



## OUT OF THIS WORLD

### Vocabulary

**daytime:** the time when part of the Earth is in daylight

**geocentric:** (Earth-centred) the Earth is at the centre of the Solar System

**heliocentric:** (Sun-centred) the Sun is at the centre of the Solar System.

**night-time:** the time when part of the Earth is in darkness.

**orbit:** the path of a planet or moon around another celestial object.

**planet:** a celestial body that orbits a star, is round and has cleared smaller objects away from its orbit solar.

**system:** a series of planets that orbit a star.

**star:** an astronomical body that produces its own energy.

**Sun:** the star at the centre of our Solar System

**time zone:** a geographical region where the same time is set.

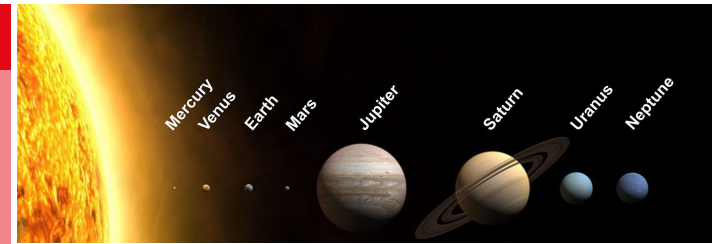
The planets in order of their distance away from the Sun are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

### We are learning to:

- Describe the movement of the Earth and other planets relative to the Sun in the Solar System.
- Describe the movement of the Moon relative to the Earth.
- Describe the Sun, Earth and Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky

### OVERVIEW

- In this topic, children learn about space. Starting with the Solar System, they look next at how ideas about space have changed over time before they explore what causes us to experience night and day on Earth.



### LET'S THINK LIKE SCIENTISTS

- How big are the planets?
- How far away from us are they?

### WORKING SCIENTIFICALLY

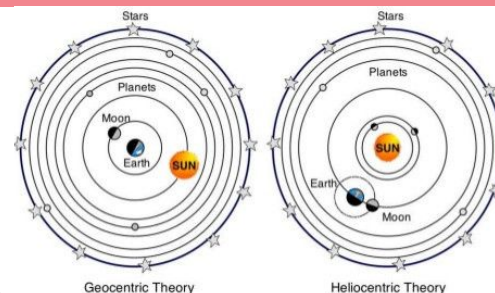
- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to set up further comparative and fair tests.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Identify scientific evidence that has been used to support or refute ideas or arguments.

### PRIOR LEARNING

- That Earth and space are not covered at all. However, the children will be aware of our Sun and be familiar with the names of some of the planets.
- The study of light and shadows in Year 3 introduces children to the Sun's apparent movement across the sky

### EARTH

- Earth rotates on its axis. It does a full rotation once every 24 hours. At the same time that Earth is rotating, it is also orbiting around the Sun. It takes just over 365 days to orbit the Sun.



### THE MOON

- The Moon orbits Earth in an oval-shaped path while spinning on its axis. At various times in a month, the moon appears to be different shapes.

