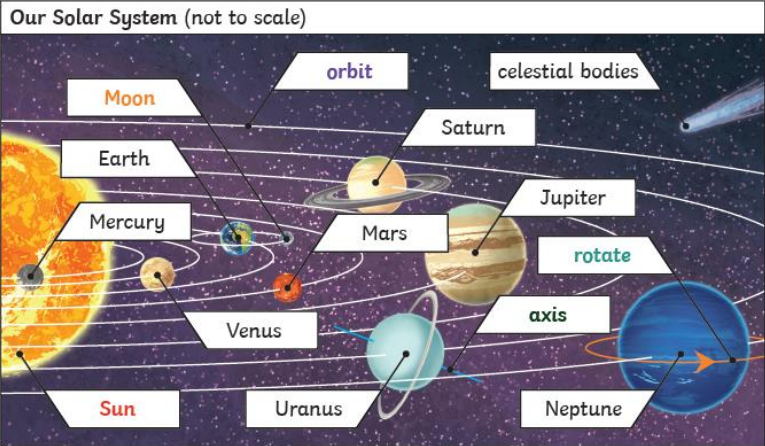


Crofton Junior School – Curriculum Knowledge Organiser

Unit of Work	Science – Physics – Year 5	
Key Strand	Understand the Earth’s movement in space	
Overview of the Unit of Work	This concept involves understanding what causes seasonal changes and day and night.	
Prior Learning & Vocabulary	N/A	
Sticky Knowledge	<p>Earth rotates on its axis once every 24hours (a day). At the same time as it rotates, it orbits the sun which takes 365 ¼ days. This is rounded to a year and explains why we have a leap year every 4 years. Daytime occurs when the side of the Earth is facing the Sun; night occurs when the Earth is facing away from the Sun. It appears that the sun rises in the East and sets in the West, but the Sun does not move at all: it is due to the Earth’s rotation. The Moon orbits Earth in an oval-shaped pathway while spinning on its axis creating the Moon’s phases.</p> <p>The order of the planets is: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto (classified as dwarf planet 2006)</p>	 <p>The diagram illustrates the solar system with the Sun at the center. Planets are shown in their relative positions: Mercury, Venus, Earth (with the Moon), Mars, Jupiter, Saturn, Uranus, and Neptune. Labels identify the Sun, Moon, Earth, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, and Neptune. Key concepts are highlighted with callouts: 'orbit' for the paths around the Sun, 'celestial bodies' for the planets and Moon, 'rotate' for the Earth's spin, and 'axis' for the Earth's rotational axis.</p>
New Vocabulary	Earth, planets, Sun, solar system, Moon, celestial body, sphere/spherical, rotate/rotation, orbit, spin, revolve, geocentric model, heliocentric model, shadow clocks, sundial, astronomical clocks night and day, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, ‘dwarf’ planet	
Post Learning	KS3 – space physics	