
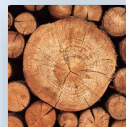


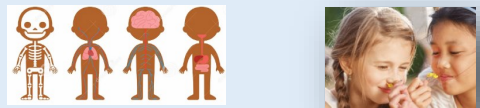

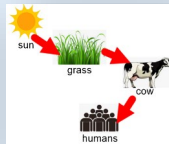
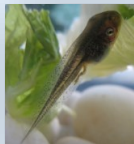



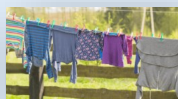
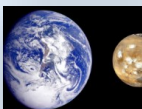
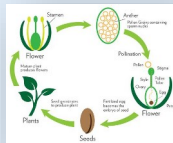


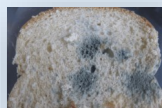




Science Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Animals, including humans  <p>Year 1 will identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. They will use science enquiry skills to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). They will identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Year 1 will explore the world around them and raise their own simple questions and begin to recognise different ways in which they might answer scientific questions.</p>	Materials  <p>Year 1 will identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. They will learn the basic structure of a common flowering plants including the roots, trunk, branches and leaves of trees.</p> <p>As scientists we will be distinguishing between an object and the material which it is a made from. Identifying and naming a variety of everyday materials, including wood, plastic, glass, metal, water and rocks. They will also describe the simple physical properties of a variety of everyday materials and compare and group together a variety of everyday materials on the basis of their simple properties.</p>	Materials  <p>Year 1 will identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. They will learn the basic structure of a common flowering plants including the roots, trunk, branches and leaves of trees.</p> <p>As scientists we will be distinguishing between an object and the material which it is a made from. Identifying and naming a variety of everyday materials, including wood, plastic, glass, metal, water and rocks. They will also describe the simple physical properties of a variety of everyday materials and compare and group together a variety of everyday materials on the basis of their simple properties.</p>	Plants  <p>Year 1 will identify, name, draw and label the basic parts of the human body. They will learn to say which part of the body is associated with each sense.</p> <p>As scientists Year 1 will be learning all about the senses using scientific enquiry.</p> <p>With help, Year 1 will use Venn diagrams and tables . They will measure and observe using simple equipment: egg timers, ruler, tape measure, metre stick, beaker , hand lenses. They will measure with non-standard units and begin to use simple standard units: cm, m, ml, l,</p>	The Human Body and Senses  <p>Year 1 will identify, name, draw and label the basic parts of the human body. They will learn to say which part of the body is associated with each sense.</p> <p>As scientists Year 1 will be learning all about the senses using scientific enquiry.</p> <p>With help, Year 1 will use Venn diagrams and tables . They will measure and observe using simple equipment: egg timers, ruler, tape measure, metre stick, beaker , hand lenses. They will measure with non-standard units and begin to use simple standard units: cm, m, ml, l,</p>	
	SEASONS Year 1 will observe changes across the four seasons and observe and describe weather associated with the seasons and how day length varies.					
Year2	Living things and their habitats  <p>As scientists, Year 2 will explore the world around them and raise their own simple questions. They will explore and compare the differences between things that are living, dead and things that have never been alive. They will identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of the different kinds of animals and plants, and how they depend on each other. They will look for patterns in where animals choose to live. Year 2 will identify and name a variety of plants and animals in their habitats, including micro– habitats. They will describe how animals obtain their food from plants and other animals, using the idea of simple food chains, and identifying and naming different sources of food.</p> <p>Year 2 will research that animals, including humans, have offspring which grow into adults. They will find out about and describe the basic needs of animals, including humans, for survival (water, food, air.) Year 2 will describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	Animals, including human (Growth)  <p>As scientists, Year 2 will be observing and describing how seeds and bulbs grow into matured plants. They will observe plants growing over time. They will investigate and describe how plants need water, light and a suitable temperature to grow and stay healthy. They will use scientific enquiry to compare different conditions (light, water and temperature) for growing plants and how this effects the health and growth of a plant.</p>	Plants  <p>Year 2 will distinguish between an object and the material from which it is made. They will identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Year 2 will describe the simple physical properties of a variety of everyday materials and compare and group together a variety of everyday materials based on their simple properties. They will find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching and solve problems.</p> <p>Year 2 will use simple equipment: egg timers, ruler, tape measure, metre stick, beaker, hand lenses. Measure with non-standard units and begin to use simple standard units: mm, cm, m, ml, l, half litre, °C. They will use venn diagrams, tally charts, bar charts, pictograms, tables and a simple food chain.</p>	Uses of everyday materials  <p>Year 2 will distinguish between an object and the material from which it is made. They will identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Year 2 will describe the simple physical properties of a variety of everyday materials and compare and group together a variety of everyday materials based on their simple properties. They will find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching and solve problems.</p> <p>Year 2 will use simple equipment: egg timers, ruler, tape measure, metre stick, beaker, hand lenses. Measure with non-standard units and begin to use simple standard units: mm, cm, m, ml, l, half litre, °C. They will use venn diagrams, tally charts, bar charts, pictograms, tables and a simple food chain.</p>		

