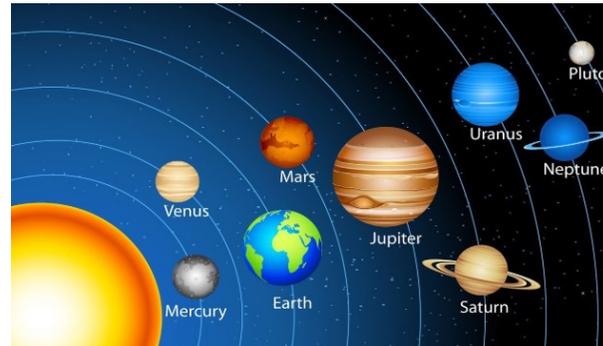


STARGAZERS



What do I need to know?

The solar system is made up of a collection of planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.



The earth rotates in an **anti-clockwise direction**. This is why we say the sun rises in the **East** and sets in the **West**.

The sun is a star at the centre of our solar system.

Gravity is a force that pulls objects **towards** each other.

Night and day occurs because the Earth rotates on its axis. When part of the Earth is facing the sun, it is daytime and light in this place. When that part faces away, it is night.

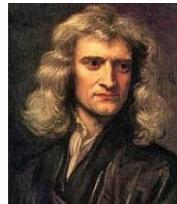


Galileo Galilei (1564–1642) proved that the Earth orbits the sun. He invented the telescope and discovered the four moons orbiting Jupiter.



The moon is a **natural satellite**. It orbits the Earth every **27 days**. You can only see the moon because the light from the sun is reflected on it.

Isaac Newton (1643–1727) formed his theory of gravity when he watched an apple fall from a tree. We measure the force of gravity in Newtons (N).



"That's one small step for man, one giant leap for mankind."



Glossary

Asteroid: A rock that orbits the sun.

Astronomer: A person who makes observations about and studies space.

Atmosphere: A mixture of gases that surround a planet.

Axis: The imaginary line on which a planet rotates.

Comet: A frozen mass of dust and gas orbiting the sun.

Crater: A large hole made when an object hits a surface with force.

Dwarf Planet: An object orbiting the sun that is larger than a comet or asteroid but not as big as a planet e.g. Pluto.

Lunar: Relating to the moon.

Orbit: A curved, invisible path that a planet, asteroid or comet takes as it goes around something else such as the sun.

Planet: An almost spherical object made of rock, gas and metal orbiting a star.

Rotate: To turn around a fixed point.

Star: A huge, bright ball of burning gas that is held together by gravity.

Universe: All of space and everything in it, including stars, planets and galaxies.

Neil Armstrong was the first man to step on the moon after the landing of the American spacecraft, **Apollo 11**, on 21st July 1969.