



Fen Ditton C. P. School

**Science Coverage for Years 5 and 6**

**2020 – 2021**

**National Curriculum Statements**



| 1½ - 2 hour weekly sessions. | Term 1   | Term 2  | Term 3   | Continuous Provision<br>(Working Scientifically)  |
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| <p><b>Week 1</b></p>         | <p><b>Year 5 <i>Living things and their Habitats</i></b></p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> | <p><b>Year 6 <i>Living things and their Habitats</i></b></p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.</p> | <p><b>Consolidation Week</b><br/><i>Use/move as needed.</i></p>  | <ul style="list-style-type: none"> <li>• Plan enquiries, including recognising and controlling variables where necessary.</li> <li>• Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.</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> </ul> |
| <p><b>Week 2</b></p>         | <p><b>Year 5 <i>Living things and their Habitats</i></b></p> <p>Describe the life process of reproduction in some plants and animals.</p>                        | <p><b>Year 6 <i>Living things and their Habitats</i></b></p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>  | <p><b>Consolidation Week</b><br/><i>Use/move as needed.</i></p>  |   |
| <p><b>Week 3</b></p>         | <p><b>Year 5 <i>Animals, including Humans</i></b></p> <p>Describe the changes as humans develop to old age.</p>  | <p><b>Year 6 <i>Animals, including Humans</i></b></p> <p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Describe the ways in which nutrients and water are</p>              | <p><b>Year 6 <i>Animals, including Humans</i></b></p> <p>Recognise the impact of diet, exercise; drugs and lifestyle on the way their bodies function.</p> |   |

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|               |  | transported within animals, including humans.  |   | <ul style="list-style-type: none"> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> <li>• Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul> |
| <b>Week 4</b> | <p><b>Year 5 Properties and change of materials</b></p> <p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</p> | <p><b>Year 5 Properties and change of materials</b></p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p>               | <p><b>Year 5 Properties and change of materials</b></p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p>   |   |
| <b>Week 5</b> | <p><b>Year 5 Properties and change of materials</b></p> <p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p>   | <p><b>Year 5 Properties and change of materials</b></p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> | <p><b>Year 5 Properties and change of materials</b></p> <p>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.</p> |   |
| <b>Week 6</b> | <p><b>Year 5 Earth and Space</b></p> <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>Describe the movement of the Moon relative to the Earth.</p>  | <p><b>Year 5 Earth and Space</b></p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies.</p>  | <p><b>Year 5 Earth and Space</b></p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>  |   |
| <b>Week 7</b> | <b>Year 5 Forces</b>   | <b>Year 5 Forces</b>   | <b>Year 5 Forces</b>  |   |

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|                                     | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.   | Identify the effects of air resistance, water resistance and friction that act between moving surfaces.   | Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.   |  |
| <b>Week 8</b>                       | <b><i>Year 6 Evolution and Inheritance</i></b><br><br>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.                         | <b><i>Year 6 Evolution and Inheritance</i></b><br><br>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.                  | <b><i>Year 6 Evolution and Inheritance</i></b><br><br>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. |  |
| <b>Week 9</b>                       | <b><i>Year 6 Light</i></b><br><br>Recognise that light appears to travel in straight lines.<br><br>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. | <b><i>Year 6 Light</i></b><br><br>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.                                    | <b><i>Year 6 Light</i></b><br><br>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.                            |  |
| <b>Week 10</b>                      | <b><i>Year 6 Electricity</i></b><br><br>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.   | <b><i>Year 6 Electricity</i></b><br><br>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. | <b><i>Year 6 Electricity</i></b><br><br>Use recognised symbols when representing a simple circuit in a diagram.  |  |
| <b>Possible Investigation Ideas</b> | <b>Autumn Term</b>   | <b>Spring Term</b>  | <b>Summer Term</b>   |  |

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