

	Working Scientifically	Changing Materials
Years 1-2	<p>Can ask simple questions.</p> <p>Can ask simple questions and recognising that they can be answered in different ways.</p> <p>Can observe closely, using simple equipment.</p> <p>Can perform simple tests.</p> <p>Can identify and classify phenomena.</p> <p>Can use their observations and ideas to suggest answers to questions.</p> <p>Can gather data to help in answering questions.</p> <p>Can record data to help in answering questions.</p> <p>Can identify patterns in their observations.</p> <p>Can suggest ways to improve a scientific investigation.</p> <p>Can explain their ideas using scientific vocabulary correctly.</p>	<p>Knows what an object is called and what it is made from.</p> <p>Can name a variety of different materials (including wood, plastic, glass, metal, water and rock).</p> <p>Can describe the properties of some materials.</p> <p>Can compare and group different materials based on their properties.</p> <p>Can compare whether a material is suitable for a job.</p> <p>Can identify whether a material is suitable for a job.</p> <p>Can list a variety of uses for a given material e.g. metal – coins, spoons, cans, cars.</p> <p>Can explain why an object can be made from different material e.g. a spoon can be wooden or metal.</p> <p>Can explain how some materials can be changed.</p>
	Working Scientifically	Our Living Earth
Years 1-2	<p>Can ask simple questions.</p> <p>Can ask simple questions and recognising that they can be answered in different ways.</p> <p>Can observe closely, using simple equipment.</p> <p>Can perform simple tests.</p> <p>Can identify and classify phenomena.</p> <p>Can use their observations and ideas to suggest answers to questions.</p> <p>Can gather data to help in answering questions.</p> <p>Can record data to help in answering questions.</p> <p>Can identify patterns in their observations.</p> <p>Can suggest ways to improve a scientific investigation.</p> <p>Can explain their ideas using scientific vocabulary correctly.</p>	<p>Can explain why an object can be made from different material e.g. a spoon can be wooden or metal.</p> <p>Can identify and name some common carnivores, herbivores and omnivores.</p> <p>Can describe the bodies of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Can compare the bodies of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Know that animals, including humans have offspring which grow into adults.</p> <p>Can identify, name, draw and label basic parts of the human body.</p> <p>Can recognise some of the signs of growth (e.g. egg, chick, chicken, egg or baby, toddler, child, teenager, adult).</p> <p>Can describe the importance of exercise for humans.</p> <p>Can describe the importance of eating the correct types of food</p> <p>Can describe the importance of hygiene.</p> <p>Can explore the differences between things that are living, dead and things that have never been alive (e.g. is a flame alive? Is a tree dead in winter?).</p> <p>Can compare the differences between things that are living, dead and things that have never been alive.</p> <p>Know some of the process of growth in humans and animals.</p>
	Working Scientifically	Habitats & Seasonal Change
Years 1-2	<p>Can ask simple questions.</p> <p>Can ask simple questions and recognising that they can be answered in different ways.</p> <p>Can observe closely, using simple equipment.</p> <p>Can perform simple tests.</p> <p>Can identify and classify phenomena.</p> <p>Can use their observations and ideas to suggest answers to questions.</p> <p>Can gather data to help in answering questions.</p> <p>Can record data to help in answering questions.</p> <p>Can identify patterns in their observations.</p> <p>Can suggest ways to improve a scientific investigation.</p> <p>Can explain their ideas using scientific vocabulary correctly.</p>	<p>Can observe changes across the four seasons.</p> <p>Can observe weather associated with the seasons and how day length changes.</p> <p>Can describe weather associated with the seasons and how day length changes.</p> <p>Know that it is not safe to look at the Sun, even when wearing sun glasses.</p> <p>Can talk about changes in the weather.</p> <p>Can talk about changes in the seasons.</p> <p>Can identify that living things live in habitats to which they are suited.</p> <p>Can describe how different habitats provide for the basic needs of different kinds of plants and animals.</p> <p>Can describe how plants and animals within a habitat depend on each other.</p> <p>Can identify and name plants and animals within a habitat (including microhabitats e.g. woodlice under a log.)</p> <p>Can describe how an animal gets their food from plants and other animals.</p> <p>Can use a food chain.</p> <p>Can identify and name different sources of food.</p> <p>Understands the term 'habitat'.</p> <p>Understands the term 'micro-habitat'</p> <p>Can compare animals that live in different habitats.</p>

	Working Scientifically	Geology, Mixtures & Separation
