






## Subject Overview

| Science                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vision for Science</b><br>Through building up a body of key knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.                                                                                                    |                                                                                                                                                                                                                                            | <b>Key Concepts</b><br>Life Organisation<br>Force Cause and effect<br>Changes Systems<br>Reactions Diversity<br>Matter Variation                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                   | <b>Content and Sequencing</b><br>Learning is sequenced so that knowledge is built upon each year e.g. In Year 1 knowing that materials can be grouped; Year 3 understanding that materials can be classed as solids, liquids or gases; Year 5 knowing that all matter has mass.                                                                                                                            |                                                                                                                                                                                    |
| Curriculum Drivers                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                    |
| Aspirational                                                                                                                                                                                                                                                                                                                            | Outward Looking                                                                                                                                                                                                                            | Conceptual                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Experience Led                                                                                                                                                                                                                    | Language Rich                                                                                                                                                                                                                                                                                                                                                                                              | Enquiry Based                                                                                                                                                                      |
| Science teaching and learning enables children to understand that great Scientists have influenced our society today and are continuing to influence our future. We teach them that there are many jobs using Science available to them.                                                                                                | Science teaching and learning builds pupil's knowledge of their local and wider environment. It provides them with an understanding about what impact Science can have on their life and that of their community and also the wider world. | A scientific concept is an idea or model explaining some natural phenomenon. Many scientific concepts are abstract and complex. Science teaching and learning deepens knowledge of key concepts so that learning is accessible and memorable.                                                                                                                                                                                                                                                                       | True scientists make discoveries through experience. Science teaching and learning is practical and uses the environment to make learning memorable. Children make links to their own experiences to make sense of new knowledge. | The quality and variety of language heard and spoken are key factors in developing scientific vocabulary and articulating scientific concepts clearly and precisely. This language assists children making their thinking clear, both to themselves and others.                                                                                                                                            | Science teaching and learning begins with asking questions. Throughout a unit of learning, children are encouraged to question phenomena with a sense of excitement and curiosity. |
| Links with Mathematics and English                                                                                                                                                                                                                   |                                                                                                                                                                                                                                            | Progressive                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                   | Inclusive                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                    |
| Opportunities to apply their English skills: <ul style="list-style-type: none"> <li>➤ Explanations about experiments</li> <li>➤ Biographies about scientists</li> </ul> Opportunities to apply their Mathematics skills: <ul style="list-style-type: none"> <li>➤ Data collection and analysis</li> <li>➤ Rounding, averages</li> </ul> |                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>➤ Scientific enquiry will be evident in books.</li> <li>➤ Evidence of the scientific process will be clear – making predictions using evidence to draw conclusions.</li> <li>➤ Children can talk confidently at each stage about the big ideas in Science.</li> <li>➤ Evidence of children applying their understanding after the unit of learning or another subject for example learning about states of matter and then applying this in their own experiments</li> </ul> |                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>➤ Task varied to support children to access the task.</li> <li>➤ Learning is challenging.</li> <li>➤ Children's starting point are identified using assessment tools and teaching builds on prior knowledge.</li> <li>➤ The curriculum is practical to engage all.</li> <li>➤ The outside environment and other resources are used to aid understanding.</li> </ul> |                                                                                                                                                                                    |

