



The Intent, Implementation and Impact of our Curriculum – Science.

At Holy Trinity R.C. Primary School, we understand the need for all pupils to develop their Scientific ability as an essential component of all subjects and as a subject in its own right. A good understanding of scientific knowledge and conceptual understanding helps to support pupils work across the curriculum.

Intent

At Holy Trinity Primary School, we believe that a high quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Leaders adopt a curriculum that is ambitious and designed to give all pupils, particularly disadvantaged pupils and including pupils with SEND, the knowledge and cultural capital they need to succeed in life. Holy Trinity's curriculum is coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment. The curriculum is successfully adapted, designed or developed to be ambitious and meet the needs of pupils with SEND, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. At Holy Trinity, our Science curriculum aims to instil a deep-rooted curiosity for scientific inquiry, nurturing critical thinking skills and a passion for exploration. It is carefully crafted to align seamlessly with the National Curriculum, ensuring comprehensive coverage of scientific concepts while fostering positive attitudes towards learning Science.

Implementation

The teachers at Holy Trinity R.C. Primary School have good knowledge of the subjects and leaders provide effective support for those teaching outside their main areas of expertise. The school invests in continuous professional development for teachers, equipping them with robust subject knowledge and innovative teaching strategies. Science lessons are designed to be interactive and hands-on, providing pupils with abundant opportunities to engage in practical experimentation, group work, and scientific investigations that stimulate their curiosity and deepen their understanding of complex scientific principles. Teachers present subject matter clearly, promoting appropriate discussion about the subject matter being taught. They check pupils' understanding systematically, identify misconceptions accurately and provide clear, direct feedback. In so doing, they respond and adapt their teaching as necessary without unnecessarily elaborate or individualised approaches.

Over the course of study, teaching is designed to help pupils to remember long term the content they have been taught and to integrate new knowledge into larger ideas. Teachers and leaders use assessment well, for example to help pupils embed and use knowledge fluently, or to check understanding and inform teaching. Leaders understand the limitations of assessment and do not use it in a way that creates unnecessary burdens on staff or pupils. Teachers create an environment that allows pupils to focus on learning. The textbooks and other teaching materials teachers select - in a way that does not create unnecessary workload for staff - reflect the school's ambitious intentions for the course of study and clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment. The work given to pupils is demanding and matches the aims of the curriculum in being coherently planned and sequenced towards cumulatively sufficient knowledge.

Impact

The impact and measure of this is to ensure pupils develop detailed knowledge and skills across the curriculum and, as a result, achieve well. We aim for our pupils to be ready for the next stage of education, employment or training and that they have the knowledge and skills they need. Our inclusive approach aims for pupils with SEND to achieve the best possible outcomes. Pupils' work across the curriculum is of good quality.

All children will have a wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills. A richer vocabulary which will enable to articulate their understanding of taught concepts. Lastly, they will have high aspirations, which will see them through to further study, work and a successful adult life.