



Science at St Chad's

"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." (*The National Curriculum 2014*)

Aims (Intent)

At St Chad's, we recognise that young children are naturally curious and have an inherent desire to explore and understand the world around them. Our science curriculum is designed to build on this natural curiosity by providing practical, hands-on investigative opportunities that encourage children to become independent learners with inquisitive and enquiring minds.

At St Chad's the principle aims for Science are to:

- Build on children's natural curiosity
- Teach the children scientific knowledge
- Teach the children scientific skills
- Stimulate the children to investigate and question
- Teach the children to communicate ideas using appropriate scientific vocabulary
- Teach the children to evaluate and record their findings and suggest explanations

Organisation (Implementation)

At St Chad's, we have developed a unique and engaging Forest School program, designed in collaboration with school leaders and brought to life by the Down to Earth Company. Since 2020, our school field has been transformed into an outdoor learning space, enriched by our dedicated Forest School leader. This area includes gardening and planting zones where both new and established plants, trees, and vegetables flourish. Children participate in Forest School weekly, in small groups, throughout the academic year. The program encourages children to connect with nature by exploring the outdoors through the changing seasons. Each week, planned activities enhance the learning environment and deepen children's understanding of the natural world.

The Eco Club plays an integral role in promoting sustainability alongside the Forest School leader. Children are actively involved in various projects, learning hands-on skills such as planting and nurturing vegetables. They gain practical knowledge on growing their own food, which is later used in cooking sessions or as snacks.

At St Chad's, Science is taught as part of the termly theme, centered around a broad enquiry question. This approach is designed to foster curiosity and provide a clear focus for teaching and learning throughout the school. To deepen their understanding of scientific concepts, children engage in hands-on exploration and work scientifically throughout each unit of work by:

- Asking simple questions
- Observing
- Performing simple tests
- Identifying and classifying
- Answer questions
- Gather and record data

At present, there is a three-year cycle in place. Over the course of one academic year, children complete three blocks of science study, including:

- Everyday materials/use of everyday materials
- Plants
- Seasonal changes
- Living things and their habitats
- Animals, including humans

The learning environment is carefully designed to reflect and enhance the teaching and learning of science through hands on experiences. New vocabulary is introduced and consistently reinforced throughout the year, supporting children in building a strong scientific language foundation.

Assessment and Recording of Work (Impact)

At St Chad's, children demonstrate the key enquiry skills and knowledge they have learned throughout each science unit. They use scientific vocabulary to articulate their understanding and share their knowledge with peers and teachers.

In science, high-quality work is proudly recorded in a variety of ways, including:

- Individual Theme Books, where children document their scientific discoveries
- Class Dojo: Videos and photographs are shared with parents to celebrate and communicate learning
- Classroom and central displays: These displays showcase scientific processes and key learning
- Forest School: As part of the Forest School program, children contribute to the development of updated habitats and planting beds, which also serve as a practical record of their environmental learning.

Summative and formative assessment are both key elements of the science program at St Chad's. Children are assessed at the end of each unit of work using outcomes from Birth to Five Matters (Early Years) and the National Curriculum outcomes (KS1), which are documented on FFT. Teachers also use formative assessment throughout the unit to monitor children's knowledge, understanding, and skills. This continuous feedback allows for the adaptation of teaching practices to meet the individual needs of children, ensuring that learning is personalised and effective.

During science monitoring, subject leaders capture children's voices through pupil surveys and work closely with class teachers to explore children's work. This collaborative approach ensures that assessments reflect a holistic view of each child's learning journey and helps inform the ongoing development of the science curriculum.