“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.”

Purpose of Study, Science National Curriculum, 2014

At Burton Primary, we endeavour to provide high-quality science education which provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics.

Science has changed our lives and plays an essential role in the world’s future prosperity. Through building up a body of key foundational knowledge and concepts, our children should be encouraged to develop a sense of excitement and curiosity about the world they live in. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Intent

At Burton, our children are urged to constantly ask questions and where practicable answer them.

Through the National Curriculum for science we aim to develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics. It is our intent that children will develop an understanding of the nature, processes and methods of science through different the different types of enquiry that help them to answer scientific questions about the world around them. Children will move on to their next stage of education equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Implementation

Throughout their science learning at Burton Primary, much of the knowledge content of the curriculum will be taught through the 'Working scientifically' strand, which specifies the understanding of the nature, processes and methods of science for each year group. It should not be taught as a separate strand.

These types of scientific enquiry include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Through these investigations, children should seek answers to questions through collecting, analysing and presenting data.

Children's learning is enhanced through opportunities to further inspire their scientific development through school visitors, visits and special events such as our annual Science Fair and annual STEM week.

Planning for science is a process in which all teaching staff are involved. Delivering a broad and balanced science education to our children is a core principle of our school. All classes in KS1 and KS2 receive the equivalent of two hours science per week with 'Working Scientifically' running through all units. In EYFS science is taught in lessons but also many opportunities are provided for the children to investigate during 'Active Agents' learning through play. In KS1 science is taught in every half term. In KS2 science may be taught in blocks e.g. some topics are predominantly science based so more science is taught in that half term and then other topics are more humanities based so less is taught in that half term. Care has been taken to ensure a good balance.

The school ensures that a broad and balanced science curriculum is followed in which enquiry is at the heart of our children's scientific learning.

Impact

At Burton Primary, children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve. Many opportunities are provided throughout a unit of learning for the teachers to observe children's knowledge such as through

questioning, listening to group discussion, observing presentations and through the written work produced. Activities during, and at the end of, each topic record achievement and celebrate success. Continuous assessment of children's work, much of which is informal is used to inform teaching throughout the school.

Throughout their journey through Burton Primary, we aim for all children to develop a love for Science and a sense of wonder and amazement for the world in which they live. Science is in everything we do and all around us. We hope to plant the seeds for our future scientists.