

Holy Family Catholic Primary School Cronton



Year 5: Science Spring Term 2		
What I should already know:		

* We have four seasons (autumn, winter, spring and summer).

- * The Sun is a source of light but the Moon is not.
- * A shadow is caused when an object blocks light from passing through it.
- * The properties of a sphere.

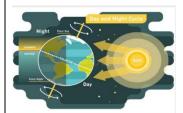
Fact File

What causes a year and the seasons?

- st The Earth takes 365 and a quarter days to orbit the Sun.
- * Because of the extra quarter day, it takes to orbit the Sun, every four years on Earth is a leap year!
- * It is the Earth's tilt that causes the seasons.

What causes day and night

- * The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day).
- * It appears as though 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 and orientation.



What I will know by the end of the unit:

Unit: The Earth and Beyond

- *I know about the Earth's (and other planets') place in the solar system, and their relationships with other bodies in space, in particular with the Sun.
- *I know how the Earth's orbit determines the length of a year and why we have leap years.
- * I know the Earth's rotation and tilt affect the direction and length of shadows, and how to use shadows for telling the time.
- * I know about how time was standardised around the world, about the need for scientists to choose a starting point in the continuous process of cycles of sunrise and sunset, and investigate longitude.
- *I know about the International Date Line and the Greenwich Meridian.

Key Scientist

Dr Maggie Adderin-Pocock

born 9 March 1968 is a British <u>space</u> scientist and science educator. She is an

honorary research associate of <u>University College</u>
<u>London</u>'s Department of Physics and Astronomy. Since
February 2014, she has co-presented the long-running
astronomy television programme <u>The Sky at</u>
<u>Night</u> with <u>Chris Lintott</u>. She is the first black woman to
win a gold medal in the Physics News Award. She has
also earned the title of the president-elect of the British
Science Association.

		Our Solar System
Welch,	eunz Earth Water	ter Saturn Uranus Neptu

Theme: Earth and Space		
Vocabulary		
Astronomer	An expert in or student of astronomy (space and the universe).	
Axis	An imaginary line through the middle of something.	
Moon	The natural satellite of the earth.	
Orbit	The curved path in space that is followed by an object going round and round a planet, moon, or star	
Planet	A large, round object in space that moves around a star.	
Rotate	Move in a circle round an axis or centre.	
Satellite	An artificial body placed in orbit round the earth or moon or another planet in order to collect information or for communication	
Solar system	The Sun and all the planets that go round it.	
Sphere	An object that is round in shape like a ball.	
Star	A large ball of burning gas in space.	
Sun	A star which the earth orbits.	

