



We care, we share, we dare to dream



Curriculum Statement for Science

Ticket to Anywhere

Happy, caring school

First rate education

Nurture curiosity and creativity

Inspire and engage

Welcoming, safe environment

Thursfield Primary

Curriculum

INTENT

Here at Thursfield 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. Science at Thursfield is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills. The staff ensure that all children are exposed to high quality teaching and learning experiences, which allow children to explore their outdoor environment and locality, thus developing their scientific enquiry and investigative skills. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. We intend to provide all children regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum. At Thursfield Primary School we embrace the 'Rosenshine Principles of Learning' for all pupils including our children with Special Educational Needs and Disabilities (SEND). The delivery of the Science curriculum involves the careful planning of lessons ensuring plenty of opportunities for the over learning of key facts and the mastery of key skills. We remove barriers to allow all pupils to achieve by producing 'Learning Passports' with our SEND children. These outline personal learning preferences and the reasonable adjustments which need to be made by school in order for each pupil to access the full Science curriculum and to achieve the high expectations which are set for them.

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IMPLEMENTATION

National Curriculum

Planning is creative and meets the requirements of the National Curriculum. The structure of knowledge within the curriculum is split into these key areas: biology, chemistry, physics and working scientifically.

Curriculum Journey

All our topics follow a set pathway. Pupils work through a series of blocked sessions, which build on their prior knowledge, by introducing specific knowledge, skills and vocabulary. Children are exposed to 3 scientific strands: biology, chemistry, and physics. Alongside those strands, each one will contain concept of working scientifically and significant scientists. Science teaching involves adapting and extending the curriculum to match all pupils' needs. Where possible, Science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage.

Working scientifically

Within each scientific strand and block (every half term), there is a non-negotiable expectation at Thursfield to weave in working scientifically through investigations. This enables the children to embed working methodically, understanding the different types of scientific enquiry and completing fair/balanced investigations.

We also participate in whole school science days where the whole focus is to work scientifically and investigate, completing fair investigations. We also partner frequently with companies who offer scientific opportunities: JCB, Siemens, RAF Cosford.

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IMPACT

PUPIL VOICE

Children will demonstrate a positive attitude towards Science and develop a deep knowledge, understanding and appreciation of the scientific community. Termly pupil voice sessions will enable teachers to adapt their teaching in a way which supports this.

EVIDENCE OF KNOWLEDGE/SKILLS

Assessment of children's learning in Science is an ongoing monitoring of children's understanding, knowledge and skills by the class teacher, throughout lessons. Review sessions allow teachers to assess children's recall of scientific concepts previously taught. This assessment is then used to inform differentiation and to provide the necessary support and challenge required by the children.

TICKET TO ANYWHERE

Here at Thursfield, children will not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which enable them to progress within their everyday lives.

1. A wide variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
2. A richer vocabulary which will enable to articulate their understanding of taught concepts.
3. High aspirations, which will see them through to further study, work and a successful adult life.