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Rocks 	Plants 	Forces and Magnets 	Animals, including humans 	Light 	
	<p>Year 3 will be exploring rocks and soil in our environment. They will use comparative tests to investigate the properties of different kinds of rocks and research how rocks are formed, with a detailed look at the formation of fossils. They will investigate the composition of soils and identify that soils are made from rocks and organic matter.</p> <p>Year 3 will study plants in greater depth. They will research and identify and describe the functions of different parts of flowering plants: roots, stem, trunk, leaves and flowers. They will use fair testing to investigate 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>Year 3 will observe over time as they investigate the way in which water is transported within plants. They will also research and identify the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. They will look to see if there is a pattern followed by pollinating insects when choosing flowers.</p>		<p>Year 3 will compare how things move on different surfaces. They will notice that some forces need contact between two objects, but magnetic forces can act at a distance and observe how magnets attract or repel each other and attract some materials and not others. They will also compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. They will learn that magnets have 2 poles and predict whether two magnets will attract or repel each other, depending on which poles are facing each other. Year 3 will Identify animals and look at nutrition and what they eat. They will group foods. They will also identify that humans and some other animals have skeletons and muscles for support, protection and movement. They will ask questions and conduct fair tests.</p>		<p>Year 3 will use comparative investigations to recognise that they need light in order to see things and that the dark is an absence of light. Investigations will be designed to notice that light is reflected from surfaces. They will research daylight and recognise that light from the sun can be dangerous and that there are ways to protect the eyes.</p> <p>They will recognise that shadows are formed when the light from a light source is blocked by a solid object.</p> <p>Year 3 will observe the way that the size of shadows change over time and identify patterns.</p> <p>Year 3 will use notes, bar charts, tables, keys, labelled diagrams and drawings. They will have help to analyse data and use simple measurements and equipment with support: Data loggers, thermometers, beakers, syringes. They will use measures: mm, cm, m, cl, l, °C, lx.</p>	
Year 4	Living things and their habitats 	Electricity 	Animals, including humans—Teeth and digestion 	States of matter 	Sound 	
	<p>Year 4 will recognise that living things can be grouped in a variety of ways. They will explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. They will write their own questions to create a branch diagram. They will research and recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>Year 4 will identify common appliances that run on electricity and learn basic safety rules when using electricity. They will construct simple series electrical circuits, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. They will investigate whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. They will recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights a simple circuit. Year 4 will use a fair test to recognise some common conductors and insulators, and associate metals with being good conductors.</p>		<p>Year 4 will describe the simple function of the basic parts of the digestive system in humans. They will research and identify the different types of teeth in humans and their simple functions.</p> <p>Year 4 will construct and interpret a variety of food chains, identify producers, predators and prey after researching animal teeth and using problem solving skills.</p> <p>Year 4 will compare and group materials together according to whether they are solids, liquids or gases. They will observe that some materials change state when they are heated or cooled, and measure and research the temperatures at which this happens in degrees Celsius. They will identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>		<p>Year 4 will identify how sounds are made, associating some of them with something vibrating. They will use their knowledge of solids, liquids and gases to recognise that vibrations from sounds travel through a medium to the ear. They will find patterns between the pitch of a sound and features of the object that produced it. They will also investigate and find patterns between the volume of sound and the strength of the vibrations that produced it. Year 4 will use a fair test to recognise that sound gets fainter as the distance from the source increases.</p> <p>Year 4 will use notes, bar charts, tables, keys, labelled diagrams and drawings. They will have help to analyse data and use simple measurements and equipment with support: Data loggers, thermometers, beakers, syringes. They will use measures: mm, cm, m, cl, l, °C, lx.</p>	

