

Name _____

Mars: The Red Planet's Mysteries

Short Answer Key

1. Mars's atmosphere is thin and composed mainly of carbon dioxide, which lacks the warmth and protection provided by Earth's thicker atmosphere. This thin atmosphere results in extremely cold average surface temperatures.
2. One of Mars's famous surface features is Valles Marineris, a vast canyon system that dwarfs the Grand Canyon on Earth. It stretches across Mars's surface and is a stunning example of the planet's geological diversity.
3. The discovery of seasonal flows of liquid water on Mars is significant because it suggests the presence of liquid water, a key ingredient for life as we know it. It raises the possibility of habitable zones on Mars and the potential for microbial life.
4. Mars has two moons, Phobos and Deimos. Phobos is the larger of the two and orbits Mars at a very close distance. Deimos is smaller and orbits at a greater distance from Mars. Both moons have irregular shapes and are thought to be captured asteroids.
5. NASA's Artemis program aims to establish a sustainable human presence on the Moon, which can serve as a stepping stone for future Mars missions. By learning to live and work on the Moon, astronauts can gain valuable experience and test technologies needed for Mars exploration.

