



Science Subject Coverage

<u>Year Group</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
Year 1	<p><u>Superheroes and Moon Zoom</u> <i>Superheroes - Human body; Eating healthily</i> <i>Moon Zoom - Properties of everyday materials</i></p> <p>Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future. Gather and record data to help in answering questions. Identify and classify. Compare and group together a variety of everyday materials on the basis of their simple physical properties. Describe the simple physical properties of a variety of everyday materials. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Distinguish between an object and the material from which it is made. Use their observations and ideas to suggest answers to questions. Perform simple tests. Ask simple questions and recognise that they can be answered in different ways.</p>	<p><u>Memory Box and Paws, Claws and Whiskers</u> <i>Memory Box - Animals, including humans</i> <i>Paws, Claws and Whiskers- Animals, including humans</i></p> <p>Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Gather and record data to help in answering questions. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Identify and classify. Perform simple tests.</p>	<p><u>Dinosaur Planet and Enchanted Woodland</u> <i>Dinosaur Planet - Plants and animals</i> <i>Enchanted Woodland - Plants and animals; Identifying and classifying</i></p> <p>Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Identify and classify.</p>

			<p>Use their observations and ideas to suggest answers to questions. Perform simple tests. Observe closely, using simple equipment. Ask simple questions and recognise that they can be answered in different ways.</p>
<p>Year 2</p>	<p><u>Street Detectives and Towers, Tunnels and Turrets</u> <i>Street Detectives- Everyday materials; Plants</i> <i>Towers, Tunnels and Turrets - Habitats; Everyday materials</i> Gather and record data to help in answering questions. Identify and classify. Perform simple tests. Observe closely, using simple equipment. Identify and name a variety of plants and animals in their habitats, including microhabitats.</p>	<p><u>Land Ahoy and Beat Band Boogie</u> <i>Land Ahoy - Everyday materials</i> <i>Beat Band Boogie- Sound</i></p> <p>Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. Gather and record data to help in answering questions. Identify and classify. Use their observations and ideas to suggest answers to questions. Perform simple tests. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p>	<p><u>The Scented Garden and Beachcombers</u> <i>The Scented Garden - Plants</i> <i>Beachcombers- Habitats; Living and non-living things; Food chains; Basic needs of animals.</i></p> <p>Identify and classify. Use their observations and ideas to suggest answers to questions. Perform simple tests. Observe closely, using simple equipment. Ask simple questions and recognise that they can be answered in different ways. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Observe and describe how seeds and bulbs grow into mature plants.</p>

			<p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Explore and compare the differences between things that are living, dead, and things that have never been alive.</p>
<p>Year 3</p>	<p><u>Urban Pioneers and Tribal Tales</u> <i>Urban Pioneers - Light and dark; Sources and reflectors; Shadows; Sun safety</i> <i>Tribal Tales - Plants; Light</i></p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>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><u>Scrumdiddlyumptious and Flow</u> <i>Scrumdiddlyumptious - Nutrition</i> <i>Flow - Soil; Plants</i></p> <p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their</p>	<p><u>Heroes and Villains and Mighty Metals</u> <i>Heroes and Villains- not Science based</i> <i>Mighty Metals - Forces and magnets</i></p> <p>, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</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 a solid object.</p> <p>Find patterns in the way that the size of shadows change.</p>	<p>own food; they get nutrition from what they eat.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Recognise that soils are made from rocks and organic matter.</p>	<p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Compare how things move on different surfaces.</p> <p>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p>Describe magnets as having two poles.</p> <p>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.</p> <p>Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p>
<p>Year 4</p>	<p><u>I am Warrior and Road Trip USA</u> <i>I am Warrior- not Science based</i> <i>Road Trip USA - Electricity</i></p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</p> <p>Identify 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.</p>	<p><u>Burps, Bottoms and Bile and Playlist</u> <i>Burps, Bottoms and Bile - Teeth types; Tooth decay and hygiene; The digestive system</i> <i>Playlist - Sound</i></p> <p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p>	<p><u>Blue Abyss and Potions</u> <i>Blue Abyss - Living things and their habitats; Animals, including humans</i> <i>Potions - States of matter</i></p> <p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p>

	<p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p> <p>Identify common appliances that run on electricity.</p>	<p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Recognise that vibrations from sounds travel through a medium to the ear.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Find patterns between the pitch of a sound and features of the object that produced it.</p> <p>Identify how sounds are made, associating some of them with something vibrating.</p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Describe the simple functions of the basic parts of the digestive system in humans.</p>	<p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Recognise that living things can be grouped in a variety of ways.</p> <p>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>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>Explore and use classification keys to help group, identify and name a variety of</p>
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Year 5	<p><u>Stargazers and Off with her Head</u> <i>Off with her Head- not Science based</i> <i>Stargazers - Earth and space; Forces</i></p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. Describe the Sun, Earth and Moon as approximately spherical bodies. Describe the movement of the Moon relative to the Earth. Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. Identify scientific evidence that has been used to support or refute ideas or arguments. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Use test results to make predictions to set up further comparative and fair tests.</p>	<p><u>Alchemy Island and Pharaohs</u> <i>Pharaohs- not Science based</i> <i>Alchemy Island - Properties and changes of materials</i></p> <p>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. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. 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. Demonstrate that dissolving, mixing and changes of state are reversible changes. Identify scientific evidence that has been used to support or refute ideas or arguments. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p>	<p><u>Beast Creator and Scream Machine</u> <i>Beast Creator - Living things and habitats</i> <i>Scream Machine - Forces; Properties of everyday materials; Mechanisms</i></p> <p>Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. Describe the life process of reproduction in some plants and animals. Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Identify scientific evidence that has been used to support or refute ideas or arguments. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Use test results to make predictions to set up further comparative and fair tests. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p>

	<p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	<p>Use test results to make predictions to set up further comparative and fair tests.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	<p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>
<p>Year 6</p>	<p><u>Child's War and Tomorrow's World</u> <i>Child's War- not Science based</i> <i>Tomorrow's World - Light; Electricity</i></p> <p>Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</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>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> <p>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.</p> <p>Recognise that light appears to travel in straight lines.</p>	<p><u>ID and Frozen Kingdom</u> <i>ID - Classification; Families and inheritance</i> <i>Frozen Kingdom - Living things and their habitats</i></p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>Use test results to make predictions to set up further comparative and fair tests.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on</p>	<p><u>Gallery Rebels and Hola Mexico</u> <i>Gallery Rebels - Light</i> <i>Hola Mexico - Light and shadows</i></p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>

	<p>Use recognised symbols when representing a simple circuit in a diagram.</p>	<p>similarities and differences, including micro-organisms, plants and animals. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Give reasons for classifying plants and animals based on specific characteristics.</p>	
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