Porters Grange Primary School

Science Curriculum

Intent		It is our intention that the science curriculum at Porters Grange Primary School will develop pupil's scientific knowledge and scientific capital through carefully planned exciting science opportunities which will promote a curiosity in the natural world and engages with our unique coastal locality. In addition, through actively seeking partnerships and relationships with the local and wider scientific community seek to raise the aspiration of pupils. Also, it will in tandem with the learning powers create a desire through investigation to ask questions and answer them using a variety of methods such as; observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests and finding things out via secondary sources of information. Finally, an understanding by the time they move to secondary school of how science can be split into Biology, Chemistry and Physics.		
Implementation	**What**	**Key Stage 1:** The focus is to enable pupils to experience and observe the world around them. Following on from their time in Foundation Stage children need time to deepen prior learning and engage in first hand experiences, begin to use scientific vocabulary, ask questions and find the answers. **Lower Key Stage 2:** The emphasis is all around pupils having opportunities to broaden their scientific view of the world around them. Children are still encouraged to talk, test and make links. During their time in Lower Key Stage 2 children are encourages to speak about their findings and write about what they have found. **Upper Key Stage 2:** Pupil's principal focus is to deepen and develop their understating of a range of scientific ideas. Here we encourage our children to select the most appropriate way to answer and record their scientific findings.		
	How	**Resources and Equipment**	**Planning**	**Environment**
		We have a dedicated selection of equipment stored centrally and accessed by staff when required for investigations. Consumables are regularly refreshed and there is further budget purposed for the purchase of new and replacement equipment. Staff are encouraged to plan for scientific enquiry and as a result are able to put in bespoke requests if the requisite resources are not in stock. Field trips and the use local environment are used to engage pupils.	Planning is taken from the learning sequences for scientific knowledge and working scientifically. This results in pupil's understanding being built on for each topic as they progress through the school. Medium Term Plans provide the children with opportunities to work scientifically through practical investigations. Embedded in these is vocabulary for each topic so that this too is built upon each time it is revisited in subsequent years.	Using our location on the coast, staff will seek opportunities such the Moon's influence on the tide to illustrate how relevant science is to pupil's everyday life. Within the classroom environment staff use science working walls where key vocabulary, concepts and investigations are referenced through a topic. Science across the school is celebrated in an assembly hall and in corridor displays.
Impact		**Quality of Education**	**Behaviour and Attitudes**	**Personal Development**
		Through carefully planned opportunities pupils will be engaged in a curriculum that is rooted in a desire to find answers. They will be able to use a variety of resources that engage their curiosity and develop their understanding of Biology, Chemistry and Physics.	Pupils will use their learning powers to develop a curiosity in the natural world around them and their locality. Working individually and collaboratively they will develop question that they can investigate and find answers to. Presenting their findings using multifaceted approaches.	Pupils will develop a love of science and scientific inquiry. Through partnerships they will see potential career paths into the scientific world. They will be resilient in their learning so that they desire to find out for themselves and see setbacks as opportunities to learn.
Monitoring		Conversations with Pupils	Work Scrutiny	Planning Scrutiny	Teaching and Learning Observations