

Science Curriculum St Antony's Science Curriculum's Impact:

## **Quality of Science On Offer**

We have been recognised for our achievements in Science Teaching at St. Antony's Catholic Primary School by being awarded the **Primary Science Quality Mark – Gold (Guilt)**. This shows that the standard of science teaching and learning and the enrichment opportunities offered to the children is very high. This now needs to be reviewed and renewed as thinking and working in science changes rapidly over time and the curriculum must remain relevant to the pupils' current needs.

## **Creating an Environment that encourages Scientific Thinking**

At St Antony's we strive to create a supportive and collaborative ethos for learning by providing opportunities for children to conduct investigations to discover answers for themselves and take their learning in a direction they are interested in. We believe that this sharpens their natural curiosity and instinct for science and learning in this area and will drive them on to want to study science in the future.

Our science curriculum is of high quality, well thought out and is designed to demonstrate progression. We focus on progression of knowledge and skills with the use of specific scientific jargon and technical vocabulary. This aids with pupil's progression over time particularly with their recording of findings in their investigations, which forms part of the units of work.

## We measure the impact of our curriculum through the following methods:

- Assessing children's understanding of topic linked vocabulary before and after the unit is taught
- Marking of written work and scientific enquires in books-gauging their level of understanding
- Using Bloom's Taxonomy hierarchy of questioning in learning tasks to assess children's understanding -further stretching and challenging them.
- Using Formative and Summative assessment of pupil's understanding, knowledge and skills in discussions about their learning with them- strengthening pupil voice.
- Using images and videos of the children's practical learning to have then critically analysing their own practice and learning methodology.
- Interviewing the pupils about their learning (pupil voice) and assessing how we can further improve our provision
- Hosting moderation staff meetings where pupil's books are scrutinised and there is the
  opportunity for professional dialogue between teachers to foster better understanding of their
  class' work and progress as well as planning and strategies to close learning gaps flagged up in
  lessons
- External moderation of children's work at the end of each Key Stage
- Formal reporting of standards at the end of each Key Stage to SLT, Governors and the MAT.
- Annual reporting of standards achieved by pupils across the curriculum to parents

## **Rigorous Monitoring Of Standards**

The Science subject leader, is tasked with continually monitoring the impact that teaching and learning is having on the quality of science teaching across the school. Through working collaboratively with the Curriculum Lead/HT and the staff we are able to assess the impact that the support being given to staff by the SLT and myself is having on the children's learning. We make our assessments through book 'book looks' to ensure the progression of knowledge and skills is being taught from year to year.

Staff are also supported to ensure the knowledge taught, year on year, is retained by the children (ensuring sticky knowledge). This is continually revisited year on year as they progress through the school, so that the learners are able to use and apply the skills, knowledge and understanding that they have been taught to a variety of different lessons and settings, developing more independence with their learning as they move up to year 6; and ultimately on to secondary school.