**What I need to do in science in Year 6**

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| **Working scientifically, I need to be able to:** |  | **☺** | **😐** |
| plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary |  |  |  |
| take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate |  |  |  |
| record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs |  |  |  |
| use test results to make predictions to set up further comparative and fair tests |  |  |  |
| report and present 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 |  |  |  |
| identify scientific evidence that has been used to support or refute ideas or arguments. |  |  |  |

**What I need to do in Year 6: Living things and their habitats**

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| **I need to be able to:** |  | **☺** | **😐** |
| 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. |  |  |  |
| give reasons for classifying plants and animals based on specific characteristics. |  |  |  |

**What I need to do in Year 6: Animals, including humans**

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| **I need to be able to:** |  | **☺** | **😐** |
| identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. |  |  |  |
| recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies  function. |  |  |  |
| describe the ways in which nutrients and water are transported within animals, including humans. |  |  |  |

**What I need to do in Year 6: Evolution and inheritance**

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| **I need to be able to:** |  | **☺** | **😐** |
| recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago . |  |  |  |
| recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. |  |  |  |
| identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. |  |  |  |

**What I need to do in Year 6: Light**

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| **I need to be able to:** |  | **☺** | **😐** |
| recognise that light appears to travel in straight lines. |  |  |  |
| 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. |  |  |  |
| 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. |  |  |  |
| use the idea that light travels in straight lines to explain why shadows have the  same shape as the objects that cast them. |  |  |  |

**What I need to do in Year 6: Electricity**

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| **I need to be able to:** |  | **☺** | **😐** |
| associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. |  |  |  |
| 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. |  |  |  |
| use recognised symbols when representing a simple circuit in a diagram. |  |  |  |