

<b>SCIENCE – YEAR 5</b>	
<b>AUTUMN TERM</b>	
<p>Pupils will have the opportunity to develop the following skills; Working scientifically:</p> <ul style="list-style-type: none"> <li>• Plan enquiries, including recognising and controlling variables where necessary</li> <li>• Take measurements, using a range of scientific equipment, with increasing accuracy and precision</li> <li>• Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models</li> <li>• Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</li> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> <li>• Use simple models to describe scientific ideas</li> <li>• Identify scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>	<p>Pupils will have the opportunity to develop their knowledge about:</p> <p><b>Earth and Space</b></p> <ul style="list-style-type: none"> <li>• To describe the Sun, Earth and Moon as approximately spherical bodies</li> <li>• To describe the movement of the Earth relative to the Sun in the solar system.</li> <li>• To describe the movement of the Moon relative to the Sun.</li> <li>• To use the idea of Earth’s rotation to explain day and night.</li> </ul> <p><b>Animals including humans</b></p> <ul style="list-style-type: none"> <li>• To describe the changes as humans develop to old age.</li> </ul> <p><b>Living things and their habitats</b></p> <ul style="list-style-type: none"> <li>• To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>
<b>SPRING TERM</b>	
<p><b>Working scientifically</b> – pupils will have the opportunity to develop the following skills:</p> <ul style="list-style-type: none"> <li>• Plan enquiries, including recognising and controlling variables where necessary</li> <li>• Take measurements, using a range of scientific equipment, with increasing accuracy and precision</li> <li>• Record data and results of increasing complexity using scientific diagrams and labels, tables, bar and line graphs, and models</li> <li>• Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</li> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests</li> </ul>	<p><b>Properties of Materials (and reversible changes)</b> - pupils will have the opportunity to develop their knowledge about:</p> <ul style="list-style-type: none"> <li>• Comparing and grouping together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>• How some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>• Solids, liquids and gases and decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>• Comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>• How dissolving, mixing and changes of state are reversible changes</li> <li>• Absorbency of materials</li> </ul>

<ul style="list-style-type: none"> <li>• Use simple models to describe scientific ideas</li> <li>• Identify scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<p><b>Living things and their habitats</b> - pupils will have the opportunity to develop their knowledge about:</p> <ul style="list-style-type: none"> <li>• Life processes and reproduction of plants: Germination, Growth, Fertilisation, Seed production, Seed dispersion</li> </ul>
<p><b>SUMMER TERM</b></p>	
<p>Working scientifically – pupils will have the opportunity to develop the following skills:</p> <ul style="list-style-type: none"> <li>• Plan enquiries, including recognising and controlling variables where necessary</li> <li>• Take measurements, using a range of scientific equipment, with increasing accuracy and precision</li> <li>• Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models</li> <li>• Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</li> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> <li>• Use simple models to describe scientific ideas</li> <li>• Identify scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>	<p>Pupils will have the opportunity to develop their knowledge of:</p> <p><b>Forces</b></p> <ul style="list-style-type: none"> <li>• Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>• Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>• Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> <li>• Working scientifically project on the weight of school bags or friction of shoes on different surfaces.</li> </ul> <p><b>Properties of Materials (and irreversible changes)</b></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>