Knowledge Organiser Curriculum Spring Term / Topic: Reach for the Stars

Curriculum Subjects Covered: PSHE, English, Mathematics, RE, Science, DT, PE

Caritas Theme: Recognising the difference between rights and responsibilities.

Key Vocabulary and Spellings	
Star	A burning mass of gas which makes heat and light energy
Planet	A large object which orbits a star
Sun	The star which Earth orbits
Solar System	The Sun and planets (along with other objects) which orbit it
Orbit	Curved path taken by a planet / satellite around a larger object
Satellite	A natural or artificial object that orbits around a planet
Moon	Earth's largest satellite
Spherical	Large bodies in space, such as planets and the Sun are "ball-shaped" (spheres)
NASA	Stands for 'National Aeronautics and Space Administration', the US agency for the exploration and study of space
Galaxy	A group of stars and other objects
Universe	All of space and everything in it
Asteroid	Small rocky body orbiting the Sun
Axis	A planet rotates (spins)on its axis. Earth takes 24 hours to do this
Astronomy	The branch of science that deals with space / physical universe





Key Knowledge

How does the Moon move around the Earth?

The Moon orbits the Earth anticlockwise and takes approximately 28 days, we call this the **lunar month**. The Moon spins once on its axis every time it orbits Earth. This means that we only see one side of the Moon. The side of the moon we do not see is called the dark side of the moon.

The Moon has different phases depending on where it is in its orbit. Each lunar month, the moon is unilluminated, this is call the new moon. As the lunar month continues, more of the moon is illuminated by the sun until it becomes a full moon.

Waxing occurs after a new moon and before a full moon, as more of the moon is illuminated.

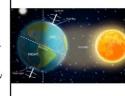
Waning occurs after a full moon and before a new moon, as less of the moon is illuminated.

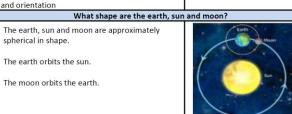


There is gravity on the moon. However it is a much lesser force than the gravity on earth.

What causes day and night?

The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day). This makes it appear as the Sun moves through the sky but the Earth's rotation causes day and night. Different parts of the Earth experience daylight at different times - this means that it is morning, afternoon and night in different places. This is also the reason why we have time zones. Because of the Earth's tilt, the poles experience 24 hours of sunlight in the summer, and very few hours of sunlight in the winter. As the Earth rotates, shadows that are formed change in size





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