Year 3-6	<p>Can take accurate measurement using standard units.</p> <p>Can gather data to answer a question.</p> <p>Can record data to answer a question.</p> <p>Can report findings using simple scientific language.</p> <p>Can report findings using drawings.</p> <p>Can report findings using labelled diagrams.</p> <p>Can report findings using a table.</p> <p>Can use results to draw a simple conclusion.</p> <p>Can take accurate and precise measurements using scientific equipment.</p> <p>Can take repeat measurements where appropriate.</p> <p>Can record data and results using diagrams with labels.</p> <p>Can record data and results using tables.</p> <p>Can record data and results using bar and line graphs.</p>	<p>Can compare different rocks based on their appearance and their physical properties.</p> <p>Can group different rocks based on their appearance and their physical properties.</p> <p>Can use a microscope to identify and classify rocks according to whether they are made of grains or crystals.</p> <p>Can describe how fossils are formed.</p> <p>Can recognise that soils are made from rocks and organic matter.</p> <p>Can explore different soils and identify similarities and differences between them.</p> <p>Can use my knowledge of solids, liquids and gases to decide how to separate a mixture (including filtering, sieving and evaporating).</p> <p>Can demonstrate that dissolving is reversible.</p> <p>Can demonstrate that mixing is reversible.</p> <p>Can demonstrate that changes of state are reversible.</p> <p>Can explain that some changes result in the formation of a new material and that this kind of change is usually irreversible.</p>
	Working Scientifically	Electricity
Years 3-6	<p>Can ask relevant questions.</p> <p>Can conduct a scientific enquiry to answer my own questions.</p> <p>Can set up a simple scientific enquiry.</p> <p>Can make careful observations.</p> <p>Can take accurate measurement using standard units of measure.</p> <p>Can plan different types of scientific enquiries to answer questions.</p> <p>Can recognise and control variables.</p> <p>Can take accurate and precise measurements using scientific equipment.</p> <p>Can take repeat measurements where appropriate.</p>	<p>Can identify common appliances that run on electricity.</p> <p>Can name basic electrical components – cells, wires, bulbs, switches and buzzers.</p> <p>Recognises that a switch can be open or closed.</p> <p>Can identify whether or not a lamp will light, based on whether or not the lamp is part of a complete loop with a cell.</p> <p>Knows that a switch can control whether a lamp will light in a simple series circuit.</p> <p>Recognises some common conductors.</p> <p>Recognises some common insulators.</p> <p>Knows that metals are good conductors.</p> <p>Can draw a circuit using conventional circuit symbols.</p> <p>Can associate the brightness of a lamp and the volume of a buzzer with the voltage of cell used.</p> <p>Can associate the brightness of a lamp and the volume of a buzzer with the number of cells used.</p> <p>Can compare variations in how components function (brightness of bulbs, loudness of buzzers, on/off position of switches).</p> <p>Can give reasons for variations in how components function (brightness of bulbs, loudness of buzzers, on/off position of switches).</p> <p>Can use recognised symbols when representing a simple circuit on a diagram.</p> <p>Knows what precautions to take to work safely with electricity.</p>
	Working Scientifically	Environment, Ecology and Evolution
Years 3-6	<p>Can use results to draw a simple conclusion.</p> <p>Can use results to make a prediction for further values.</p> <p>Can identify difference, similarities and changes related to simple scientific ideas.</p> <p>Can use test results to make further predictions which will feed into further comparative and fair tests.</p> <p>Can report findings from an enquiry both orally and in writing.</p> <p>Can make a conclusion based on a test.</p> <p>Can explain results from an enquiry.</p> <p>Can identify a degree of trust within an enquiry.</p> <p>Can suggest improvements to be made to an investigation.</p>	<p>Knows that animals need the right types and amounts of nutrition.</p> <p>Knows that animals cannot make their own food.</p> <p>Can explore and use classification keys to group living things in the wider environment.</p> <p>Can explore and use classification keys to identify and name living things in their local environment.</p> <p>Knows that environments can change and that this can pose dangers to living things.</p> <p>Knows that living things have changed over time.</p> <p>Knows that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Knows that living things produce offspring, but normally offspring are not identical to their parents.</p> <p>Knows that animals are adapted to suit their environment in different ways.</p> <p>Knows that adaptation can lead to evolution.</p> <p>Can describe the difference in the life cycles of mammals, amphibians, insects and birds.</p> <p>Can describe the life process of reproduction in some animals.</p>