Science
Curriculum Intent and Implementation

School Curriculum Intent:

At St Peter's, every child will live, love and learn in an environment founded upon moral and Christian values; they will leave the school with the knowledge and skills to be lifelong learners and rounded citizens, and with the ability to make a positive contribution to their future society.

All that we do is founded upon a clear set of shared values, from which our motto is derived:
Together We Believe, Aspire And Achieve

Subject Curriculum Intent:

In our everyday life and rapidly changing world, science is a vital part of our curriculum intention. Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies their curiosity with knowledge. Because science links direct practical experience with ideas, it can engage learners at many levels. Scientific method is about developing and evaluating explanations through experimental evidence and modelling. Pupils learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

We aim to help our St Peter's pupils to develop an enthusiasm and enjoyment of scientific learning and discovery. They will develop scientific knowledge and conceptual understanding. They will 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. We will equip our children with the scientific knowledge required to understand the uses and implications of Science, today and for the future. The children will develop the essential scientific enquiry skills to deepen their scientific knowledge.

Threads of the subject:

Primary Science is centred around the skills of working scientifically, which can be split into five key areas: Classifying, Testing, Observing and Measuring, Collecting and Handling Data, Asking and Answering Questions.

The subject is organised into a number of broad topics across our school:

Materials and their Properties
Physical Processes: *sound, forces and electricity*
Life Processes: *humans, plants, life cycles and environment*
STEM: *Whole school curriculum approach*

What a child experiences in this subject going through St Peter's:

In EYFS:

- Children learn the skills and knowledge in the context of practical activities, e.g. learning about the characteristics of liquids and solids by involving children in melting chocolate or cooking eggs. Examine change over time, for example, growing plants, and change that may be reversed, e.g. melting ice.
- Children use correct terminology so that, for example, children will enjoy naming a chrysalis if the practitioner uses its correct name.
- Children are given opportunities to design practical, attractive environments, for example taking care of the flowerbeds or organising equipment outdoors.

At Key Stage 1:
Pupils will observe, explore and ask questions about living things, materials and physical phenomena. They begin to work together to collect evidence to help them answer questions and to link this to simple scientific ideas. They begin to evaluate evidence and consider whether tests or comparisons are fair. They use reference materials to find out more about scientific ideas. They share ideas and communicate them using scientific language, drawings, charts and tables with the help of ICT if it is appropriate.

At Key Stage 2:
Pupils learn about a wider range of living things, materials and physical phenomena. They make links between ideas and explain things using simple models and theories. They apply their knowledge and understanding of scientific ideas to familiar phenomena, everyday things and their personal health. They think about the effects of scientific and technological developments on the environment and in other contexts. They carry out more systematic investigations, working on their own and with others. They use a range of reference sources in their work. They talk about their work and its significance, using a wide range of scientific language, conventional diagrams, charts, graphs and ICT to communicate their ideas.