Year 5

Earth and Space

Statutory Requirements:

- 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

Working Scientifically:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting 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

Key Knowledge:

The Sun is at the centre of our solar system. The eight planets orbit the sun. It takes the earth 365.25 days to orbit the sun.

The earth has a tilted axis (23.5^{o}). This is what causes the seasons.

The earth spins on tits axis, taking 24 hours to complete one rotation. This is what causes day and night.

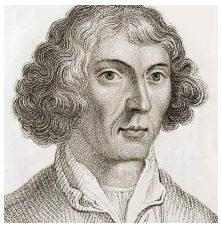
Our solar system is in a galaxy called the Milky Way. A galaxy is a vast collection of stars.

Moons orbit planets. Earth has one moon which takes 27 days to orbit the earth.

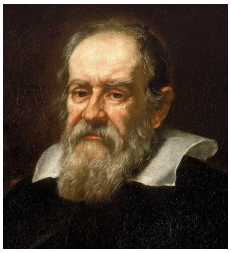
Key Vocabulary:

- Day / night
- Earth, axis, hemisphere
- Orbit, revolve, rotate, spin
- Solar system, galaxy, universe
- Star, supernova, sun
- Planets - Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, dwarf planet
- Moon - phases - full moon, gibbous moon, half moon, crescent moon, new moon, waxing, waning
- Asteroid, comet, meteorite

Key Scientists



Nicolas Copernicus (1473 – 1543)
Discovered that the earth spun on an axis and orbited the sun.



Galileo Galilei (1564 – 1642)
Discovered fur moons of Jupiter. First person to study the skies with a telescope.

Stephen Hawking (1942 – 2018)
English cosmologist and author famous for work on black hole theory.