



Reading Statement of Intent, Implementation and Impact St Peter's R.C. Primary School



Intent:

Science has been carefully designed and coherently planned to create personalised and ambitious curriculum which intends to create a stimulating environment which provides opportunities and experiences for our pupils. Through Science, we can motivate, engage and inspire our pupils to think of themselves as scientists and believe they can be in the future. We aim to embed the skills of 'Working Scientifically' consistently throughout the school and enable children to be confident in using technical scientific vocabulary effectively. Science study involves the development of important skills, including life skills. By focusing on developing these skills, we will help our pupils not merely memorise the scientific method, but help our children be more effective at independently gathering and using knowledge by emphasising the Primary Science Skills: observing, classifying, quantifying (measuring), predicting, controlling variables, interpreting and communicating. These skills will be reinforced regularly, making scientists out of all learners and improving their life chances. Promoting these skills will highlight how Science is used in the wider world and broaden pupils' horizons.

Implementation:

At St. Peter's, Science topics are taught within each year group in accordance with the National Curriculum.

- Topics are blocked to allow children to focus on developing their knowledge and skills, studying each topic in depth.
- Every year group will build upon the learning from prior year groups therefore developing depth of understanding and progression of skills.
- Teachers promote enjoyment and foster interest of the scientific disciplines; Biology, Chemistry and Physics.
- Children explore, question, predict, plan, carry out investigations and observations as well as conclude their findings.
- Children present their findings and learning using science specific language, observations and diagrams.
- In order to support children in their ability to 'know more and remember more' there are regular opportunities to review the learning taken place in previous topics as well as previous lessons.
- In order to support children in their understanding on technical science vocabulary, teachers will pre-teach vocabulary and display and assess their understanding before the topic begins.
- Effective CPD and standardisation opportunities are available to staff to ensure high levels of confidence and knowledge are maintained.
- Effective use of educational visits and visitors are planned, to enrich and enhance the pupil's learning experiences within the Science curriculum.
- Teachers use highly effective assessment for learning in each lesson to ensure misconceptions are highlighted and addressed.
- Effective modelling by teachers ensures that children are able to achieve their learning intention, with misconceptions addressed within it.

- Through using a range of assessment tools, differentiation and personalisation is facilitated by teachers, to ensure that each pupil, including children with SEND, can access the Science curriculum.
- Children are given clear success criteria in order to achieve the learning intention with differing elements of independence.
- Cross-curricular links are planned for, with other subjects such as Maths, English and Computing.
- Our Core Subject Assessment Tracker allows us to use data to inform future practice.

Impact:

The impact of this curriculum design will lead to outstanding progress over time, across key stages, relative to a child's individual starting point and their progression of skills. Children will therefore be expected to leave St. Peter's reaching at least age related expectations for Science. Through various workshops, trips and interactions with experts our Science curriculum will lead pupils to be enthusiastic Science learners and understand that science has changed our lives and that it is vital to the world's future prosperity. We want to empower our children so they understand they have the capability to change the world. This is evidenced in a range of ways, including pupil voice, their work and their overwhelming enjoyment for science. In our ever changing, globalised world, our children must be prepared in all aspects of Science, and believe that they can use the powerful knowledge and skills learnt at St. Peter's to achieve their dreams and ambitions.