



St. Sebastian's Church of England Primary School

Curriculum Intent Statement - Science

Intent:

'Science is fun. Science is curiosity. We all have natural curiosity. Science is a process of investigating. It's posing questions and coming up with a method. It's delving in.' Sally Ride

- **Unlock children's potential** by equipping them all with the scientific knowledge required to understand the uses and implications of science and prepare them for the KS3 curriculum.
- Encourage a sense of excitement and **curiosity** about natural phenomena by nurturing children's interests and enabling them to **flourish**.
- Encourage children to be **independent, enquiring learners** who pose their own questions, know ways to investigate these and form their own conclusions.
- **Widen children's horizons** so they understand the uses and implications of science, today and for the future; ensuring they become **responsible global citizens**.

**Colours link intent back to Whole School Curriculum Intent*

Implementation:

All lessons build on prior learning and teachers support children to learn and remember more through:

- Clear and progressive plans of science content and process knowledge linked to the National Curriculum;
- Opportunities to develop content knowledge alongside process knowledge. Scientific enquiry (process knowledge) embedded in each topic, revisited and built upon throughout their time in school;
- Knowledge organisers which outline sticky knowledge (including vocabulary) all children must master;
- Mind maps to elicit prior knowledge and understanding on which to build learning and encourage children to pose questions and spark their curiosity;
- Low stakes tests, quizzes and activities to support learners' ability to block learning and increase space in the working memory;
- Elaborative questioning to challenge and deepen understanding;
- Trips and visits from experts who will enhance the learning experience;
- A big emphasis on practical investigation, encouraging children to find answers to questions they raise.
- High importance given to specialist scientific vocabulary for topics taught and this builds on prior learning.
- Opportunities for curriculum adaptation and challenge, pre teaching and interventions for those children who may require it, including those with SEN, throughout a topic or prior to a new topic being taught.

Impact:

We measure the impact of our curriculum through the following methods:

- Reflecting on the standards achieved against the planned outcomes;
- A scientific investigation built into most units to assess process knowledge;
- Tracking of knowledge using knowledge recaps and mind maps;
- Pupil discussions about their learning and looking at children's work in their books;
- Subject leader monitoring and tracking end of year attainment in science.