet the Crew

Three men were chosen to be a part of the Apollo 11 crew. All three men were experienced astronauts. They had all flown into space before. Interestingly enough, they were all born in 1930, weighed the same amount, and were almost all the same height. They were meant to be a team!



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official mission badge from Apollo 11

Each astronaut had a job to do during the mission. They each had different tasks. But, each role was important to the success of the mission.

Neil Armstrong was chosen to be commander of the Apollo 11 mission. Armstrong had fallen in love with flying at a young age. He earned his pilot's license on his 16th birthday. He became a pilot even before getting his driver's license! On Apollo 11, he was the main person in charge of the spacecraft. He was also the leader of the crew. His responsibility was to make sure the crew and spacecraft were safe. He was responsible for the overall success of the mission.

LET'S EXPLORE MATH

The combined mass of the three Apollo 11 astronauts was about 224.4 kilograms. Since each astronaut had the same mass, what was the mass of each man? Choose the correct answer, and explain your reasoning.

A. 7.48 kg **B.** 74.8 kg **C.** 748 kg

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Math Talk

1. How can you use what you know about dividing whole numbers to divide decimals?
2. How are multiplying and dividing decimals related?
3. What models can you draw to show division with decimals?
4. How can estimating help you divide decimals?
5. When Lindsay calculates 42 ÷ 0.5, her quotient is 84. She says, "That can't be right! I divided 42, and now my answer is greater than what I started with. I must have done something incorrectly." What would you tell Lindsay?
6. Describe a situation when scientists involved with the first moon landing might have divided decimals.

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