Stargazers- What is in our solar system?

Vocabulary	Definition
planet	A massive body of matter orbiting a star
star	A huge, bright ball of burning gas that is held together by gravity. The Sun is the closest star to Earth.
axis	The imaginary straight line on which a planet rotates.
orbit	When one body of matter spins around another
rotate	When a planet moves about its axis
solar system	The Sun, planets, moons and smaller bodies such as asteroids, meteoroids and comets.
celestial body	A natural body outside of the Earth's atmosphere
spherical body	A body in space which is round due to its gravitational force pulling everything to the centre. The planets, moons and Sun are all spherical bodies.

What is in our solar system?



Our Solar System is made up of planets and their moons which orbit around the Sun. There are also smaller bodies such as asteroids, meteoroids and comets.

Aristotle. Galileo and Isaac Newton are examples of people with big ideas about Earth and space. These have changed the way we understand the solar system.

What is the sun and how do planets orbit the sun?



- The Sun is a star
- All planets in the solar system orbit the Sun due to its gravitational force.
- It takes Earth 365 days (one year) to completely orbit the sun
- The sun is at the centre of our solar system

How does the moon orbit Earth and why does it have phases?



- A moon is a natural satellite which orbits a planet.
- It takes our moon 29.5 days to orbit Earth
- The Moon reflects the Sun's light.
- As the moon travels around Earth, it's lit from different angles by the sun
- What part we see of the Moon depends on where the Moon is when orbiting the Earth

How does day and night



- The Earth rotates about its axis once every 24 hours.
- When Britain faces the Sun it is daytime in Britain but the other side of the world is in darkness. So, in Australia it is night.

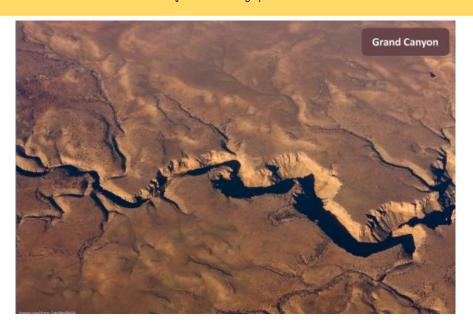
What is it like to be in space?



- In space there is zero gravity
- You are 'weightless'
- On Earth, there is gravity which is a force that stops us floating away!

Aerial images and maps/atlases

What are aerial images and how can we use them to identify features of a country/place?

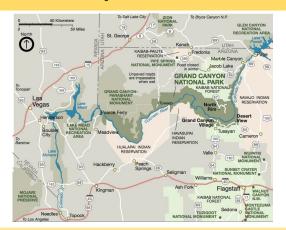


Aerial images are photographs of Earth's surface taken from satellites, aircraft, drones and balloons at different distances from Earth. Aerial images allow us to understand an area in more detail.

They can help us to answer questions about:

- Coasts
- Population
- Wealth and development
- Tourism and climate

What is the difference between and map/atlas and an aerial image and how can they tell us about an area?



Maps are drawn, meaning they are man made. However, an aerial image is a photograph.

Maps can tell us:

- Country boundaries
- Place names
- Key features of an area which are labelled e.g houses, roads, shops.

How can we use aerial imagery, maps and atlases to compare two different countries?

• Since aerial images and maps and atlases can tell us different things, they are both useful in understanding different areas/landscapes.