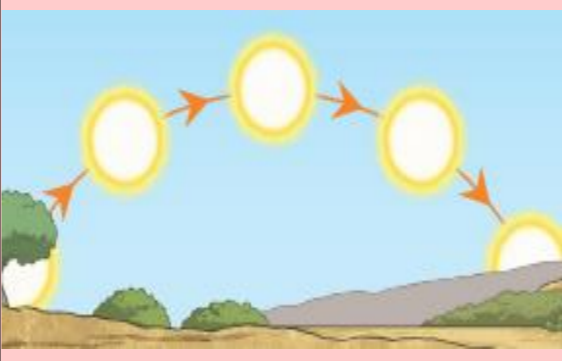
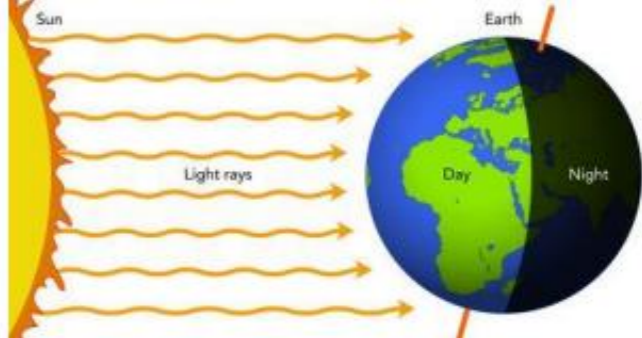
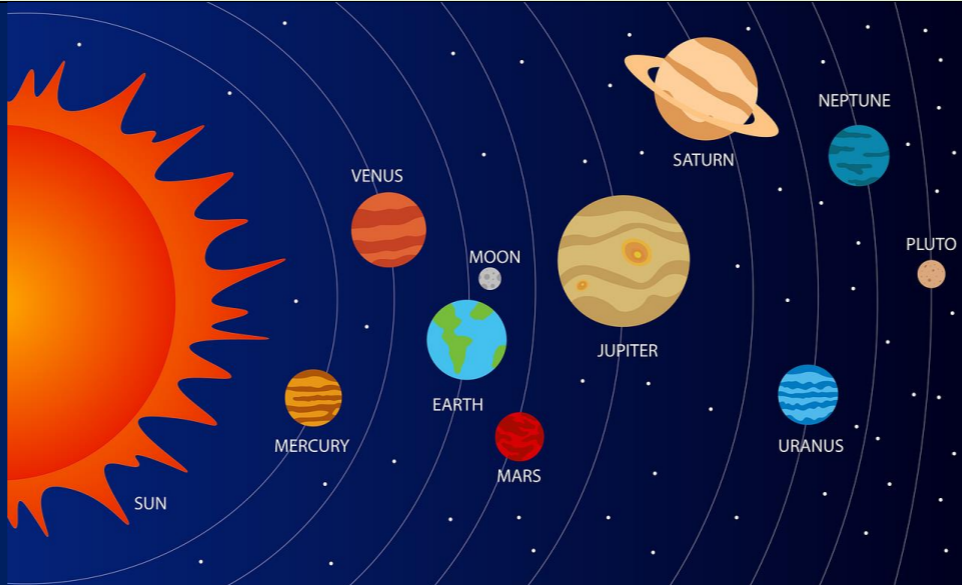
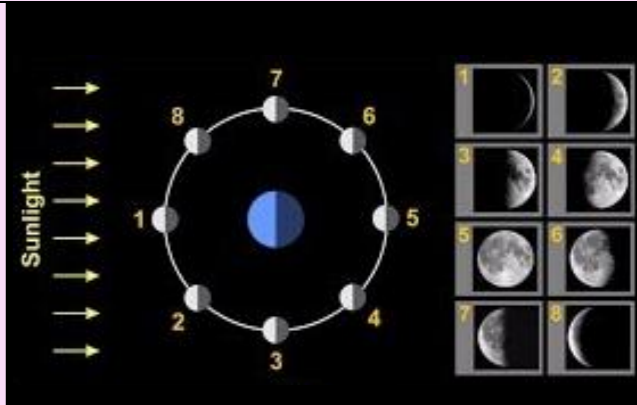



