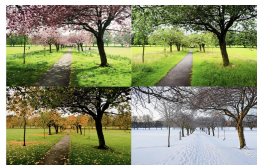




Knowledge I already have

- In Year 1, I:
- observed changes across the four seasons.
 - observed and described weather associated with the seasons and how day length varies.



Future Knowledge

- In KS3, I will learn:
- to measure the force of gravity and the formula: $\text{weight} = \text{mass} \times \text{gravitational field strength (g)}$. I will learn that on Earth $g=10 \text{ N/kg}$, and this is different on other planets and stars. I will learn about gravity forces between the Earth and the Moon, and between the Earth and the Sun.
 - about the Sun as a star, other stars in our galaxy and other galaxies.
 - about why we have seasons and the Earth's tilt; why day length differs at different times of year, in different hemispheres.
 - about light years as a unit of astronomical distance.

New Knowledge

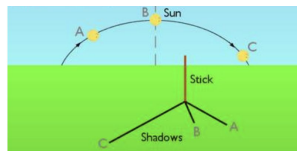
- By the end of this unit, I will be able to:
- describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
 - describe the movement of the Moon relative to the Earth.
 - describe the Sun, Earth and Moon as approximately spherical bodies.
 - use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.

Scientific Enquiry

- Researching using secondary sources:
- use secondary sources to help create a model/role play to show the movement of the Earth around the Sun, the Moon around the Earth and why day and night occur.
 - research and explain why we have time zones.

Observing over time/Pattern seeking:

- observe and record how shadows caused by the Sun change through the day.



The Sun is a star. It is at the centre of our solar system. There are 8 planets. These travel around the Sun in fixed orbits. Earth takes $365\frac{1}{4}$ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to complete its orbit. The Sun, Earth and Moon are approximately spherical.

earth



Our planet is called Earth. It travels in a slightly flattened path, called an orbit, around the Sun.

moon



The Moon orbits Earth taking about 28 days to do so.

orbit



The path that planets travel on relative to one another.

rotate



Spin or turn around an axis which may be visible or invisible.

spherical



A round, three-dimensional shape.

solar system



There are eight **planets** in our solar system which orbit the sun.

star



A giant sphere of hot gases.

sun



A star - a great spinning ball of hot, glowing gas. Other planets and moons to orbit around it.