Science Curriculum Intent – Kilmington Primary School

The National Curriculum

The national curriculum for science aims to ensure that all pupils:

- 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

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.

Curriculum Design

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 "Grammarsaurus" scheme of work as as a foundation. 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.

Nurturing lifelong learning behaviours through Science			
Motivation/ Resilience • Keeping going • Perseverance • Resilience • Not giving up I'm Wilbur Woodpecker	I'm Olive Owl Engagement/ Reflectiveness • Planning • Reflecting • Thinking things through	Collaboration/ Reciprocity <i>Listening</i> <i>Sharing</i> <i>Collaborating</i> <i>Working as a team.</i>	Thinking/ Resourcefulness • Curiosity • Finding out • Why? Where? • When? Who? I'm Samuel Squirrel
Trialling different	Understanding the need	Sharing hypotheses and	Choosing appropriate
experimental approaches.	for a 'fair test'.	managing discussion and	equipment.
Dealing with unexpected	Drawing on prior	differing ideas, e.g. I think	Identifying questions to
outcomes.	knowledge to help	that I disagree because	explore a new topic, e.g.
	understand the topic.	Planning and executing	Why are most plants
	Evaluating findings and	experiments.	green?
	approaches, e.g. Why did		Discussing results and
	this test not show what		making links with other
	we expected?		topic or curriculum areas.
Evaluation			
The curriculum is reviewed on a yearly basis to ensure that it is responsive to the needs of our current pupils			