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	<p>Properties and changes of materials</p> 	<p>Earth and Space</p> 	<p>Living things and their habitats</p> 		<p>Forces</p> 	<p>Animals, including humans</p> 
	<p>Year 5 will compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity, and response to magnets. The children will investigate and know that some materials will dissolve in liquid to form a solution, and describe how to recover the substance from the solution. Year 5 will use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. They will demonstrate that dissolving, mixing and changes of state are reversible. They will explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p>Year 5 will describe the movement of the Earth, and other planets, relative to the Sun in the solar system. They will describe the movement of the Moon relative to the Earth. They will describe the Sun, Earth and Moon as approximately spherical bodies. They will 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>Year 5 will research and describe the differences in the life cycles of a mammals, an amphibian, an insect and a bird. They will describe the life processes of reproduction in some plants. They will describe the life processes of reproduction in some animals.</p> <p>(Link to Vikings—farm animals, crops and fish)</p>		<p>Year 5 will describe the changes as humans develop to old age.</p> <p>Year 5 will explain that unsupported objects fall towards the Earth because of the force of gravity acting between Earth and the falling object. They will identify the effects of air resistance, water resistance and friction, that act between moving surfaces. They will recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Year 5 will explain which variables need to be controlled and why. Talk about how scientific ideas have developed over time.</p> <p>Year 5 will use: scientific diagrams and labels, classification keys, tables, scatter graphs, bar graphs, line graphs, timelines and measure in mm, cm, m, cl, l, °C.</p>	
Year 6	<p>Animals, including humans</p> 	<p>Living things a their habitats</p> 	<p>Evolution and Inheritance</p> 		<p>Light</p> 	<p>Electricity</p> 
	<p>Year 6 will identify and name the main parts of the human circulatory systems, and describe the functions of the heart, blood vessels and blood. They will recognise the impact of diet, exercise, drugs and life style on the way their bodies function. They will describe the way in which nutrients and water are transported within animals, including humans.</p> <p>Year 6 will describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. They will design an enquiry to study the growth of microorganisms. They will give reasons for classifying plants and animals based on specific characteristics.</p>		<p>Year 6 will research and recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. They will recognise that living things produce off-spring of the same kind, but normally off-spring vary and are not identical to their parents. They will identify how animals and plants are adapted to suit their environment in different ways and that adaption may lead to evolution.</p>		<p>Year 6 will use fair tests to investigate light and recognise that light appears to travel in straight lines. They will use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. They will explain that we see things because light travels from light sources to our eyes or from light sources to objects and then our eyes. They will make observations over time to study shadows and use the idea that light travels in straight lines to explain why shadows have the same shape as the object that cast them.</p> <p>Year 6 will associate the brightness of a lamp or the volume of a buzzer with the number of cells used in the circuit. They will design investigations to 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 the switches. They will use recognised symbols when representing a simple circuit in a diagram.</p> <p>Year 6 will explain which variables need to be controlled and why. Talk about how scientific ideas have developed over time.</p> <p>Year 6 will use: scientific diagrams and labels, classification keys, tables, circuit diagrams, scatter graphs, bar graphs, line graphs, timelines and measure in mm, cm, m, cl, l, °C and lx.</p>	