

ASAT Science Intent, Implementation and Impact

Through each topic, children's knowledge and skill base grows bigger and broader.

thinking skills they

need to be a scientist in

the future.

Children understand

their role in the world

and are caring,

compassionate and

sustainable in mindset.

They feel empowered

as decision-makers and

problem-solvers.

Children show curiosity about the world around them and ask questions about how and why to further their own understanding.

Cumulative science curriculum: curriculum planners that

collectively build skills and understanding across the school,

explicit connections to prior scientific learning through use of

'Previously On ...'

Impact

Children are prepared for future learning as scientists at secondary school by the time they leave primary school.

Children develop accurate and precise use of scientific vocabulary.

Children will develop confidence and critical

A pedagogy of 'Personalised Learning' which is implemented into our tailored science curriculum designed around engaging questions. Children's interests are pursued and pupil voice helps shape the curriculum.

Science boxes created for each science topic per year group which Includes resources to offer a high impact curriculum, medium term planning, resources and text.

Implementation

Immersion activities and provocations to peak children's scientific curiosity.

Range of formative and summative assessment strategies to assess how embedded and tightly connected children's scientific understanding is.

Intent

The development of our science curriculum is underpinned by our intent to develop in our children:

- To provide opportunities for children to engage in an exciting and empowering science curriculum that equips them with a range of skills to continue their school journey with.
- A sense of awe and wonder about the world around them.
- A deep, embedded conceptual knowledge and extensive scientific vocabulary, which they draw on to give substance to their opinions.
- Increasing scientific knowledge and competence in scientific skills.
- The ability to read, write and think critically as a scientist.
- An enquiry-based curriculum to acquire and embed knowledge and skills.
- An appreciation of the diversity of cultures that exist in today's world and the ability to empathise with the cultural identities and personal science of others.
- An understanding of how the science and technology impacts on their lives and how their lives impact on science and technology.
- Recognise children's prior learning, provide first hand experiences, build resilience and enable them to become creative, critical thinkers.

Opportunities to develop and apply their conceptual understanding by writing as scientist embedded within the 'writing spine' for each year group, drawing on opportunities for disciplinary reading.

Clear strategic planning allows the curriculum to be dynamic and adapt to our school context and children's needs.

Bespoke, curated collections of non-fiction texts linked to each topic and whole-class sets of narrative non-fiction to support disciplinary reading in science.

Opportunities to

inspire children by

using quality

teaching, high

quality non-fiction

and non-narrative

texts, primary

sources, visits and

visitors to stimulate

learning. Giving the

learning a clear

purpose and making

connections.

communicate
confidently as scientists
through reading,
writing and speaking.

Book scrutiny, planning,
Books and Biscuits and

Children are literate in

the field of science and

are able to

Book scrutiny, planning, Books and Biscuits and pupil voice to celebrate the positives and strength areas that might need to be developed further.

Whole-school science week annually for children to explore, enquire and investigate fun hands-on experiments.

Children use enquiry skills in increasingly complex and precise ways.

Children understand how scientific thinking informs everyday decision making.

Children to develop an awe and wonder about the world around them.