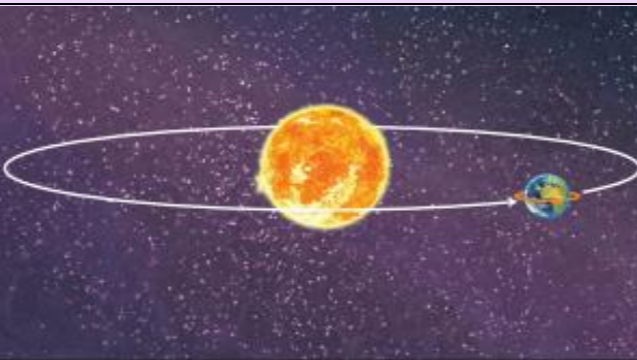



Cunningham Hill Junior School - Science Knowledge Organiser - Year 5 - Earth and Space

Key Vocabulary:		The Sun:		Day and Night:	
sun	A huge star that Earth and the other planets in our solar system orbit around.	<p>The sun does not move, it is fixed at the centre of our solar system, Earth and the other planets orbit around the sun. This makes it look like the sun is moving through the sky each day, but actually it is the Earth that is moving.</p>		<p>Earth rotates on an axis. During the winter the North Pole is tilted away from the Sun's rays. As Earth travels around the sun the tilt of Earth changes. By June, The North Pole is tilted towards the Sun and the days become very long. This difference creates seasons above and below the equator, but the equator is always the same distance from the sun.</p>	
star	A giant ball of gas held together by its own gravity.			<p>Daytime occurs when the side of the Earth is facing towards the Sun. Night occurs when the side of the Earth is facing away from the sun.</p>	
moon	A natural satellite which orbits Earth or other planets.				
planet	A large object, round or nearly round that orbits a star.				
rotate	To spin. E.g. Earth rotates on its own axis.				
sphere	A round 3D shape in the shape of a ball.				
spherical bodies	Astronomical objects shaped like spheres.	<p>Planets:</p> <p>There are 9 planets in our solar system.</p>			
satellite	Any object or body in space that orbits something else, for example: The moon is a satellite of the Earth.	<p>Jupiter, Saturn, Uranus and Neptune are gas planets - made up of different gasses such as helium and hydrogen (although they do have cores (centres) that are made of rock and metal.</p>			
orbit	An orbit is a regular, repeating path that one object in space takes around another one.	<p>Mercury, Venus, Earth and Mars are rocky planets - made up of metal and rock.</p>			
axis	An imaginary line that a body rotates around. E.g. Earth's axis (imaginary line) runs from the North Pole to the South Pole through the centre of the Earth.			<p>The moon orbits the Earth in an oval-shaped path while spinning on its axis. During each month, the Moon appears to be different shapes. This is because as the moon rotates round the Earth and the sun lights up different parts of it.</p>	
astronomer	Someone who studies or is an expert in astronomy (space science).				
geocentric model	A belief people used to have that other planets and the sun orbited around Earth.				
heliocentric model	The structure of the solar system where the planets orbit around the sun.				
<p>Scientist Study:</p>					
	<p>Mae Carol Jemison (born October 17, 1956) is an American engineer, physician, and former NASA astronaut. She became the first black woman to travel into space when she served as a mission specialist aboard the Space Shuttle Endeavour in 1992.</p>	<p>Ex-Planet:</p> <p>Pluto used to be classified as a planet, but was changed to a dwarf planet in 2006, due to its comparatively small size.</p>			
		<p>Mae orbited Earth 127 times during her space mission on the endeavour with her 6 other crew members.</p>	<p>Theories about the Solar System:</p> <p>The work of many astronomers (such as Copernicus and Kepler) combined over many years before the idea of heliocentric model was developed. Galileo's work on gravity allowed astronomers to understand how planets stayed in orbit.</p>		
<p>The Earth:</p> <p>Earth rotates (spins) on its axis. It does a full rotation once in every 24 hours. At the same time that Earth is rotating, it is also orbiting (revolving) around the Sun. It takes a little more than 365 days to orbit the Sun.</p>		<p>Many years ago people believed that planets moved around the earth.</p>			
		<p>1 full spin of the earth (24 hours) = day + night.</p>	<p>1 full orbit of the sun (365 $\frac{1}{4}$ days) = 1 year</p>	<p>Geocentric Model: WRONG</p> 	<p>Heliocentric Model: CORRECT</p> 