

## Unit 4: The Red Planet

**Narrator:** Mars is the most studied planet in the solar system after Earth. Today, NASA and other space programs are working to send people to Mars.

However, we still have much to learn about the red planet. Scientists believe Mars was formed about 4.5 billion years ago. It is the fourth planet from the sun, and the second smallest planet in the solar system. Its diameter is almost the width of Africa, and its surface area is similar to that of all of Earth's continents combined.

Just like Earth, Mars is a rocky planet. The ancient Romans named the planet Mars after their god of war because of its blood-red appearance. We now know that Mars is red because it is covered with red dust.

Today, Mars is dry, barren, and cold. Temperatures can be as low as  $-142^{\circ}\text{C}$ . But scientists think that billions of years ago, Mars was much warmer, and had liquid water on its surface. Scientists have found lakebeds and river valleys on Mars, showing us where water once flowed.

Mars also has volcanoes such as Olympus Mons, the largest volcano in the solar system. It is three times the height of Mount Everest and was once active. But by about 50 million years ago, all volcanic activity on Mars stopped. Water can still be found on Mars in the form of polar ice caps. Because of this, some scientists believe that life may have once existed on the red planet.

Since the 1960s, scientists from around the world have launched missions to Mars. They want to understand the planet, its past and its present. They hope to discover that the planet can support life once again. There are some who even think that life on Mars might be the key to a bright new future for humanity.