

The background is a vibrant space scene. On the left, a large, bright sun with a yellow and orange gradient is partially visible. The rest of the background is a dark blue space filled with numerous small white stars. Several celestial bodies are scattered throughout: a brown planet with a cratered surface (Mars) is in the upper center; a blue and green Earth is in the upper right; a grey moon is in the top right corner; and another brown planet is in the bottom right corner. A dark blue rounded rectangle is positioned in the center-left, containing the title text.

Earth and Space

Learning Objective:
To describe the movements of
the Sun, Earth and Moon.




This lesson is all about these three celestial bodies.

celestial: adj. relating to the sky or outer space

Sun

The Sun is at the centre of our solar system. It is a star made of burning gases. It burns at over 5000°C which provides the solar system with light and warmth.



The light from the Sun only takes eight minutes to travel the 149.6 million km to Earth!

Sun



The Sun is the biggest object in our solar system. It makes up 98% of the total mass!

The Sun has a roughly spherical shape which is about 1,400,000 km in diameter. Earth has a diameter of just over 13,500 km. This means the Sun could fit 1,300,000 Earths inside it!

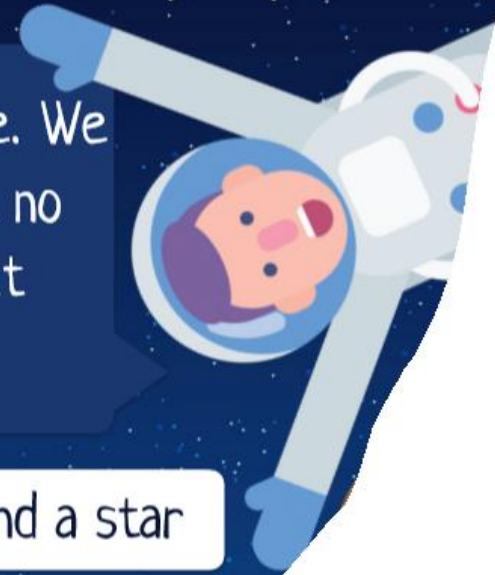
roughly spherical: adj. roughly shaped like a ball

Earth



Earth is a planet. It is the third planet from the Sun and is the only one which has the correct conditions to sustain human life (us!).

Earth is also roughly spherical in shape. We say 'roughly' because we know that no planets, moons or stars are perfect spheres.



planet: noun. A celestial body which orbits around a star

Moon

The Moon is a special celestial object called a natural satellite. This means it is a naturally occurring object (not man-made) which orbits a planet. The Moon orbits Earth but doesn't have anything orbiting it.

The Moon is also, you guessed it, roughly spherical in shape. It is about a quarter of the size of Earth.

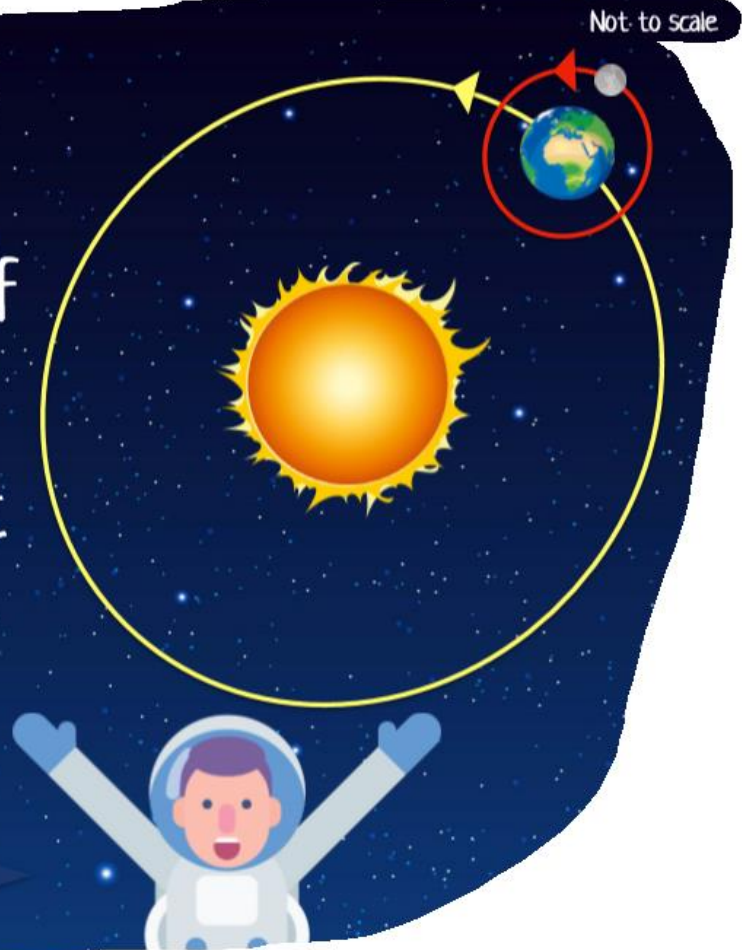


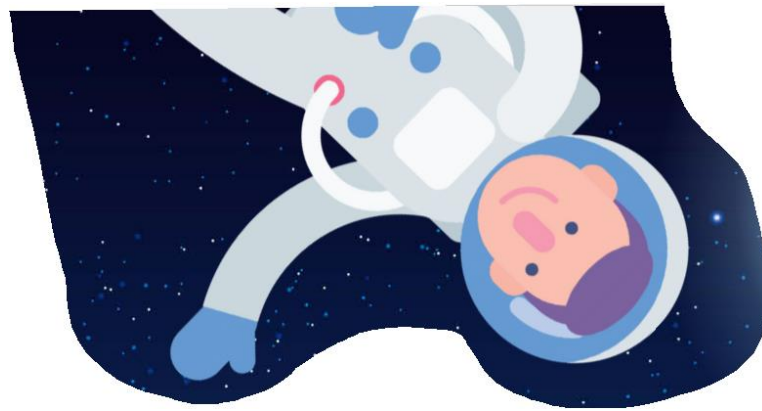
We've used the word orbit a lot to help us describe these celestial bodies.
What do you think orbit means?
Can you use it in a sentence to describe how the Sun, Moon and Earth are linked?



An orbit is a repeating path that an object in space takes around another, larger object. The path of an orbit is normally elliptical or oval shaped, rather than a perfect circle.

Earth and the Moon, as well as the other planets in the solar system, orbit in an anticlockwise direction.





How long does
it take Earth
to orbit the
Sun?

How long does
it take the
Moon to orbit
Earth?

Watch this video to answer these questions!

<https://www.bbc.co.uk/bitesize/topics/zwccwmn/articles/zqbx82>