

Science Enquiry Overview

|                                    | <u>EYFS</u>   | <u>Year 1</u>   | <u>Year 2</u>   | <u>Year 3</u>   | <u>Year 4</u>  | <u>Year 5</u>   | <u>Year 6</u>   |
|------------------------------------|---|---|---|---|--|---|---|
| <b>Researching</b>                 | Finding things in books e.g. animals<br><br>Watching videos and feeding information back to whole class | Which materials can be recycled?<br><br>How are animals in Australia different to the animals we have in the UK?  | What do you need in a healthy diet and why?<br><br>How does the habitat of Arctic compare to the habitat of the rainforest? | Food groups and how to keep healthy.<br><br>Why and how soils are formed.   | Parts of the digestive system.<br><br>Similarities and differences in the melting points of different materials.   | Gestation period of different animals.<br><br>Life cycles of different animals<br><br>Pulleys, levers and gears   | Different types of microbes and if they are always harmful.<br><br>How idea of electricity has changed over time.<br><br>How food and water are transported around the body.  |
| <b>Identifying and Classifying</b> | Simple groupings e.g. colours, transport, opposites such as hot / cold                                  | Naming the parts of a human body.<br><br>Things found in each season.<br><br>Things that will float or sink.  | Which offspring belongs to which animal?<br><br>Which materials are shiny and which materials are dull?                     | Animals with and without skeletons.<br><br>Different types of rocks – grains, crystals, fossils etc.  | Types of teeth in mammals.<br><br>Solids, liquids and gases.<br><br>Classification keys.   | Grouping materials.<br><br>Phases of the moon.<br><br>Stages in human life cycle.   | Microbes<br><br>Classification keys – vertebrates and invertebrates.<br><br>Organs of the digestive system.<br><br>Colours that make up light.  |
| <b>Pattern Seeking</b>             | Distance things travel e.g. cars / trains along a pipe  | Do trees with bigger leaves lose their leaves first in Autumn?<br><br>Do all trees lose their leaves in Autumn?<br><br>Are all doors made from the same material? | Do bigger seeds grow into bigger plants?  | Time it takes different plants to grow.<br><br>Are different mini beasts found in different places?<br><br>The way magnets behave.<br><br>Patterns in the way shadows form. | Objects and the different sounds they make.<br><br>Link between the amount of noise in school and the time of day.<br><br>Time it takes different ice lollies to melt. | Do people with longer arms through further?<br><br>What is the pattern between the size of planets and the distance from the sun and the length of time it takes for them to orbit the sun. | Is there a pattern between the size and shape of a bird's beak and the food it will eat?<br><br>Do people with longer legs run faster?  |
| <b>Observing Over Time</b>         | Ice<br><br>Their own journey  | Height over the year.<br><br>Tree during different seasons.<br><br>Plant growing over time.   | What happens to my bean after I have planted it?<br><br>How much food and drink do I have over a week?                      | How water is transported in plants.<br><br>Stages of a plant life cycle.<br><br>How shadows change throughout the day.  | Time it takes different ice lollies to melt.<br><br>Evaporation time of a puddle.<br><br>How egg shells change when left in different drinks.                          | Length of the day at different times of the year.<br><br>Reversible and irreversible changes.<br><br>How objects fall.<br><br>Chicks hatching.<br><br>Length of babies.                     | What happens to bread if it is left for 2 weeks?<br><br>How does a shadow change over the day?<br><br>How much exercise I do during a week?   |
| <b>Fair Testing</b>                |   |   |   | Friction – how things move on different surfaces.   | Melting temperature of different substances.<br><br>Does the length of wire affect how bright a bulb is?   | Which material is best for a warm jacket?<br><br>What makes the best parachute?   | How does the length of time we exercise for affect our heart rate?<br><br>How does the voltage of the batteries in a circuit affect the brightness of the lamp?<br><br>Does the distance away from an object affect the size of the shadow? |