

Science at Churchstanton Primary School

"The whole of science is nothing more than a refinement of everyday thinking." - Albert Einstein "Nothing in life is to be feared, it is only to be understood." - Marie Curie

Statement of Intent

At Churchstanton Primary School, we encourage children to explore and ask questions about the world around them at every stage of their learning development. The Science curriculum encourages children to utilise the power of rational explanation, creates excitement and curiosity about natural phenomena and supports children to understand what it means to be a scientist.

Our school aims to support children in their acquisition of core knowledge, scientific concepts and key skills by developing an understanding of how to work scientifically. The children are encouraged to apply their knowledge by utilising scientific equipment and methods, by conducting and evaluating experiments and developing theories and conclusions about the universe. Our curriculum is designed so that it builds on knowledge that the children have acquired in previous years to ensure that there is a consistent, continuous development of scientific understanding and skills as the children progress through the school.

<u>Aims</u>

The 2014 National Curriculum for Science aims to ensure that all children:

- 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 skills required to understand the uses and implications of science, today and for the future.

Through scientific enquiry, the children will develop a range of skills that help them to collect, analyse, and represent data. These skills include pattern seeking, classifying and grouping, comparing data and controlling 'fair test' investigations. By using these skills, the children are encouraged to develop a sense of excitement and curiosity about the world around them.

Implementation

At Churchstanton Primary School, we use a two-year cycle (Cycle A and B) to ensure that all children have the expected coverage across each topic area, within the science curriculum. The children's learning is often linked to the term's driver subjects across History or Geography, with some stand-alone topics to ensure that there is full coverage of the Key Stage 1 and 2 curriculums. The children use knowledge organisers to support their initial understanding around the topic and to introduce them to key vocabulary as well as other important information, which they can then refer to as they move forward in their learning. Within Reception, the children's science coverage is linked closely with the Year 1 and 2 topics to ensure that the children are accessing a broad and balanced science curriculum.

Reception Curriculum

Churchstanton Primary School	Term 1		Term 2		Term 3	
Reception	Ready Steady Grow / Long ago-My History	Exploring Autumn	Build It Up	Sunshine and Sunflowers	Garden Explorers / Animal Safari	

Churchstanton Primary School	Term 1		Term 2		Term 3	
Y1/2 Cycle A	Everyday Materials		Human Senses	Seasonal Changes	Plant Parts	Animal Parts
Y1/2 Cycle B	Human Survival	Habitats	Uses of Materials	Plant Survival	Animal Survival	
Y3/4 Cycle A	Animal Nutrition and the Skeletal System		Forces and Magnets		Plant Nutrition and Reproduction	Light and Shadows
Y3/4 Cycle B	Food and the Digestive System	Sound	States of Matter	Grouping and Classifying	Electrical Circuits and Conductors	
Y5/6 Cycle A	Forces and Mechanisms		Earth and Space	Human Reproduction and Ageing	Properties and Changes of Materials	
Y5/6 Cycle B	Circulatory System		Electrical Circuits and Components		Light Theory	Evolution and Inheritance

Impact

Each topic is split into five key areas of learning; Engage, Develop, Innovate, Express which give children the opportunity to explore, develop and meet different learning outcomes that support their key skills and core knowledge. Each year, the children will build on their existing understanding and utilise their previous skills and knowledge to support and engage with new learning. Children within the Science curriculum become more independent during scientific exploration, find deeper meaning in the conclusions they draw and are able to relate their understanding into a widerworld context. Children have an improved understanding of the world around them and the functions within it, which in turn aims to spark an interest in them to pursue the topic further, as they move through their different educational settings and throughout their lives.