

Key Facts

Planets

- ◇ There are 8 planets in our Solar System (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune). Pluto is a dwarf planet.
- ◇ They all orbit the Sun, which is a star, and they all have moons.
- ◇ The first four planets are relatively small and rocky, while the four outer planets are gas giants (Jupiter and Saturn) or ice giants (Uranus and Neptune).



The planets are called Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

An easy way to remember the names of planets in order is:
My Very Easy Method Just Speeds Up Naming

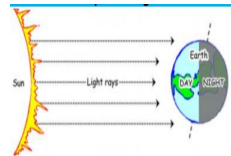
Orbits

- ◇ The Sun, Earth and Moon are approximately spherical.
- ◇ It takes 24 hours for the earth to rotate on its axis once.
- ◇ It takes 365 and $\frac{1}{4}$ days for earth to orbit the sun.
- ◇ Every four years we have an additional day on Feb 29th - this is called a leap year.
- ◇ It takes 28 days for the moon to orbit earth.



Day and Night

- ◇ The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day).
- ◇ This makes it appear as the Sun moves through the sky but the Earth's rotation causes day and night.
- ◇ Different parts of the Earth experience daylight at different times - this means that it is morning, afternoon and night in different places. This is also the reason why we have **time zones**.



Science Year 5

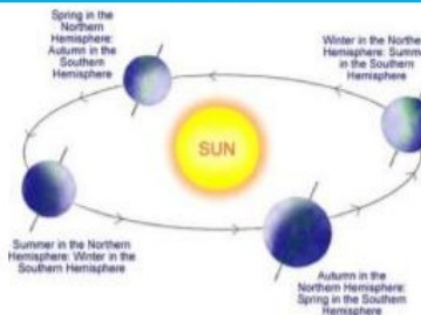
Autumn 2

The Earth and

Beyond

Sustainability links: Global Warming

Seasons



- It is the Earth's tilt that causes the seasons.
- The seasons are the opposite for the Northern and Southern Hemispheres.



Vocabulary

Word	Definition
The Solar System	A collection of the eight planets and their moons, which orbit the Sun.
Axis	A line through the centre of a spinning object
Rotation	The spinning of the Earth around its axis. The Earth rotates once every 24 hours.
Planet	Roughly spherical object which orbits the Sun
Equator	An imaginary line round the earth at an equal distance from the North and South poles.
Satellite	An object that orbits a planet or a star.
Model	A physical representation of an idea or process.
Orbit	The curved path taken by something moving round a planet or other body in space.
Moon	A natural satellite that orbits the Earth and reflects light from the Sun.
Galaxy	An extremely large group of stars and planets. Our galaxy is called the Milky Way.