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| **Year 6 Science Disciplinary Knowledge – Investigation** |
| **Investigation & Hypothesising Observing and recording Concluding and Evaluating** | Sci 1WTS | Sci 2WTS | Sci 3WTS | Sci 1EXS | Sci 2EXS | Sci 3EXS | Sci 1GDS | Sci 2GDS | Sci 3GDS |
| I can plan repeated tests changing different variables to ensure scientific reliability |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can alter and refine my hypothesis as a result of a previous investigation  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can justify the fairness of my investigation under scientific scrutiny |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can take accurate and precise measurements e to the nearest single unit of measure  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can use technology to improve the accuracy of measurements I might take.  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can use technology to create graphs and charts to illustrate a point |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can confirm the validity of results and conclusions by using data from more than one investigation.  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can demonstrate a confidence to doubt conclusions as a result of unfair testing or bias  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can evaluate my investigations to ensure scientific reliability. Fairness and lack of bias |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |



**Science Assessment and Tracking**

**Year 6 Overview 24/25**

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| **Science 1 - Electricity** |
|  **Objective** | **WTS** | **EXS** | **GD** |
| I know how to adjust the brightness of a lamp or the volume of a buzzer with the number of m cells issued in a circuit  |   | Rest of class |   |
| I know how to compare and give reasons for variations in how components function.  |  | Rest of class |  |
| I know the wire length affect how components work?  |  | Rest of class |  |
| I know that adding cells make bulbs glow more brightly, even if the wire length is long |  | Rest of class |  |
| Are there other components that make more of a difference in this situation or counteract the effect of the wire length? |  | Rest of class |  |
| I know how to mend a broken circuit |  | Rest of class |  |
| I know how to use symbols when representing a circuit in a diagram. (Bulb, closed switch, open switch, wire, cell, buzzer, battery and a motor). |  | Rest of class |  |

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| **Science 2 - Light** |
|  **Objective** | **WTS** | **EXS** | **GD** |
| I know that light appears to travel in straight lines  |   | Rest of class |   |
| I know that objects are seen because they give out or reflect light into the eye. |  | Rest of class |  |
| I know how our eyes work and how we see things |  | Rest of class |  |
| Recognise that the colours of the visible spectrum have different wavelengths. |  | Rest of class |  |
| Explain how a prism allows us to see the visible spectrum. |  | Rest of class |  |
| I know what refraction is. |  | Rest of class |  |
| Understand refraction as light bending or changing direction. |  | Rest of class |  |
| Explain how light is refracted as it travels through glass or water. |  | Rest of class |  |
| I know why shadows have the same shape as the objects that cast them. |  | Rest of class |  |
|  Understand how shadows change size. |  | Rest of class |  |
| Understand that shadows are the same shape as the object that casts them |  | Rest of class |  |

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| **Science 3 – Animals including humans** |
|  | **WTS** | **EXS** | **GDS** |
| I know the changes human go through as they develop to old age.  |  | Rest of class |  |
| I know the main parts of the human circulatory system including the functions of the heart, blood vessels and blood |   | Rest of class |   |
| I know the impact that diet, exercise, drugs and lifestyle impact on the way the body functions. |  | Rest of class |  |
| I know the way in which nutrients and water are transported in animals including humans |  | Rest of class |  |

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| **Science 4 – Evolution and Adaptation** |
| I know what evolution and inheritance is.  | **WTS** | **EXS** | **GDS** |
| I know how living things have changed over time |  | Rest of class |  |
| I know how fossils provide information about what life was like millions of years ago |   | Rest of class |   |
| I know living things produce offspring and that these sometimes vary and are not identical to parents |  | Rest of class |  |
| I know how animals and plants are adapted to suit their environment and that adaptation may lead to evolution. |  | Rest of class |  |

**Next Steps -Learning Points for next enquiry (noting revisit points for Pupils at WTS )**

**1)**

**2)**

**3)**

**4)**