



Science Curriculum



Year 3	Year 4	Year 5	Year 6
<p>Identify that animals, including humans, need the right types and amount of nutrition</p> <p>Identify that humans and other animals have skeletons and muscles for support, protection and movement.</p>	<p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p>Identify the different types of teeth in humans and their simple functions</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>Describe the life process of reproduction in some plants and animals.</p>	<p>Describe how living things are classified into broad groups</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>
<p>Identify and describe the functions of roots, stem/trunk, leaves and flowers</p> <p>Explore the requirements of plants for life and growth</p> <p>Investigate the way in which water is transported within plants</p> <p>Explore the part that flowers play in the life cycle of flowering plants.</p>	<p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Describe the changes as humans develop to old age.</p>	<p>I Identify, name and describe the main parts of the human circulatory system</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>
<p>Compare and group together different kinds of rocks</p> <p>Describe in simple terms how fossils are formed</p> <p>Recognise that soils are made from rocks and organic matter.</p>	<p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity</p> <p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways</p>

<p>Compare how things move on different surfaces</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p>Predict and observe how magnets attract or repel each other and attract some materials and not others</p> <p>Compare and group everyday materials to see if they are attracted to a magnet, and identify some magnetic materials</p> <p>Describe magnets as having two poles</p>	<p>Compare and group materials together, according to whether they are solids, liquids or gases</p> <p>Observe that some materials change state when they are heated or cooled</p> <p>Identify the part played by evaporation and condensation in the water cycle</p>	<p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>Learn how to change the brightness of bulbs, the loudness of buzzers and the on/off position of switches (and explain)</p> <p>Use recognised symbols when representing a simple circuit in a diagram.</p>
<p>Recognise that they need light in order to see things and that dark is the absence of light</p> <p>Notice that light is reflected from surfaces</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>Find patterns in the way that the size of shadows change.</p>	<p>Identify how sounds are made</p> <p>Recognise that vibrations from sounds travel through a medium to the ear</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>Describe the movement of the Moon relative to the Earth</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p>	<p>Recognise that light appears to travel in straight lines</p> <p>Explain that objects are seen because they give out or reflect light into the eye</p> <p>Explain how shadows are formed and can be altered.</p>
	<p>Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts</p> <p>Identify whether or not a lamp will light in a simple series circuit</p> <p>Recognise that a switch opens and closes a circuit</p> <p>Recognise some common conductors and insulators</p>	<p>Compare and group together everyday materials on the basis of their properties</p> <p>Know that some materials will dissolve in liquid to form a solution</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Explain that some changes result in the formation of new materials</p>	

