

# Science



## Progression of skills

## Foundation stage

Characteristic of learning		Development matters	
Playing and Exploring	<ul style="list-style-type: none"> <li>Show curiosity about objects, events and people.</li> <li>Engage in open-ended activity.</li> <li>Take a risk, engage in new experiences and learn by trial and error.</li> <li>Use senses to explore the world around.</li> </ul>	8 - 20m	<ul style="list-style-type: none"> <li>Closely observes what animals, people and vehicles do (The World)</li> </ul>
		30 - 50m	<ul style="list-style-type: none"> <li>Questions why things happen. (Speaking)</li> <li>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. (The World)</li> <li>Builds up vocabulary that reflects the breadth of their experience. (Understanding)</li> </ul>
		40 - 60m	Create simple representations of events, people and objects. (Being Imaginative) Looks closely at similarities, differences, patterns and change. (The World)
Creating & Thinking Critically	<ul style="list-style-type: none"> <li>Find ways to solve problems / find new ways to do things / test their ideas.</li> <li>Make links and notice patterns in their experience.</li> <li>Develop ideas of grouping, sequences, cause and effect</li> </ul>	ELG	<ul style="list-style-type: none"> <li>Develop their own narratives and explanations by connecting ideas or events, (Speaking)</li> <li>Answer how and why questions about their experiences. (Understanding)</li> <li>Make observations of animals and plants and explain why some things occur, and talk about changes. (The World)</li> <li>Choose the resources they need for their chosen activities. (Self Confidence &amp; Self Awareness)</li> <li>Handle equipment and tools effectively. (Moving &amp; Handling)</li> <li>Know about similarities and differences in relation to places, objects, materials and living thing. (The World)</li> </ul>

## Key Stage One – Working Scientifically

	Year 1	Year 2
Planning and Predicting	<ul style="list-style-type: none"> <li>Suggest what might happen and ways to test ideas.</li> </ul>	<ul style="list-style-type: none"> <li>With help, suggest some ideas and questions.</li> <li>Think about how to collect evidence.</li> <li>Suggest what might happen.</li> <li>Think about and discuss whether comparisons and tests are fair or unfair.</li> </ul>
Investigating and observing	<ul style="list-style-type: none"> <li>Make observations using appropriate senses.</li> <li>Explore using the five senses.</li> <li>Make simple comparisons and groupings.</li> </ul>	<ul style="list-style-type: none"> <li>Make observations and comparisons using simple equipment, following simple instructions.</li> <li>Use first-hand experiences and, with help, simple information sources to answer questions.</li> </ul>
Recording, analysing and evaluating	<ul style="list-style-type: none"> <li>Communicate findings in simple ways.</li> <li>Collect evidence to try to answer a question.</li> </ul>	<ul style="list-style-type: none"> <li>Record findings in simple ways including tables, graphs etc.,</li> <li>Say whether what happened was what was expected and draw simple conclusions.</li> </ul>

## Key Stage One

	Year 1	Year 2
Animals including humans	<ul style="list-style-type: none"> <li>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>Describe and compare the structure of a variety of common animals. (fish, amphibians, reptiles, birds and mammals, including pets)</li> <li>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li> </ul>	<ul style="list-style-type: none"> <li>Notice that animals, including humans, have offspring which grow into adults.</li> <li>Find out about and describe the basic needs of animals, including humans, for survival. (water, food and air)</li> <li>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> </ul>
Living things and their habitats		<ul style="list-style-type: none"> <li>Explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>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.</li> <li>Identify and name a variety of plants and animals in their habitats, including microhabitats.</li> <li>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</li> </ul>

Everyday Materials	<ul style="list-style-type: none"> <li>• Distinguish between an object and the material from which it is made.</li> <li>• Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>• Describe the simple physical properties of a variety of everyday materials.</li> <li>• Compare and group together a variety of everyday materials on the basis of their simple physical properties.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li>• Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>
Plants	<ul style="list-style-type: none"> <li>• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>• Identify and describe the basic structure of a variety of common flowering plants, including trees.</li> </ul>	<ul style="list-style-type: none"> <li>• Observe and describe how seeds and bulbs grow into mature plants.</li> <li>• Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul>
Seasonal changes	<ul style="list-style-type: none"> <li>• Observe changes across the four seasons.</li> <li>• Observe and describe weather associated with the seasons and how day length varies.</li> </ul>	