

Earth in Space Progression map Year 5

Previous Year: Year 1		Current Year: Year 5	Next Year: KS3
<ul style="list-style-type: none"> Observe changes across the four seasons. (Y1 - Seasonal changes) Observe and describe weather associated with the seasons and how day length varies. (Y1 - Seasonal changes) 		<ul style="list-style-type: none"> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 	<ul style="list-style-type: none"> Gravity force, weight = mass x gravitational field strength (g), on Earth $g=10$ N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only). Our Sun as a star, other stars in our galaxy, other galaxies. The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. The light year as a unit of astronomical distance.
Physical education links: -	<u>Learning Values:</u> - respect - responsible - resourceful - resilient - risk taker	<u>How can the learning be applied?</u> <ul style="list-style-type: none"> Use secondary sources to help create a model e.g. role play or using balls to show the movement of the Earth around the Sun and the Moon around the Earth. Use secondary sources to help make a model to show why day and night occur. Make first-hand observations of how shadows caused by the Sun change through the day. Make a sundial. Research time zones. Consider the views of scientists in the past and evidence used to deduce shapes and movements of the Earth, Moon and planets before space travel. 	
<u>Possible stimulus:</u> George's Secret Key to the Universe by Lucy Hawking, Stephen Hawking & Gary Parsons The Skies Above My Eyes by Charlotte Guillain & Yuval Zommer Planetarium: Welcome to the Museum by Roman Prinja		<u>Key learning for the topic:</u> The Sun is a star. It is at the centre of our solar system. There are 8 planets (can choose to name them, but not essential). These travel around the Sun in fixed orbits. Earth takes $365\frac{1}{4}$ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to complete its orbit. The Sun, Earth and Moon are approximately spherical.	