

Science Curriculum Intent – Kilmington Primary School

The National Curriculum			
<p>The national curriculum for science aims to ensure that all pupils:</p> <ul style="list-style-type: none"> develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future. 			
Curriculum Intent			
<p>A high-quality science education provides the foundations for understanding the world. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.</p>			
Curriculum Design			
<p>Kilmington School operates with mixed age classes and follows a two year rolling programme to cover the full range of topics in Science. The school uses the Rising Stars 'Switched on Science' as a core scheme. Units of learning are planned to motivate and inspire pupils through meaningful and purposeful learning opportunities. These will draw knowledge and understanding together in a coherent manner through generating and exploring 'key questions'. Memorable experiences are often incorporated into the sequence to enhance learning and create an exciting learning environment. This might be a trip, a special visitor, an extraordinary activity or event. There is a clear skills development pathway identified for Science, which sets out expectations in each Key Phase: EYFS, KS1, LKS2 and UKS2. This enables teachers to create sessions that are supported by previous learning and develop skills at an appropriate level.</p>			
Nurturing lifelong learning behaviours through Science			
<p>Motivation/ Resilience</p> <ul style="list-style-type: none"> Keeping going Perseverance Resilience Not giving up <p>I'm Wilbur Woodpecker</p> 	<p>I'm Olive Owl</p>  <p>Engagement/ Reflectiveness</p> <ul style="list-style-type: none"> Planning Reflecting Thinking things through 	<p>I'm Betty Bee</p>  <p>Collaboration/ Reciprocity</p> <ul style="list-style-type: none"> Listening Sharing Collaborating Working as a team. 	<p>Thinking/ Resourcefulness</p> <ul style="list-style-type: none"> Curiosity Finding out Why? Where? When? Who? <p>I'm Samuel Squirrel</p> 
<p>Trialling different experimental approaches. Dealing with unexpected outcomes.</p>	<p>Understanding the need for a 'fair test'. Drawing on prior knowledge to help understand the topic. Evaluating findings and approaches, e.g. Why did this test not show what we expected?</p>	<p>Sharing hypotheses and managing discussion and differing ideas, e.g. I think that ...I disagree because... Planning and executing experiments.</p>	<p>Choosing appropriate equipment. Identifying questions to explore a new topic, e.g. Why are most plants green? Discussing results and making links with other topic or curriculum areas.</p>
Evaluation			
<p>The curriculum is reviewed on a yearly basis to ensure that it is responsive to the needs of our current pupils.</p>			