

		Year 1 <u>Seasonal changes</u>	Year 5 <u>Earth and space</u>
Scientific knowledge and understanding	Key facts	<p>To know the name and order of the four seasons; spring, summer, autumn and winter.</p> <p>To know that it is unsafe to look directly at the Sun.</p>	<p>To know that the Sun is a star at the centre of our solar system.</p> <p>To know that the Sun, Earth and Moon are approximately spherical bodies.</p> <p>To know the names, order and relative positions of the planets and other main celestial bodies.</p> <p>To know that a moon is a celestial body that orbits a planet and give examples of moons that orbit other planets.</p>
	Forces in motion	<p>To know weather associated with the four seasons and how it changes (in the UK).</p> <p>To understand that day length varies across the four seasons, with fewer daylight hours in the winter and more in the summer.</p>	<p>To know that the Earth and other planets orbit around the Sun.</p> <p>To know that the tilt of the Earth and its orbit around the Sun causes the seasons.</p> <p>To know that the Moon orbits around the Earth.</p> <p>To understand how the Earth's rotation causes day and night and the apparent movement of the Sun across the sky.</p>
	Factors affecting forces		

		Year 3 <u>Forces and magnets</u>	Year 5 Imbalanced forces
Scientific knowledge and understanding	Key facts	<p>To know some examples of contact and non-contact forces.</p> <p>To know that some forces are a result of contact between two surfaces, but some forces can act at a distance (e.g. magnetism).</p> <p>To know the North and South poles of a magnet.</p> <p>To know some examples of magnetic materials, including iron and nickel, and how they react to a magnet and each other.</p> <p>To know some different examples of magnets, including bar, horseshoe, button and ring,</p> <p>To know some uses of magnets.</p>	<p>To know that gravity is a non-contact force that pulls objects together.</p> <p>To know that air resistance and water resistance are both types of friction.</p>
	Forces in motion	<p>To know that friction is a contact force that acts between two surfaces to slow an object down.</p> <p>To know that magnetism is a non-contact force that affects objects containing magnetic metal.</p> <p>To understand that the opposite poles of a magnet attract one another and like poles repel one another.</p>	<p>To know that unsupported objects fall towards the Earth because of gravity.</p> <p>To know that friction, air resistance and water resistance act in the opposite direction to a moving object.</p> <p>To know that when forces are imbalanced, the speed, shape or direction of an object changes.</p> <p>To know that when forces are balanced the speed, shape or direction of an object stays the same.</p> <p>To know that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.</p>
	Factors affecting forces	<p>To know that rougher surfaces have more friction between them than smoother surfaces.</p> <p>To understand that the strength of different magnets may vary.</p>	<p>To know that rougher surfaces have more friction between them than smoother surfaces and how that may affect movement.</p> <p>To know that the larger the surface area of an object the greater the air or water resistance it creates.</p>