4.1. The Sun, the Earth and the Moon

What are the Sun, the Earth and the Moon?

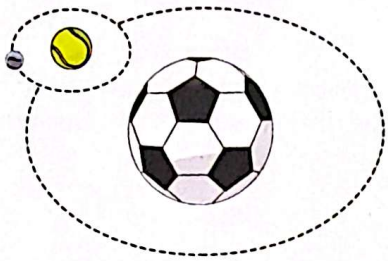
A camera on the spacecraft Galileo took this image of the Earth and the Moon on its way to explore the planet Jupiter. The image shows us that the Moon is much smaller than the Earth and that they are surrounded by black, empty space. The Sun lights up part of the Earth and the Moon. The Sun is shining because it is a star.

All stars give out light. Earth is a planet. Planets reflect the light of the Sun. The Moon also reflects the light of the Sun.

The Earth and the Moon are constantly moving in space. But they make the same movements all the time. The Moon moves around the Earth and the Earth moves around the Sun.

4.2. Does the sun move?

Model the movements of the Earth and the Moon



You will need:
Three different sized balls (football, tennis ball and a marble).

In the model, the football represents the Sun, the tennis ball represents the Earth and the marble represents the Moon.

Place the 'Sun' in the centre of a large table or open space. Do not move the 'Sun'.

One person moves the 'Earth' slowly in an oval path around the 'Sun'. This represents Earth's orbit around the Sun.

Another person should move the 'Moon' quickly in an oval path around the 'Earth'. This represents the Moon's orbit around the Earth.

Copy the diagram and add these labels:

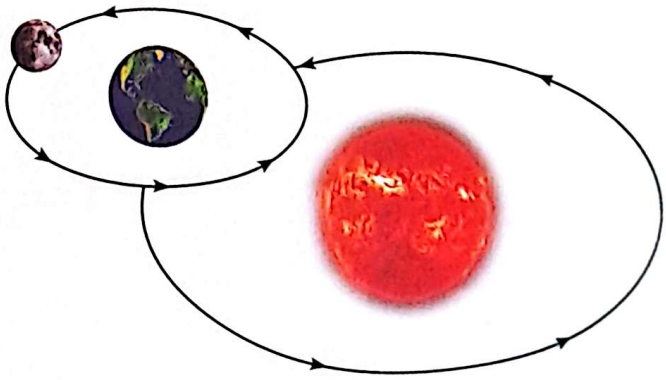
A. Sun

B. Earth

C. Moon

D. Earth's orbit around the Sun

E. Moon's orbit around the Earth



- The Earth moves around the Sun in an orbit.
- The Moon moves around the Earth in an orbit.