

Alder Coppice Primary School — Knowledge Organiser

Science

Year: 5

Unit 1: Earth and Space

Links to: Y1 Animals, including humans

What I Should Already Know:

- We have four seasons (spring, summer, autumn and winter).
- The sun is a source of light but the moon is not.
- That a shadow is caused when an object stops light from passing through it.
- The properties of a sphere.
- The history of space travel.

Subject Vocabulary:

Force—the effect of something

Model—a representation of something

Energy—power from physical or chemical resources

Skills and Enquiry:

- How big is our Solar System ? use a model to show this.
- What is the relationship between the Earth, Sun and Moon?
- Can we prove that the sun's rays are different on different parts of the Earth?

Unit Specific Vocabulary:

Asteroid - a rock that orbits the Sun in a belt between Mars and Jupiter

Axis - an imaginary line through the middle of something

Comet - a bright object with a long tail that travels around the sun.

Galaxy - an extremely large group of planets. Our galaxy is called the Milky Way.

Gravity - the force which causes things to drop to the ground.

Leap Year - a year which has 365 days. The extra day is 29 February. There is a Leap Year every 4 years.

Meteorite - a rock from outer space that has landed on Earth.

Planet - a large round object in space that moves around a star.

Phase - a phase is one part of a series of events. We refer to the phases of the moon.

Orbit - the path a planet takes on its journey around the sun.

Revolve - to move in a circle on a central axis.

Rotate - to turn or move about a circle.

Satellite - a natural body which orbits the sun.

Shadow - a dark shape on a surface made when something stands between light and a surface.

Solar System - the Sun and all the objects that go round it.

Sphere - an object that is round in shape like a ball.

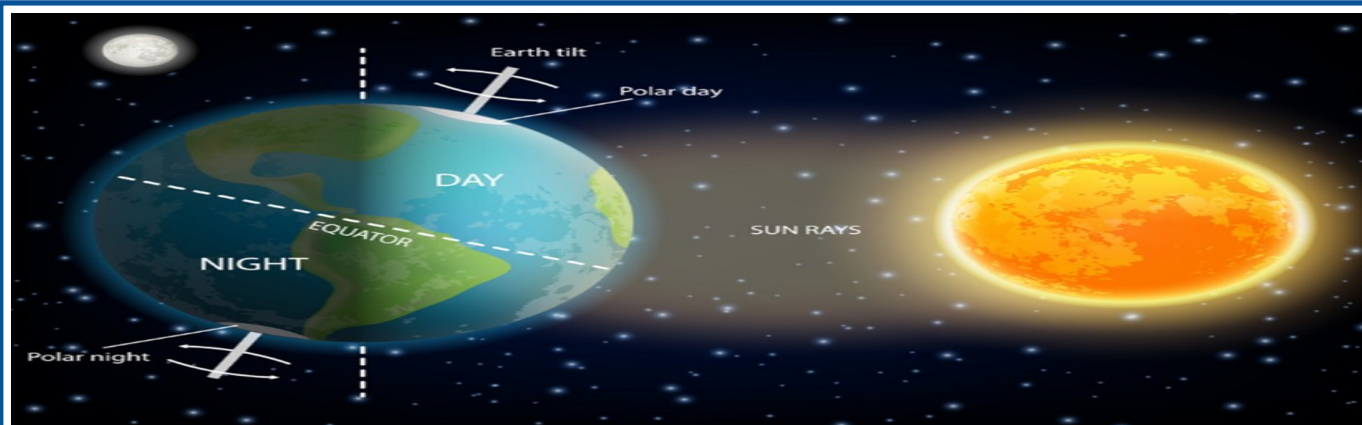
Star - a ball of burning gas in space.

terrestrial—like Earth.

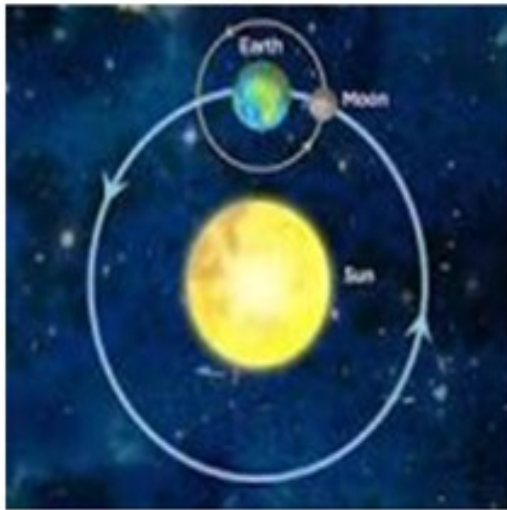
universe—the whole of space, the planets, stars and other forms of matter and energy within it.

waning—getting smaller.

