

## Year 4 - Progression of Knowledge and Skills Science

Term	Knowledge	Skills
<p style="text-align: center;"><b>Autumn 1</b> <b>Topic: Living things</b></p>	<ul style="list-style-type: none"> <li>• Recognise that living things can be grouped in a variety of ways.</li> <li>• Know that classification keys can be used to group.</li> <li>• Identify and name a variety of living things in the environment.</li> <li>• Recognise that environments can change and this can sometimes pose dangers to living things.</li> </ul>	<ul style="list-style-type: none"> <li>• Research endangered animals.</li> <li>• I can ask relevant questions to classify things.</li> <li>• Identify animals and classify into different groups.</li> <li>• To gather and record data in a table.</li> <li>• Find patterns from my results.</li> <li>• I can record observations from scientific enquiry.</li> <li>• I can use evidence to answer questions and present findings.</li> </ul>
<p style="text-align: center;"><b>Autumn 2</b> <b>Topic: Sound</b></p>	<ul style="list-style-type: none"> <li>• Identify how sounds are made, associating some of them with something vibrating.</li> <li>• Know that vibrations from sounds travel through a medium to the ear.</li> <li>• Know that sounds get fainter as the distance from the sound source increases.</li> </ul>	<ul style="list-style-type: none"> <li>• H/W- research how hearing aids work.</li> <li>• Conduct a fair test to answer a question.</li> <li>• I can observe vibrations which cause sound.</li> <li>• Spot patterns in results into how well sound travels.</li> <li>• Identify patterns in results to make conclusions.</li> </ul>

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		<ul style="list-style-type: none"> <li>• Record results in different ways.</li> <li>• Evaluate musical instrument based on sound and knowledge of pitch.</li> </ul>
<p style="text-align: center;"><b>Spring 1</b> <b>Topic: Animals including humans</b></p>	<ul style="list-style-type: none"> <li>• Describe the simple functions of the basic parts of the digestive system in humans.</li> <li>• Identify the different types of teeth in humans and their simple functions.</li> <li>• Identify and compare similarities and differences in human and animal teeth.</li> </ul>	<ul style="list-style-type: none"> <li>• I can ask questions to find out what animals eat.</li> <li>• I can research animal food chains to find out what animals eat.</li> <li>• Construct and interpret a variety of food chains, identifying producers, predators and prey.</li> <li>• Make predictions based on science knowledge of liquids to decay teeth.</li> <li>• Observe tooth decay over time.</li> <li>• Set up a comparative test to show effects of tooth decay.</li> <li>• Use a model to explain thinking.</li> <li>• I can record my results in a table and bar graph and identify patterns.</li> <li>• Evaluate learning and suggest improvements.</li> </ul>

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<p style="text-align: center;">Spring 2 Topic: Science Week</p>		<ul style="list-style-type: none"> <li>• Ask relevant questions and using different types of scientific enquiries to answer them.</li> <li>• Set up simple practical enquiries, comparative and fair tests.</li> <li>• Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>• Gather, record, classify and present data in a variety of ways to help answer questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> </ul>

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<p style="text-align: center;">Spring 2 Topic: Science Week</p>		<ul style="list-style-type: none"> <li>• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>• Identify differences, similarities or changes related to simple scientific ideas and processes.</li> <li>• Use straightforward scientific evidence to answer questions or to support findings.</li> </ul>
<p style="text-align: center;">Summer 1 Topic: States of Matter</p>	<ul style="list-style-type: none"> <li>• Compare and group materials together, according to whether they are solids, liquids or gases.</li> <li>• 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.</li> <li>• Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>	<ul style="list-style-type: none"> <li>• I can construct a fair test to answer questions.</li> <li>• I can compare and group materials together depending on their properties.</li> <li>• I can make predictions using straight forward evidence and observations.</li> <li>• I can carry out a fair test and identify change and measure factor.</li> </ul>

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Summer 1 Topic: States of Matter		<ul style="list-style-type: none"><li>• I can observe what happens when a liquid change to a solid.</li><li>• Make careful observations and identify similarities and differences.</li><li>• I can use a thermometer to take accurate measurements.</li><li>• I can interpret what I have observed using my own scientific knowledge.</li><li>• I can record using diagrams to explain my results.</li></ul>