



Intent

It is our intention at St. Mary of the Angels, in Science to develop in all young people a lifelong curiosity and interest in the sciences. When we plan for the science curriculum, we intend for children to have the opportunity, wherever possible, to learn through varied systematic investigations, leading to them being equipped for life to ask and answer scientific questions about the world around them. As children progress through the year groups, they build on their skills in working scientifically, as well as on their scientific knowledge, as they develop greater independence in planning and carrying out fair and comparative tests to answer a range of scientific questions. Linked key knowledge organisers are used to help reinforce the key knowledge for each topic as set out in the science national curriculum. The key knowledge organisers help children to consolidate and retain the science knowledge they have learnt and also reinforce key scientific vocabulary from each topic.

Implementation

The acquisition of key scientific knowledge is an integral part of our science lessons. Topic linked key knowledge organisers enable children to learn and retain the important, useful and powerful vocabulary and knowledge contained within each topic. The progression of skills for working scientifically are developed through the year groups and scientific enquiry skills are of key importance within lessons. The progression of these skills can be seen on the overview. We know that our children respond well to collaborative work and use science as an effective vehicle to build on their preferred learning styles, whilst scientific knowledge and enquiry skills are developed with increasing depth and challenge as children move through the year groups. They complete investigations and hands-on activities while gaining the scientific knowledge for each topic. Teachers ask key assessment questions throughout the lesson which allow the assessing of children's levels of understanding at various points in the lesson. They also enable opportunities to recap concepts where necessary. The sequence of science lessons taught, helps to embed scientific knowledge and skills, with each lesson building on previous learning. There is also the opportunity to regularly review and evaluate children's understanding. Activities in lessons are effectively differentiated so that all children have an appropriate level of support and challenge.

Impact

In Science, progress is measured through a child's ability to know more, remember more and explain more. This can be measured in different ways, through pupil voice and assessment bubbles. Attainment and progress can be measured across the school using the assessment sheets. Our monitoring here at St. Mary of the Angels tells us that whole-school engagement will be improved through the use of key knowledge organisers and regular assessing. Children who feel confident in their science knowledge and enquiry skills will be excited about science, show that they are actively curious to learn more and will see the relevance of what they learn in science lessons to real-life situations and also the importance of science in the real world.