St Stephens Community Academy
Science Policy

St Stephens Community Academy understands the need for all pupils to develop their scientific ability as an essential component of all subjects and as a subject in its own right. A good understanding of scientific knowledge and conceptual understanding helps to support pupils work across the curriculum.

Aims:
At St Stephens we believe that science is a body of knowledge built up through experimental testing of ideas. Science is also a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school 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 processing skills.

We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability. Our aims in teaching science include the following:

- Preparing our children for life in an increasingly scientific and technological world, both today and in the future;
- Helping our children acquire a growing understanding of the nature, processes and methods of scientific ideas;
- Helping develop and extend our children's scientific concept of their world;
- Building on our children's natural curiosity and developing a scientific approach to problems;
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating;
- Developing the use of scientific language, recording and techniques;
- Developing the use of computing in investigating and recording;
- Making links between science and other subjects.

Statutory Requirements:
Statutory requirements for the teaching and learning of Science are laid out in the National Curriculum in England Framework Document for Teaching, September 2014 and the Statutory framework for the Early Years Foundation Stage, January 2024.

How Science is structured through the school:
Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage.

Science teaching at St Stephens involves adapting and extending the curriculum to match all pupils' needs. Where possible, Science will be linked to class topics. Science will also be taught as discrete units and lessons where needed to ensure coverage. Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

Teachers and teaching assistants support pupils to develop a solid understanding of things occurring around them in their day-to-day lives. Children are encouraged to be creative and inquisitive as they participate in activities. Pupils are encouraged to use their natural questions that arise while taking part in exploratory play in specific scientific areas as well as areas that link across the EYFS framework.

Key Stage One (Year one and two):
During Key Stage one, pupils observe, explore and ask questions about living things, materials and the world around them. They begin to work together to collect evidence to help them answer questions, find patterns, classify and group objects, research using a variety of sources and carry out fair testing.

Pupils use reference materials to find out more about scientific ideas. They share their ideas and communicate them using scientific language, drawings, charts and tables. Science lessons in Key Stage one are either taught discretely or where possible connected to other curriculum areas.

Key Stage Two (Years three – six):
Children are encouraged to extend the scientific questions that they ask and answer about the world around them. Pupils carry out a range of scientific enquiries including: observations over time, pattern seeking, classifying, grouping and researching using other sources (including computing resources). Children in Key Stage Two learn to plan science investigations by only changing one variable to make it a fair test.

The Governing Body:
Regular reports are made to the governors on the progress of curriculum, including science provision. This policy will be reviewed in the light of changes to legal requirements.

Cross-curricular Science Opportunities:
Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practice and apply the skills, knowledge and understanding acquired through Science lessons to other areas of the curriculum.

The Use of Computing:
We recognise the important role computing skills have to play in the development of scientific skills. We also recognise the importance of being computer literate. Computing skills are used on a daily basis to enhance teaching and learning of science and to give all children the opportunity to use computing to research, collect, analyse and present scientific findings (see Computing policy).

Assessment:
Pupil's work will be assessed in line with the Trust Assessment Policy. Teachers will formatively assess during lessons and teaching sequences as well as summative assessments at the end of units using Rising Stars. Science attainment is reported to parents at the end of each academic year.

Inclusion:
We aim to provide for all children so that they achieve as highly as they can in science according to their individual ability. We will identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment. GDS children will be identified and suitable learning challenges provided (see inclusion and SEN policies).

Equal Opportunities:
St Stephens has high universal ambitions for every child, whatever their background or circumstances. Children learn and thrive when they are healthy, safe and engaged. In order to engage all children: cultural diversity, home languages, gender and religious beliefs are all celebrated. Our curriculum includes a wide range of texts and other resources which represent the diversity and backgrounds of all our children (see equal opportunities policy).

Role of Subject Leader:
The Subject Leader should be responsible for improving the standards of teaching and learning in Science through:

- Monitoring and evaluating pupil progress;
- Provision of Science;
- The quality of the Learning Environment;
- Taking the lead in policy development;
- Auditing and supporting colleagues in their CPD;
- Purchasing and organising resources;
- Keeping up to date with changes in the subject.

Parental Involvement:
We aim to involve parents directly in the life of the school, and thus in the development of children's skills, knowledge and understanding in Science. There are opportunities when parents can discuss their children's progress with their teacher. SATs results are published in accordance with Government legislation.

Conclusion:
This policy should be read in conjunction with the following school policies:

- Teaching and Learning Policy
- Assessment
- Feedback and Marking policy
- Special Educational Needs Policy
- Computing Policy
- Equal Opportunities Policy
- Health and Safety Policy
- Continuing Professional Development Policy

This policy will be reviewed in the light of changes to legal requirements.