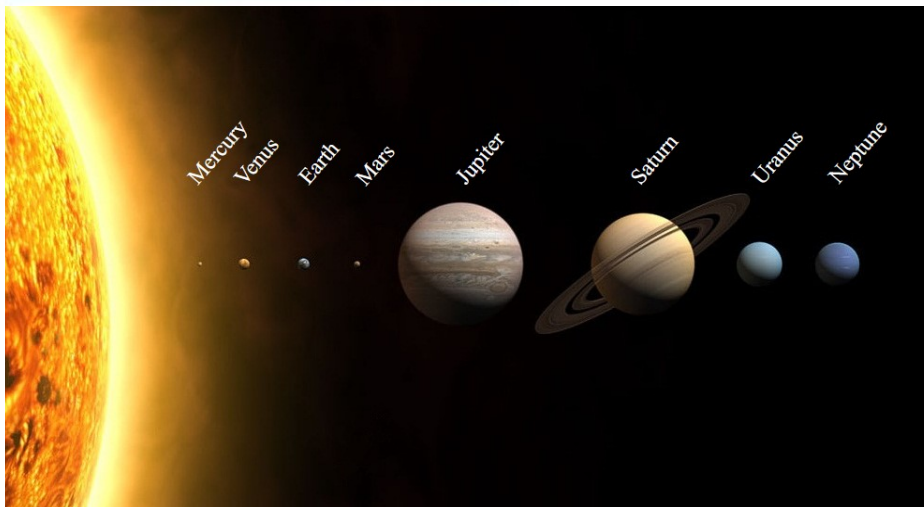
waxing—getting bigger.



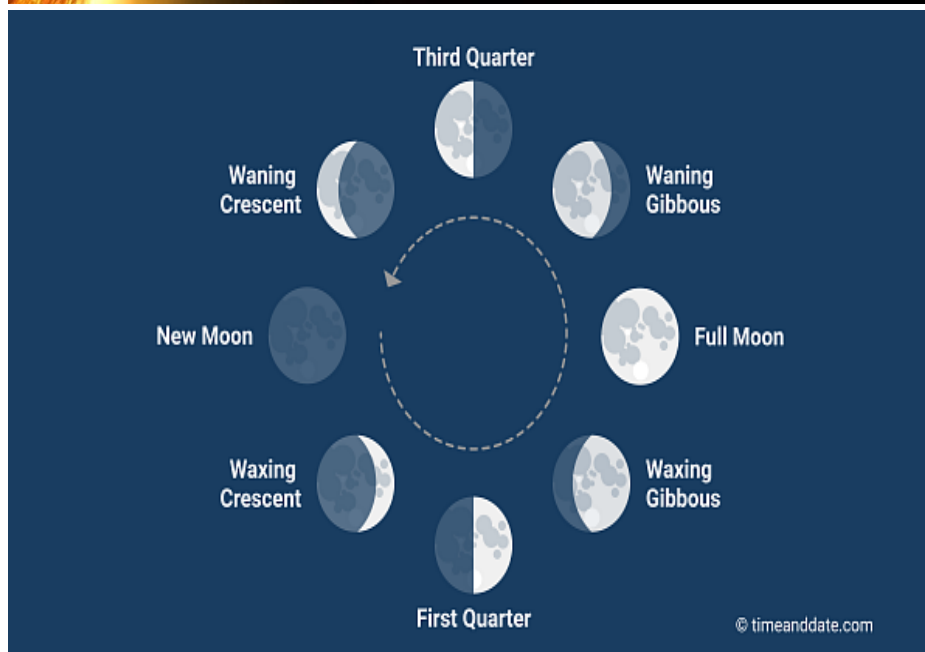
Key Facts :



- The Earth takes 365 and a quarter days to orbit the Sun.
- The Earth spins on its axis every 24 hours to create day and night.
- The 23.5 degree tilt of the Earth creates the seasons because of the distribution of the sun's rays.



- There are 8 planets in our Solar System.
- These can be grouped into terrestrial planets, ice giants and gas giants.
- They are all spherical in shape.



- The Moon orbits the Earth every 28 days.
- The light from the sun means we see different parts of its orbits. These are called the phases of the moon.
- When the moon is waxing it is getting bigger and when it is waning it is getting