# Mars



## **TOUCH MARS!**

NWA 12269

**Found:** Northwest Africa, 2018

**Mass:** 1.679 kg

Class: Martian (Shergottite)

**Specimen weight:** 1.76 gm, Partial Slice **Provenance:** Abrams Planetarium 2020.001

Mars is the fourth planet from the sun and second-smallest planet in our solar system. The name 'Mars' is inspired by the planet's red-brown color, which ancient people associated with the Roman god of war, Mars. This color, caused by iron oxide on the planet's surface, is also the reason Mars' nickname is 'The Red Planet'. Mars is only about half the size of Earth, but has many similar geographical features including craters, valleys, and deserts. The atmosphere is much too thin for us to live on Mars.

## How do rocks from Mars end up on Earth?

At some another celestial body, most likely a large asteroid, collided with Mars, and pieces of Martian rock were hurled into space. These rocks were fast enough to escape Mars' gravity. We can tell that these rocks came from Mars because the gases trapped inside them match the gases found in Mars' atmosphere.

### Is there water on Mars?

Yes! There are very small amounts of water vapor in Mars' atmosphere. Most of the planet's water is frozen into ice, forming polar ice caps similar to the Earth's. Scientists suspect there may be more water underneath the surface of Mars. It is difficult for water to remain in its liquid form on the surface because of the temperature and the planet's thin atmosphere.



#### **Gale Crater**

Gale crater was formed between 3.5 to 3.8 million years ago when a comet or asteroid collided with the surface of Mars. This massive crater is 154 kilometers wide, and holds a mountain that stands 5,500 miles (18,000 feet) high. That's three times taller than the Grand Canyon is deep! The crater contains clay and sulfate minerals, which both form naturally in water, giving scientists signs that there may have been life here in the past.