

Science Long Term Plan

	<u>Autumn Term</u>	<u>Spring Term</u>	<u>Summer Term</u>
<u>Year 1</u>	<p>Plants Identify and name a variety of common plants Describe the basic structure of a variety of common plants</p> <p>Seasonal changes (part 1) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Animals including Humans Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p>	<p>Everyday Materials Identify and name materials Physical properties of everyday materials Compare and sort materials based on properties.</p> <p>Seasonal Changes Observe and describe weather associated with winter and spring and how day length varies.</p>	<p>Plants Identify and name common plants and trees in the local environment. Observe and compare plants and trees in the local environment.</p> <p>Seasonal Changes Observe changes from autumn to winter.</p>
<u>Year 2</u>	<p>Living things and their habitats Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Uses of everyday materials Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass,</p>	<p>Animals including Humans Understand that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Plants</p>	<p>Living things and their habitats Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p>

	brick, rock, paper and cardboard for particular uses.	Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	
<u>Year 3</u>	<p>Plants Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</p> <p>Forces and magnets Compare how things move on different surfaces, observe how magnets attract or repel each other, describe magnets as having two poles, compare and group everyday materials and make predictions.</p>	<p>Animals including humans Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Rocks Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p>	<p>Light Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces.</p>

<p><u>Year 4</u></p>	<p>Animals including humans Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Electricity Can identify common appliances that run on electricity. Can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p>	<p>Sound Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the pitch of a sound and features of the object that produced it</p> <p>States of matter Compare and group materials together, according to whether they are solids, liquids or gases Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p>	<p>Electricity Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p> <p>Living things and their habitats Explore. and use classification keys to help group, identify and name a variety of living things in their local and wider environment Recognise that environments can change and that this can sometimes pose dangers to living things.</p>
<p><u>Year 5</u></p>	<p>Properties and changes of materials Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</p>	<p>Forces Can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Can identify the effects of air resistance, water resistance and</p>	<p>Living things and their habitats Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.</p>

	<p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Earth and Space 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.</p>	<p>friction that act between moving surfaces.</p> <p>Animals including humans Describe the changes as humans develop to old age</p>	<p>Sound Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the pitch of a sound and features of the object that produced it</p>
<u>Year 6</u>	<p>Evolution and inheritance Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Animals including humans Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p>	<p>Electricity Can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit Can compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Can use recognised symbols when representing a simple circuit in a diagram</p>	<p>Living things and their habitats Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals Give reasons for classifying plants and animals based on specific characteristics</p> <p>Light Recognises that light appears to travel in straight lines. Can use the idea that light travels in straight lines to explain that objects</p>

	<p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. Describe the ways in which nutrients and water are transported within animals, including humans.</p>		<p>are seen because they give out or reflect light into the eye. Can explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</p>
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