

**St. Edmund’s Catholic Primary School**

**Science Intent Document**

At St Edmund’s Catholic Primary School, we are **SCIENTISTS!** We want our children to be inquisitive about the world around them, to always ask the questions ‘why’ and ‘how’ and develop a thirst to investigate the answers. We understand that Science enables our children to have a greater understanding of the world around them, it’s inhabitants and how we must take responsibility in preserving it.

We want the children to develop their disciplinary knowledge of ‘Working Scientifically’ through developing the skills of observation, research, classifying, pattern seeking and comparative/fair testing whilst developing their substantive knowledge through the understanding of topics such as rocks, animals, electricity and light. By developing both the disciplinary knowledge and substantive knowledge we are building the foundations for the future learning of physics, biology and chemistry which may encourage our children to become the Scientists of the future.

**Implementation**

Our children are taught in mixed-aged classes therefore thought has been given to topics and the order in which they will be taught as some topics need to be taught in linear. For example, in Year Five and Six, the objectives for Living Things Year 5 and Living Things Year 6 are taught in the same year. This is to ensure that all children, no matter what year group they are in, are given the opportunity to learn the foundations required for the next stage of learning. The Science Overview document provides teachers with the topics required in each cycle.

The school uses PLAN Primary Science Resources to support with the teaching of Science. The program provides a ‘Progression in Knowledge’ document which demonstrates how the substantive knowledge is taught and built upon through the child’s primary education journey. The teacher is provided with a learning document which discusses prior learning, key learning, vocabulary and suggested activities. Teachers are able to use the prior learning information to assess children, identify those children who have got gaps in their understanding and provide extra support before they start the topic. The working scientifically resource provides information on how the disciplinary knowledge can be taught in relation to the topic. The PLAN Primary Science Resources provides our teachers with a comprehensive structure which ensures the consistent teaching of Science throughout their learning journey.

 **Impact**

In order to ensure our aims have been met, we scrutinise learning through:

* The use of prior learning assessments to check children’s prior knowledge. If there are gaps in learning the teacher will teach the children the missed learning before moving onto the new topic.
* Assessing children’s understanding of the topic including linked vocabulary throughout the unit through using reflective questioning.
* Talking to children during the lesson to ensure they have understood the learning objective – Assessment for learning.
* Mark completed work – Assessment for learning

The above enables the teacher to make an informed judgement on the children’s understanding and record their attainment on the school tracking tool ‘itrack’.