

BIRTH OF MARS

Imagine going back in time about five billion years. Our galaxy, the Milky Way, is already very old. This spiral-shaped group of **stars** stretches across trillions of miles. On one of the Milky Way's spiral arms, a huge cloud made of gas and dust spins. The cloud gets bigger and turns faster, flattening out into a shape like a disk. Much of the dust and gas is pulled in toward the disk's center. The center grows larger, becomes heavier, spins faster, and heats up. Finally, it becomes a giant star, our sun.

Now imagine skipping ahead a few million years. Not all the **matter** in the spinning cloudy disk became part of the sun. Leftover bits of dust and gas still circle the young star. Those dust particles get larger as they bump into one another and stick together. Bits of dust come together to form larger clumps and then grow into rocky chunks as they keep knocking into one another. The biggest chunks form large balls, or spheres. These become **planets**. The planets continue circling around the sun. Each is tiny compared to the sun, the shining star in the center of the solar system.

There are eight main planets in our solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Mars is the fourth planet from the sun. It is Earth's neighbor in space.

THE RED PLANET

Not all the specks of light you can see in the night sky are stars. Some of the brightest lights are actually planets. Even before **telescopes** were invented, people could tell the difference between planets and stars in the sky. The steady points of light that change position from week to week are planets. Stars, however, stay in the same place and twinkle.

We can see five planets with the naked eye—Mercury, Venus, Mars, Jupiter, and Saturn. But Mars looks different from the other planets: It appears reddish!

*You can see Mars without a telescope.
It looks like a pink or orange star that
remains bright and doesn't twinkle.*

