



The rocky planets

The Earth is one of five planets in our Solar System that are made of solid rock. The Moon is also rocky and bigger than the smallest planet.

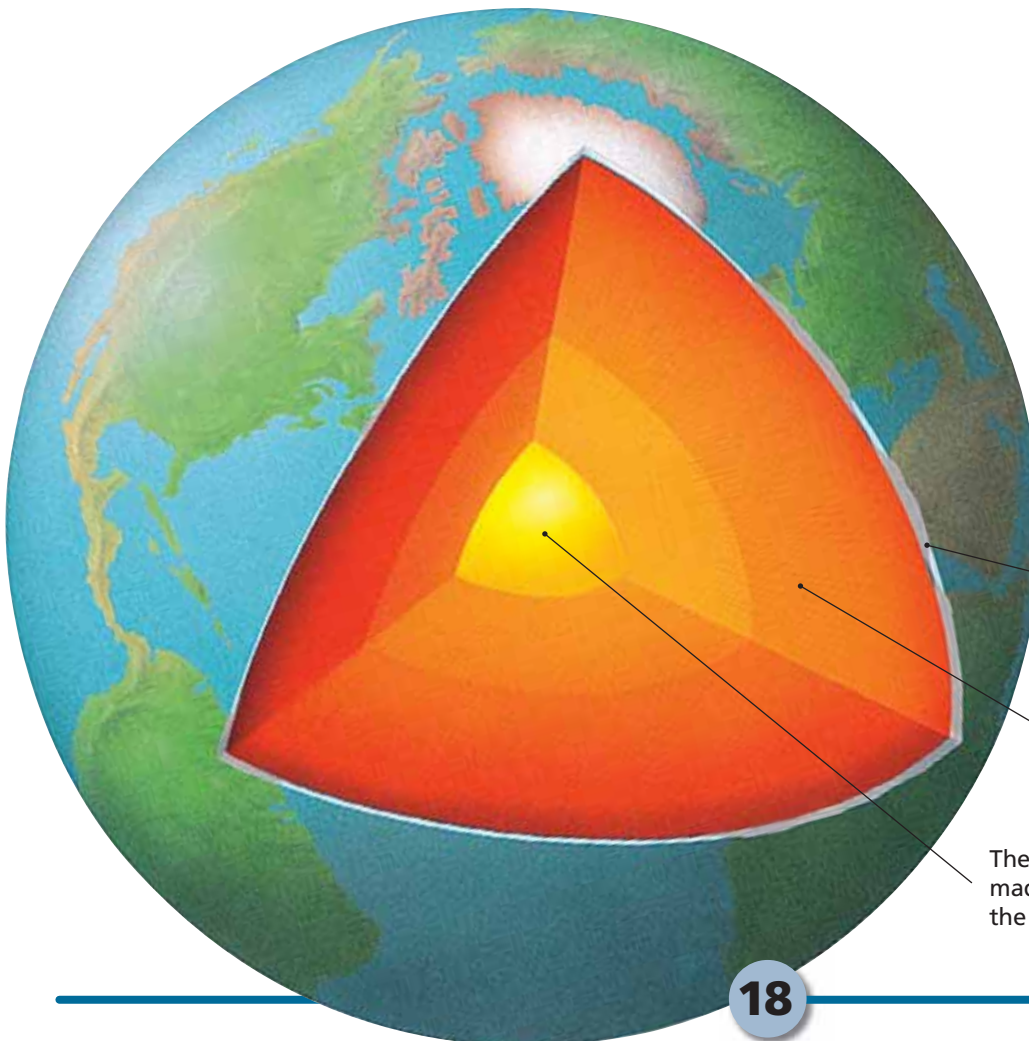
The planets of the Solar System form two main groups. One group is made of relatively small, rocky worlds. This includes the Earth and its Moon (Pictures 1, 2 and 3).

Earth

The Earth is the third planet from the Sun, orbiting at a distance of 150 million kilometres. The Earth has a cool, hard

surface called the **CRUST**. But this is only a thin coating. Inside, the Earth has hot, and even **LIQUID**, rocks. There are two main layers of this liquid rock, the **MANTLE**, below the crust, and the **CORE**, at the centre of the Earth. The air surrounding the Earth makes it a warmer world than it otherwise would be – just warm enough for most of the water to be liquid instead of frozen to ice or boiled to gas. This is the secret to life on Earth.

▼ (Picture 1) The Earth



▼ (Picture 2) The Moon



The Moon is a cold rocky world with no air and a pitted surface made by the impact of rocks scattered through space.

The crust is made largely of hard rock.

The region below the crust is called the mantle. Hot liquid rock sometimes bursts through the crust to make volcanoes.

The Earth has a hot liquid core made largely of iron. This is where the Earth's magnetism is made.

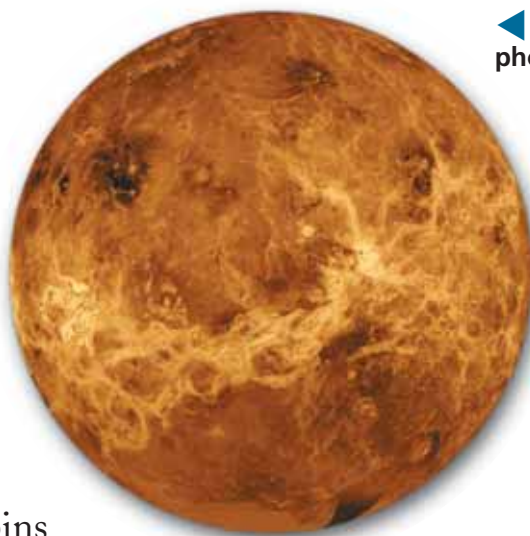


◀ (Picture 3) The order of the rocky planets from the Sun is: Mercury, Venus, Earth (with the Moon), Mars and farthest away, Pluto. ▶



Venus

Venus (Picture 4) is the second planet, some 108 million kilometres away from the Sun. It is almost as big as the Earth (12,100 kilometres across) and it has a molten core like Earth's. But because it spins very slowly, each day on Venus lasts 243 Earth days. The temperature on Venus is 480°C – nearly five times the boiling point of water.



◀ (Picture 4) A satellite photo of the planet Venus.

▼ (Picture 5) Another satellite photo showing the surface of Mars is deeply scarred by great valleys.



about by driving winds. The surface is deeply scarred by great valleys, while giant mountains rise above its plains (Picture 5). Mars has ice caps like Earth.

Mercury

Mercury, the closest planet to the Sun, is only 60 million kilometres from the Sun. It is a small planet, 4,900 kilometres across, with a surface temperature of 470°C.

Mars

Mars is a small planet 228 million kilometres from the Sun. It is the fourth planet from the Sun. Mars is only about half the diameter of the Earth (6,800 kilometres). The length of its day is similar to that on Earth.

There is a small amount of air surrounding Mars, but no clouds or rain. The dry, rocky surface is covered with orange sand that is constantly swirled

Pluto

Pluto is a tiny, frozen, rocky world just 2,300 kilometres across – smaller than our Moon. It is the farthest planet from the Sun on the edge of the Solar System. Pluto is nearly six billion kilometres from the Sun. From this distance, the Sun would not appear much brighter than any other star. It takes 248 Earth years for Pluto to orbit the Sun.

Summary

- There are five rocky planets in the Solar System and many rocky moons.
- The order of the rocky planets from the Sun is: Mercury, Venus, Earth, Mars and Pluto. Pluto is very far away, on the edge of the Solar System.