

## Science - The National Curriculum - Year 5 and 6

### The Statutory requirements

#### Year 6

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| Working scientifically: -           | <p>During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills <b><u>through the teaching of the programme of study content:</u></b></p> <ul style="list-style-type: none"><li>▪ planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li><li>⑦ taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li><li>⑦ recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li><li>⑦ using test results to make predictions to set up further comparative and fair tests</li><li>⑦ reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li><li>⑦ identifying scientific evidence that has been used to support or refute ideas or arguments.</li></ul> |
| Living things and their habitats: - | <p>Pupils should be taught to:</p> <ul style="list-style-type: none"><li>⑦ describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</li><li>⑦ give reasons for classifying plants and animals based on specific characteristics.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Animals, including humans: -        | <p>Pupils should be taught to:</p> <ul style="list-style-type: none"><li>⑦ identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</li><li>⑦ recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</li><li>⑦ describe the ways in which nutrients and water are transported within animals, including humans.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Evolution and inheritance: -        | <p>Pupils should be taught to:</p> <ul style="list-style-type: none"><li>⑦ recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|                | <p>☐ recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>☐ identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>                                                                                                                                                                                                                                                 |
| Light: -       | <p>Pupils should be taught to:</p> <p>☐ recognise that light appears to travel in straight lines</p> <p>☐ 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</p> <p>☐ 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</p> <p>☐ use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> |
| Electricity: - | <p>Pupils should be taught to:</p> <p>☐ associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>☐ 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</p> <p>☐ use recognised symbols when representing a simple circuit in a diagram.</p>                                                                                                           |