# Science Knowledge Organiser Earth and Space (Term 3)

# Year 6

## Our learning

In our science lessons this term, we will be learning about Earth and space This is part of our **physics** learning in science. Through our learning we will be considering the patterns that appear in space in relation to the Earth, the sun and the moon. We will consider what gravity is and who discovered this. We will also look at the different planets in the solar system and their orbits around the sun.

Sir Isaac Newton discovered gravity





Legend has it that Isaac Newton formulated gravitational theory in 1665 or 1666 after watching an apple fall and asking why the apple fell straight down, rather than sideways or even upward.

#### Information

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune are all planets in our solar system.

The Earth orbits the sun in 365 and a quarter days. This is why we have a leap year with an extra day every four vears.

The sun is a star.

The Earth spins on its axis once every 24 hours.

The Earth has one moon. Other planets have more than one moon.

The moon orbits the Earth in 28 days.



The relative size of the Earth compared to the sun is shown using a football to represent the sun and a 2mm ball of clay to show the Earth.

### As a scientist I will...

- Identify scientific evidence that has been used to support or disprove ideas.
- Use other people's discoveries to better understand the world around me.
- Identify and explain patterns in the natural environment.

## **Vocabulary**

solar system- the collection of eight planets and their moons that orbit round the sun. spherical—shaped like a sphere.

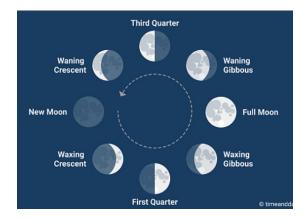
axis of rotation— the axis is the imaginary line through the earth that extends from the North Pole to the South Pole which the Earth spins on.

star- an exploding ball of burning gas held together by gravity.

constellation-a group of stars.

planet- large natural objects that orbit, or travel around, stars.

gravity-a force that pulls everything down toward the centre of the Earth.



Phases of the moon

