



**COLLINGWOOD**  
PRIMARY SCHOOL

## Science @ Collingwood Primary School

Our Science curriculum is taught through 4 key strands: Working scientifically, Biology, Chemistry and Physics. It is designed to inspire curiosity, foster a sense of wonder about the world, and equip children with the knowledge and skills to think scientifically. Our aim is to nurture confident, inquisitive learners who are eager to explore, ask questions, and develop a lifelong interest in science. Our curriculum exposes children to key scientists and through our STEM teaching, we provide opportunities for pupils to make cross-curricular links, use problem-solving skills, and understand how science connects with the modern world and future careers.

## Retrieval Practice

Low-stake quizzes for long term memory  
Varied teaching and learning activities  
Thoughtful sequencing of content  
Specific teaching of vocabulary

## Content and Sequencing

**EYFS** During their time in EYFS children develop knowledge of the world around them through exploring, observing, talking and problem solving. Carefully planned learning and environments ensure children have a wide range of experiences providing a firm foundation to be built upon in year 1.

**Year 1** begin their journey with everyday materials, which helps to build on their knowledge from EYFS and their understanding of the world around them. They move onto studying animals, including humans, where they build skills to work scientifically by asking and answering questions about themselves and others. Finally, they study plants: exploring, investigating and experimenting, to help them deepen their understanding.

**Year 2** continue to expand on their knowledge of everyday materials; they use experiments and investigations deepen this. They, then move on to living things, where the children broaden their understanding of the world around them, building on their learning from Year 1. Finally, they build on their study of plants from Year 1.

**Year 3** study plants and animals (including humans), continuing to build on their knowledge and skills from previous years, expanding their knowledge by organising and taking part in experiments and investigations. They continue their scientific journey by looking at rocks, forces, light, where they will begin to show an understanding of these parts of the world.

**Year 4** study living things and their habitats as well as animals, including humans, which builds on their knowledge, as they look at how environments change and we adapt to them and how our body works. They study states of matter, sound and electricity. During this time, they build on their skills for working scientifically by taking part in experiments and taking conclusions from them.

**Year 5** study animals, including humans, and living things and their habitats, where they look deeper into life cycles and the process of developing and changing. They investigate properties of materials, earth, space and forces, deepening their understanding of the world around them by building on knowledge from previous years.

**Year 6** study animals, including humans, living things and build on their knowledge of classification in these areas. The children also use their knowledge to look at evolution and inheritance. During year 6 they study light and electricity, building on previous learning, and bringing together their skills to work scientifically in a range of different contexts

## Essentials

The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings. Confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations.

Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings. High levels of originality, imagination or innovation in the application of skills.

The ability to undertake practical work in a variety of contexts, including fieldwork.

A passion for science and its application in past, present and future technologies.

## Assessment and Progress

Units of work are carefully sequenced; making connections with prior knowledge, concepts and vocabulary

Regular formative assessment and immediate feedback ensures misconceptions are addressed and learning is effective.

Effective questioning and higher order thinking are embedded within all learning experiences.

Adaptive teaching strategies ensure individualised instruction; supporting the needs of all learners

Opportunities for revisiting content and mastery learning/teaching for mastery

Key learning/sticky knowledge and vocabulary are recorded in knowledge organisers.

