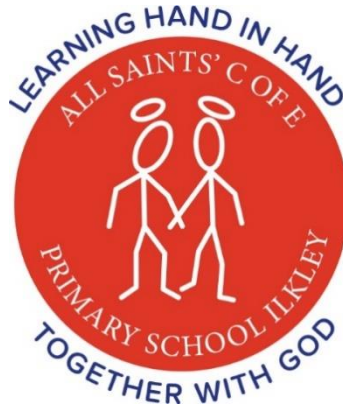


All Saints' CE Primary School



Vision

Learning hand in hand together with God.

Values

Hopeful school through honesty, forgiveness and trust
Achieving school through resilience, respect and ambition
Nurturing school through care, compassion and friendships
Developing school through wisdom, faith and fun
Sharing school through kindness, celebration and love

Subject Policy: Science

Written: October 2021

Review date: October 2022

Written by: Harriet Flaherty



Vision: Learning Hand in Hand Together with God

Curriculum Intent at All Saints'

At All Saints' Church of England Primary School, our enriched curriculum enables all children to thrive as individuals and deepen their curiosity as global citizens. By learning hand in hand together with God, every child is recognised as a unique learner. We celebrate and welcome diversity within our school family.

Through our school values:

All Saints' is a:

Hopeful school through honesty, forgiveness and trust

Achieving school through resilience, respect and ambition

Nurturing school through care, compassion and friendships

Developing school through wisdom, faith and fun

Sharing school through kindness, celebration and love

...we provide the children with the essential skills and knowledge to be aspirational, successful and resilient learners.

Children leave All Saints' with a strong sense of belonging, with confidence for today and beyond.

Subject Intent

Here at All Saints' we aim to ensure that all pupils build up a body of key knowledge, understand its value and enjoy working scientifically to develop a sense of awe and wonder about the world they live in.

How does this subject reflect our Vision and Values?

Science at All Saints' links strongly to our school's Christian values of **Developing** through wisdom, faith and fun, and **Achieving** through resilience, respect and ambition. Our enriching, ambitious curriculum allows children to develop their knowledge and deepen their curiosity in the natural world around them.

How does Science look at All Saints'?

All Saints' Science curriculum fosters children's curiosity and a love of learning throughout their time at school. Our curriculum encompasses the acquisition of knowledge, concepts and working scientifically skills within the three main domains of science; biology, chemistry and physics. Through the use of our progression frameworks, we ensure that children are consistently building upon their knowledge, concepts, vocabulary and working scientifically skills.

Science is taught once per week, through a mixture of knowledge and enquiry focussed sessions. Enquiry focussed sessions give pupils the chance to embed their curriculum knowledge and working scientifically skills into one of the five types of scientific enquiry (observing over time, identifying, classifying and grouping, pattern seeking, comparative and fair testing, research using secondary sources). We ensure children have the opportunity to experience the five different types of scientific enquiry across the academic year. Staff have the flexibility to use a mixture of regular timetable slots, blocks or days as appropriate to deliver their science curriculum.



Early Years

In the Early Years Foundation Stage (EYFS), science is taught through the 'Understanding the World' strand of the EYFS curriculum. This is delivered in response to children's own interests, through science focussed inputs, and enhanced through indoor and outdoor provision. The Early Years Foundation stage fosters children's innate curiosity by encouraging them to make sense of their immediate environment and the natural world around them. Children begin to observe changes in states of matter and their own environment. All learners leave the Early Years Foundation Stage with a deepened understanding of the world around them, key vocabulary and a foundation of working scientifically skills. This instills a love of learning and equips our pupils for the Science content of the Key Stage 1 National Curriculum and beyond.

Key Stage 1

In Key Stage 1, the Science curriculum is taught through a thematic approach, where possible, and integrated into ongoing 'topic' work to provide more contextual and meaningful learning experiences. Through a cross-curricular approach, children are encouraged to form links in their learning and begin to apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. Working Scientifically skills are embedded within the content of biology, chemistry and physics. Pupils are given regular opportunities to apply their Science knowledge and skills within the the five types of enquiry (observing over time, identifying, classifying and grouping, pattern seeking, comparative and fair testing, research using secondary sources). Children are encouraged to be curious and ask their own scientific questions. Pupils begin to use simple scientific language, consistent with their word reading and spelling knowledge at Key Stage 1, in order to communicate their ideas. Children will consolidate and build upon this bank of knowledge, vocabulary and working scientifically skills in Key Stage 2.

Key Stage 2

In Key stage 2, the Science curriculum enables pupils to develop a deeper understanding of a wide range of scientific ideas, within the domains of biology, chemistry and physics. Science is taught as a stand alone subject and planned over a 2 year cycle, with a view of moving towards a one year cycle as the school expands into a two form entry school. Working Scientifically skills are embedded within the curriculum content. Pupils are given regular opportunities to apply their science knowledge and skills within the the five types of enquiry (observing over time, identifying, classifying and grouping, pattern seeking, comparative and fair testing, research using secondary sources). In Lower Key Stage 2, children are asking their own questions, drawing simple conclusions and beginning to make some decisions about which types of scientific enquiry are best to answer them. In Upper Key Stage 2, children are able to select the most appropriate ways to answer scientific questions using different types of enquiry. Children are able to draw sophisticated conclusions and justify these based on evidence. By the end of their journey at All Saints', pupils will have built up an extended specialist vocabulary and a sufficient understanding to engage meaningfully in more sophisticated discussion of experimental design within Key stages 3 and 4.



Vision: Learning Hand in Hand Together with God

How do we ensure all pupils learn Science?

Through the use of quality first teaching, teachers and support staff offer personalised support, ensuring that all pupils learn in a way that is suitable for them. Aspects of the science curriculum are prioritised based on the child's individual needs and in line with their EHCP.

How does Science at All Saints' reflect the school's local context and include opportunities for cultural capital, enrichment and diversity?

We take every opportunity possible to enhance the cultural capital of our learners and equip them with the knowledge and experiences needed for society. One way in which we promote cultural capital through science is to provide children with a variety of educational visits and talks with scientific professionals. By exploring scientific discoveries, learning about leaders in scientific fields, and research using quality non-fiction texts, children are exposed to a wealth of different cultures and understand how science is vital in all aspects of society.

Assessment

We are developing the use of knowledge organisers and low-stakes quizzes to aid remembering and long-term learning in all subjects.

Legal Framework and Further Reading

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- DfE (2013) National Curriculum in England
- DfE (2021) Statutory Framework for the Early Years Foundation Stage

Also refer to Long Term Overviews and Curriculum Progression on our website:

<https://www.allsaintsilkley.bradford.sch.uk/curriculum-subject-overviews/>