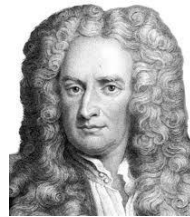




**Year 5 – Spring 1<sup>st</sup> half**  
**Title of topic: Night Sky**  
**Topic Focus: Science**

This is the knowledge organiser for our topic. It includes all the learning outcomes, key facts and vocabulary. Please share this with your child to help them develop their knowledge and understanding of our topic.

**Isaac Newton 1643 – 1727**



He formed his theory of gravity when he watched an apple fall from a tree. A Newton (N) is a unit of measurement used to measure the pull of gravity.

**Galileo Galilei 1564 – 1642**



He was an Italian Scientist and Inventor who proved that the Earth orbits the Sun. He invented a telescope used to observe sunspots.

The Sun's diameter is approximately 1.4 million km. Its surface temperature is approximately 5500 °C. Its core temperature is approximately 15.5 million °C

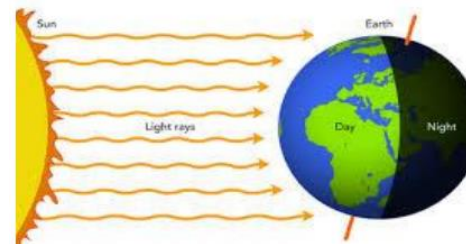


The Moon is a natural satellite that is 384,400km away from Earth. It orbits the Earth every 27 days. The Moon reflects the light of Sun and looks different every day. There is no atmosphere or life on the moon.

**Day vs Night.**

The Earth completes a full rotation every day (24 hours). When our side of the Earth is facing the Sun, it is day time. When our side of the Earth is facing away from the Sun, it is night time.

It takes 365  $\frac{1}{4}$  days for the Earth to orbit the sun. This creates one calendar year



**Key vocabulary:**

**Astronomy** - Astronomy is the study of outer space and the objects/bodies outside of the Earth's atmosphere, like stars, planets and comets.

**Asteroid** - A rock that orbits the sun in a belt between Mars and Jupiter.

**Axis** - Imaginary line which an object rotates on.

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

**Gravity** - The force that attracts an object towards a larger object.

**Lunar eclipse** - An astronomical event that occurs when the Moon moves into the Earth's shadow, causing the Moon to be darkened.

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

**Moon** - A celestial body that orbits around a planet

**Orbit** - Curved path in space followed by an object going round a planet/moon/star.

**Planet** - A celestial body which moves in orbit around the sun. It is massive enough to have its own gravity.

**Rotate** - Moving around an axis or centre.

**Solar system** - Collection of 8 planets & their moons that orbit around the Sun.

**Solar eclipse** - The Moon passes between Earth and the Sun, blocking the view of the Sun from a small part of the Earth.

**Star** - A large ball of burning gas in space with a fixed point.

**Sun** - A large star which is at the centre of our Solar System

**Universe** - The whole of space and all the stars, planets, other forms of matter and energy in it.