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| **Year 4 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 an investigation that demonstrates how I have considered the need for the test to fair and unbiased. |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can say 2 reasons why my test is fair |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can say what I am trying to prove or disprove and how my test will help me do this in a fair way |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can collect a range of measurements and data to make comparison and check for anomalies  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can explain which measurements I am taking and the validity of these |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
|  I can design a table or chart that enables me to display my data collected in the most informative way |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can explain how the conclusion of my investigation relates to my hypothesis.  |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can articulate my hypothesis prior to designing my investigation |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can evaluate the results of my Investigation and explain why they are not biased |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can identify where there might be anomalies |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |
| I can use my results to prove or disprove the hypothesis using a balanced argument |  |  |  | Rest of class | Rest of class | Rest of class |  |  |  |



**Science Assessment and Tracking**

**Year 4 Overview 24/25**

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| **Science – Animals Including Humans** |
|  **Objective** | **WTS** | **EXS** | **GD** |
|  I know animals including humans need the right type and amount of nutrition (food groups) |   | Rest of class |   |
|  I know animals cannot make their own food and that they get their nutrition from what they eat (food chains & see links with Food Technology balance diet/vitamins/ healthy active) |  | Rest of class |  |
| I know the difference between a vertebrate and invertebrate (grouping fish, mammals, insects, amphibians and reptiles into vertebrates and invertebrates) |  | Rest of class |  |
| I know that humans and some other animals have a skeleton and muscles for support, protection and movement (differences between humans and other animals e.g., reptiles fish), |  | Rest of class |  |
| I know the basic parts of the digestive system and how it works (mouth, oesophagus, stomach, small/large intestine, anus) |  | Rest of class |  |
|  I know the different types of teeth in humans and their functions (canines, incisors, premolar, molar, wisdom teeth and their functions) |  | Rest of class |  |

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| **Science - Forces and Magnets** |
|  **Objective** | **WTS** | **EXS** | **GD** |
| I know how things move on different surfaces (concrete, grass, sand, carpet, wood)  |   | Rest of class |   |
| I know some forces need contact between two objects (friction, air resistance, drag) |  | Rest of class |  |
| I know magnetic forces can act at a distance (magnetic forces can only attract and repel through air) |  | Rest of class |  |
| I know magnets attract or repel and which materials are affected in this way (magnet and magnetic material attract, other objects will repel) |  | Rest of class |  |
| I know how to group and compare materials based on their magnetic attraction (magnetic objects and nonmagnetic objects) |  | Rest of class |  |
| I know magnets have two poles (North, South) |  | Rest of class |  |
| I know how magnetic poles attract or repel each other North and North repel, South and South repel, North and South attract) |  | Rest of class |  |

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| **Science – Light and Sound** |
|  | **WTS** | **EXS** | **GDS** |
|  I know in order to see things, there must be light  |  | Rest of class |  |
| I know dark is the absence of light • I know what reflection is (mirrors change direction of light) |   | Rest of class |   |
| I know the dangers of sunlight and how to protect eyes (sunglasses, don’t look directly at the sun) |  | Rest of class |  |
| I know how shadows are made (Object preventing light shining through)  |  | Rest of class |  |
| I know how to adjust the size of shadows (movements towards and away from the light source) |  | Rest of class |  |
| I know that sounds are made from vibrations |  | Rest of class |  |
|  I know sounds travel through a medium to the ear (air, vacuum) |  | Rest of class |  |
| I know that objects make different sounds and pitches (nature, people, animals) |  | Rest of class |  |
|  I know the relationship between volume of a sound and strength of a vibration |  | Rest of class |  |

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| **Science – Electricity** |
|  | **WTS** | **EXS** | **GDS** |
|  I know common appliances that run on electricity  |  | Rest of class |  |
| I know how to complete a simple electrical circuit which includes cells, switches, wires and buzzers |   | Rest of class |   |
| I know if a lamp will light up or not dependent on the circuit  |  | Rest of class |  |
| I know which materials make good conductors and insulators (insulators- plastic, wood and rubber. Conductors – silver, gold, metal and sea waves) |  | Rest of class |  |
| I know a switch opens and closes the circuit |  | Rest of class |  |

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

**1)**

**2)**

**3)**

**4)**