

Aughton Town Green Primary School

Science Policy Document

The teaching of Science at Aughton Town Green Primary School will enable our children to acquire the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. 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. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims that all children:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

At Town Green we encourage our children to be inquisitive about the world around them. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes.

Throughout the programmes of study our children will acquire and develop the key knowledge that has been identified within each unit as well as the application of scientific skills. We aim to ensure that the 'Working Scientifically' skills are built on and developed throughout children's time at our school. This will enable them to apply their knowledge of science when using equipment, conducting experiments, building arguments, and explaining concepts. We want them to continue to ask questions and be curious about their surroundings.

Organisation

EYFS: The Foundation Stage investigates science as part of the 'Understanding the World' strand from the EYFS curriculum. Children are given lots of opportunities to explore the world around them and make comparisons with other parts of the world. Seasonal changes are observed as well as changes in states of matter.

Key Stage 1: Science is arranged in topic blocks, with two topics being delivered each term. Observations of seasonal changes take place throughout the year.

Lower Key Stage 2: Science topics are blocked into units of half a term and follow a two year cycle with all Year 3 and 4 children following the same topics. Six topics are taught within both cycle A and B.

Upper Key Stage 2: Science topics are blocked into units of a term (or a half term in the case of Forces and Electricity) with all the Year 5 and Year 6 children following the same topics. Four topics are taught in cycle A and three are taught in cycle B.

This is to ensure that children in mixed age classes do not repeat or miss topics.

Teaching and Learning

Science is a core subject in the National Curriculum. Our school uses the national curriculum objectives as the basis of our planning. Each science lesson planned should provide the opportunity for the children to develop a key skill. These skills include Pattern Seeking, Comparative and Fair Test, Identifying and Classifying, Researching and Observing over Time. All teaching staff are responsible for the planning and delivery of science. Classes within the same year group follow the same plan to ensure continuity. Copies of these plans are available on the teacher drive. Science is taught weekly throughout the year in each year group. Occasionally year groups may choose to deliver several lessons as part of a 'Science Day'.

During our science lessons children are encouraged to ask their own questions and be given the opportunity to use their scientific skills and research to discover the answers. Children's natural curiosities are celebrated and nurtured within our classrooms. New vocabulary and challenging concepts are introduced through direct teaching. This is developed over the years. The 'Working Scientifically Skills' are embedded into lessons to ensure these skills are being developed throughout a child's time at Town Green. The key knowledge for each topic is mapped across the school and follows the national curriculum topics for each year group. Teachers ask a range of questions which enable all children to take part, listening carefully to the answers and moving learning forward.

Outdoor experiences are used as much as possible to enhance the children's learning. These include the use of school grounds, including our Eco Garden, as well as trips within the local environment and those further afield.

Cross-Curricular Links

Science is taught in a cross curricular manner, where possible, with links to a variety of subjects including Geography, English, Art and Design Technology. This provides more contextual and meaningful experiences for our children.

Computing and ICT

Teachers will use the Interactive White Board to support the delivery of their science lessons, where appropriate. Children will use ICT for a range of purposes including the use of torches,

talking tins, thermometers and sound recorders as well as using the iPads to research relevant topics. They will use a range of websites including Explorify to support their teaching.

Resources

Most science resources are kept centrally in the Beech Room. Some teachers also keep their own bank of resources in their own classrooms.

Special Educational Needs

All children should have full access to our science teaching within Town Green. Teachers should refer to children's support plans to ensure appropriate support is provided to allow children to be fully involved in lessons if this is appropriate.

Assessment

Updated planning gives the children the opportunity to demonstrate their knowledge and understanding of scientific concepts as well as their developing skills.

Assessment opportunities are available in each lesson, linked to the National Curriculum statements. These are detailed on the weekly plans and children's achievements can be observed and recorded by the class teacher on tracker grids which are placed at the beginning of each topic in the children's science books. These records along with close observations of children during science lessons allow teachers to make a judgement as to whether a child has met the End of Year Expectations at the end of the academic year.

Subject leader monitoring takes place throughout the year which includes book scrutinies, discussion with staff, observations of displays, discussions with children etc

Review and Development

The science co-ordinator will attend any appropriate courses and pass on current information about the curriculum developments to other members of staff.

Julie Peake January 2026.