Stoke Prior First School

Science Policy

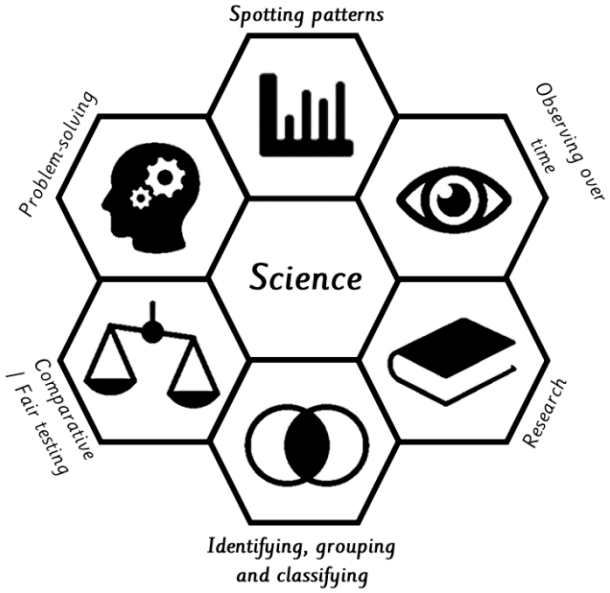
1. Aims and objectives

At Stoke Prior First School, Science develops a sense of excitement and curiosity about natural phenomena. It has changed our lives and is vital to the world's future prosperity. Science is not just the acquisition of knowledge; it is the investigation and experimentation of ideas so that scientific knowledge, understanding and skills become meaningful. In our school, we aim to develop and foster pupils' scientific enquiry skills through experiences of pattern-seeking, observing over time, problem-solving, carrying out research, identifying, grouping and classifying, and undertaking comparative/fair tests. The teaching of science offers opportunities for children to:

- think and speak like a scientist; asking and answering a vast array of scientific enquiry questions;
- plan and carry out scientific investigations, with the correct and accurate use of equipment (including ICT);
- develop knowledge of life processes in plants and animals;
- develop knowledge of materials, electricity, light, sound and natural forces; magnets, rocks and states of matter;
- understand how to evaluate evidence, and to present conclusions with clarity and accuracy;
- extend the learning environment for our pupils through outdoor learning opportunities;
- recognise the importance and impact of historically-significant individuals working within the STEM fields.

2. Teaching and learning style

We want pupils to think as scientists. Our science curriculum fosters this by being comprised of both substantive knowledge and disciplinary enquiry skills. It is of great importance that pupils are taught both of these elements, side-by-side, in order to recognise and articulate how they are working scientifically during each episode of learning, as well as make links with prior scientific experiences. The following 'hex symbols' are in place to support this:



Lessons are designed to be varied, engaging and hands-on, allowing children to work practically, collaboratively and inquisitively. We place an emphasis on the importance of activating and retrieving pre-requisite knowledge in order to prepare children for the learning of new content. Pupils will experience the teaching and learning of science through:

- whole-class teaching;
- small-group investigating;
- collecting and analysing a variety of data;
- presenting findings through photographs, diagrams, tables and graphs;
- the use of digital technology;
- role-play and discussions;
- presenting outcomes to the rest of the class;
- solving problems;
- educational visits and visitors to enhance understanding.

We allow for adaptation by:

- setting tasks which are open-ended and can have a variety of responses;
- using peer support;
- providing resources of different complexities, matched to the ability of the child;
- adapting teaching to meet the needs of all pupils;
- Using adult support where appropriate.

3. Science curriculum planning

Our Science curriculum is carefully planned to ensure full coverage of the statutory requirements outlined in the National Curriculum for Key Stage 1 and Lower Key Stage 2. Across Reception to Year 4, pupils build secure foundational knowledge in biology, chemistry and physics through a well-sequenced progression of units that revisit and deepen key ideas over time. Teachers plan lessons that develop pupils' scientific knowledge**,** working scientifically skills**,** and understanding of the nature, processes and methods of science, as required by the programme of study. By aligning long-term, medium-term and lesson-level planning with the statutory content and expectations, through the use of our 'Curriculum Overview' documents, we ensure that every child receives a broad, balanced and coherent Science education that prepares them for the next stage of learning.

4. EYFS Science

In the EYFS, children experience Science through hands-on exploration, play and talk as part of the *Understanding the World* area of learning. They investigate materials, living things and simple changes by observing closely, asking questions and using their senses to explore the world around them. Through continuous provision, outdoor learning and purposeful adult interactions, children begin to develop early scientific thinking—such as noticing patterns, making simple predictions and describing what they see—laying strong foundations for the more formal scientific enquiry taught in Key Stage 1

5. Links with other areas of the curriculum

- **English:** Development of reading, writing, speaking and listening skills
- **Mathematics:** Counting, numbers, data handling (including drawing of a variety of diagrams/tables/graphs), interpretation and analysis skills
- **Personal, social and health education (PSHE):** Development of self-confidence, understanding of others, society and its members
- **Computing:** Word-processing, finding information on the Internet (research), presenting information through PowerPoint/video/audio recording
- **Geography:** Developing understanding of the natural world, habitats, weather and environmental change, and locational knowledge
- **Music:** Exploring sound, pitch and vibration
- **History:** Building knowledge about significant scientists and how scientific ideas, understanding and opinions have changed over time

Science encourages children to explore some of life's fundamental questions, developing a sense of awe and wonder about the world. It provides opportunities to discuss important social and moral issues, such as health choices and caring for the planet. By learning how living things and environments differ, children develop respect for others and an understanding of diversity.

6. Science and inclusion

At our school, we teach Science to all children, whatever their ability and individual needs. Science forms part of the school's curriculum policy to provide a broad and balanced education to all children. Through our Science teaching, we provide learning opportunities that enable all pupils to make good progress. We do this by setting suitable learning challenges and responding to each child's different needs via adaptation. Assessment against the National Curriculum allows us to consider each child's attainment and progress against ARE (Age Related Expectations).

7. Assessment for learning

We assess the children in order to ensure that they make good progress in Science. Teachers use formative assessment in the lessons and use assessment trackers for summative assessment at the end of a topic. Teachers also use skill catchers and knowledge assessment quizzes which can be used at the end of the unit to provide a summative assessment. Learning objectives and outcomes are shared with the children and regular feedback is given to help guide their progress. Children are also encouraged to self-assess to make judgements about how they can improve their own work. Overall attainment is reported to parents through the annual written report.

8. Resources

Our school is well-supplied with all necessary resources for all Science teaching units across the school. We keep these in a central store and regularly audit and update resources. The library contains a good supply of Science topic books and all classes have access to educational software and the internet to support children's individual research.

9. Monitoring and review

The coordination and planning of the Science curriculum are the responsibility of the subject leader, who also:

- supports colleagues in their teaching, by keeping informed about current developments in Science and by providing a strategic lead and direction for this subject;
- gives the Headteacher an annual summary report in which s/he evaluates the strengths and weaknesses in Science and indicates areas for further improvement;
- uses allocated subject-leader time to review planning, work scrutiny, pupil voice and to observe Science lessons across the school.

PERSON(S) RESPONSIBLE:	SUBJECT LEADER: T Gregory
DATE POLICY AGREED:	July 2026
TO BE REVIEWED BY:	July 2029
DISTRIBUTION:	Staff / Governors / Website (delete as required)