

## Year 3 - Progression of Knowledge and Skills Science

Term	Knowledge	Skills
<p style="text-align: center;"><b>Autumn 1</b> <b>Topic: Rocks</b></p>	<ul style="list-style-type: none"> <li>• Compare different kinds of rocks on the basis of their appearance and simple physical properties.</li> <li>• Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</li> <li>• Recognise that soils are made from rock and organic matter.</li> </ul>	<ul style="list-style-type: none"> <li>• Research and learn about Mary Anning.</li> <li>• Ask questions to deepen my learning about rock formation.</li> <li>• Group materials based on their properties.</li> <li>• Classify rocks based on their properties.</li> <li>• I can set up tests to answer questions.</li> <li>• Carry out comparative tests to rank rock properties.</li> <li>• Make careful observations and identify similarities and differences.</li> <li>• Record classifications in a table, Venn or Carrol diagram.</li> <li>• I can record my results in a table.</li> <li>• Interpret the process of fossilisation using models and pictures.</li> </ul>

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<p style="text-align: center;"><b>Autumn 2</b> <b>Topic: Light</b></p>	<ul style="list-style-type: none"> <li>• Recognise we need light in order to see things and that dark is the absence of light.</li> <li>• Know that light is reflected from surfaces.</li> <li>• Recognise that light from the sun can be dangerous and that there are ways to protect your eyes.</li> <li>• Recognise that shadows are formed when light from a light source is blocked by an opaque object.</li> <li>• Find patterns in the way that the shadows change.</li> </ul>	<ul style="list-style-type: none"> <li>• I can raise questions when exploring materials and light.</li> <li>• I can make predictions based on scientific questions.</li> <li>• I can carry out a fair test and control variables.</li> <li>• I can observe what happens over time.</li> <li>• I can compare how different materials react to light.</li> <li>• I can identify patterns in my results to answer questions.</li> <li>• I can record my results in a table.</li> <li>• I can interpret my results and report on patterns found.</li> <li>• I can evaluate my test and suggest improvements.</li> </ul>

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<p style="text-align: center;"><b>Spring 1</b> <b>Topic: Forces and magnets</b></p>	<ul style="list-style-type: none"> <li>• Compare how things move on different surfaces.</li> <li>• Know that some forces need contact between two objects, but magnetic forces can act at a distance.</li> <li>• Know that magnets attract or repel each other and attract some materials and not others.</li> <li>• Know that magnets as having two poles.</li> </ul>	<ul style="list-style-type: none"> <li>• Research John McAdam to create own road surfaces</li> <li>• I can predict whether materials are magnetic or not.</li> <li>• Sort and classify materials into magnetic and non-magnetic.</li> <li>• Predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> <li>• I can plan and carry out a fair test using magnets.</li> <li>• I can observe different forces.</li> <li>• I can record my findings using scientific drawing.</li> <li>• I can spot patterns in my drawings and explain what is happening using magnetic fields.</li> <li>• I can use research and secondary sources to aid my explanations.</li> <li>• Evaluate my choices and suggest further 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: Animals including humans</p>	<ul style="list-style-type: none"> <li>• Know that humans and some other animals have skeletons and muscles for support, protection and movement.</li> <li>• Know that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</li> </ul>	<ul style="list-style-type: none"> <li>• I can use secondary sources to find out about muscles.</li> <li>• I can identify and classify animals into vertebrate and invertebrates.</li> <li>• I can make predictions from questions raised.</li> <li>• I can use scientific language to discuss ideas.</li> <li>• I can identify and classify foods.</li> </ul>

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<p style="text-align: center;"><b>Summer 1</b> Topic: Animals including humans</p>		<ul style="list-style-type: none"> <li>• I can answer questions about the uses of our bones.</li> <li>• I can look for patterns in results.</li> <li>• I can record my results in different ways.</li> <li>• I can evaluate my learning using scientific language.</li> <li>• I can evaluate my design and suggest improvements.</li> </ul>
<p style="text-align: center;"><b>Summer 2</b> Topic: Plants</p>	<ul style="list-style-type: none"> <li>• Identify and describe the functions of different parts of a flowering plant.</li> <li>• I can explore the requirements of plant life and growth.</li> <li>• I can investigate the way in which water is transported within plants.</li> <li>• I can explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal.</li> <li>• I can explain in detail what pollination is.</li> </ul>	<ul style="list-style-type: none"> <li>• I can identify the functions different parts of flowering plants: roots, stem/ trunk, leaves and flowers.</li> <li>• I can use research and my own scientific knowledge to explain the process.</li> <li>• I can identify and classify different seeds.</li> <li>• I can plan and carry out a comparative test.</li> <li>• I can make observations over time.</li> </ul>

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Summer 2 Topic: Plants		<ul style="list-style-type: none"><li>• I can look for patterns in my findings.</li><li>• I can record my findings using labelled scientific diagrams.</li><li>• I can interpret my findings using scientific knowledge.</li><li>• I can evaluate my seed spinner.</li></ul>