The Knowledge

Supporting the National Curriculum



Knowing More

Remembering More

Learning More

Stargazers



Key People

<u>Galileo Galilei 1564 – 1642 AD</u> Galileo experimented with and refined telescopes (though he did not invent them, as is often incorrectly thought). He is perhaps best known for discovering the four most massive moons of Jupiter, now known as the Galilean moons

<u>Stephen Hawking 1942 - 2018</u> Stephen made many important contributions to the world of <u>science</u>. He developed theories about how the world began and furthered our understanding of black holes, stars and the universe.

<u>Isaac Newton 1643-1727</u> Isaac Newton formed his theory of gravity when he watched an apple fall from a tree. A Newton (N) is a unit of measure that is used to measure the pull of gravity.

Solar System

The Solar system is made up of a collection of planets, their moons and smaller objects such as dwarf planets, asteroids, meteoroids and comets that orbit the Sun.

There are 8 planets:

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

Key Facts

- Gravity is a force that pulls objects toward each other.
 On Earth, gravity pulls all objects towards its centre and keeps everything on the ground.
- The Moon is a natural satellite that is 384,400km away from Earth. It orbits the Earth every 27 days. The surface of the Moon is covered with craters. There is no atmosphere or life on the Moon.

Key Vocabulary

- **Galaxy** an extremely large group of stars and planets. Our galaxy is called the Milky Way.
- **Gravity-** the force which causes things to drop to the ground due to the gravitational pull being towards the centre of the earth.
- Leap year a year which has 366 days. The extra day is the 29th of February
- Star A burning mass of gas that makes heat and light energy (E.g. the sun).
- **Planet -** An astronomical body that orbits a star and does not emit its own light. They can be terrestrial or Jovian.
- **Moon -** An astronomical body that orbits the earth, and is its only natural satellite.
- **Orbit -** A curved path of a planet, satellite or spacecraft around an object such as the sun due to the attraction of gravity.

Test Yourself

- Who was Isaac Newton?
- What are the eight planets in our solar system?
- What is gravity?
- How long does it take for the moon to orbit the Earth?
- What does the moon not have?

What I would like to know...