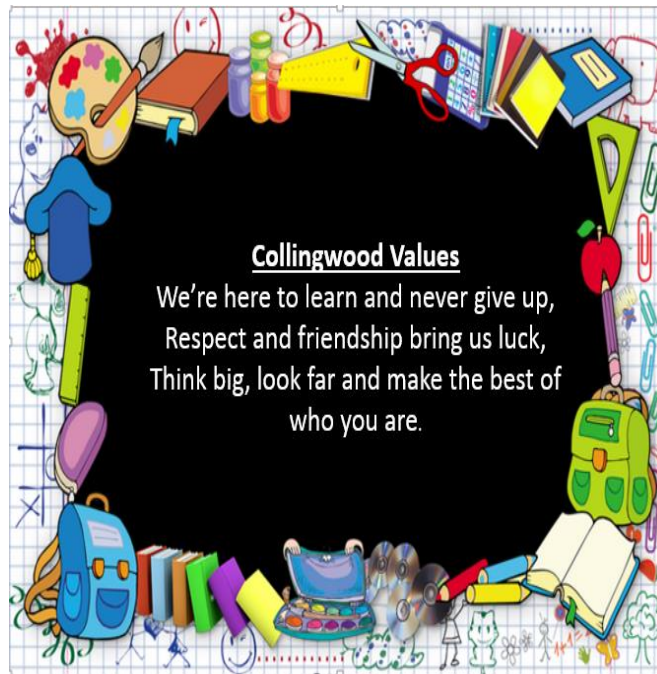


Our Science curriculum encourages children to independently question and explore their environment to develop a passion for discovery.



### Curriculum Drivers



#### Collingwood Values

We're here to learn and never give up,  
Respect and friendship bring us luck,  
Think big, look far and make the best of  
who you are.

### 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 a look everyday materials which helps to build on their knowledge from EYFS and their understanding of the world around them. They move onto looking at animals (including humans) where they build skills to work scientifically by asking and answering questions about themselves and others. Finally they look at plants where they join in experiments and investigations to help them deepen their understanding.

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

**Year 3** look at plants, animals (including humans), continue 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 deepen their understanding of these parts of the world.

**Year 4** look at living things and their habitats as well as animals (including humans ) which builds on their knowledge right from EYFS as they look at how environments change and we adapt to them as well as how our body works. They also look at states of matter, sound and electricity, during this time they build on their skills for working scientifically by taking part in experiments but also by writing up more detailed recaps of their working.

**Year 5** continue studying animals (including humans) as well as living things and their habitats, where they look deeper into life cycles and process as well as how we develop and change. They also study properties of materials, earth and space as well as forces, deepening their understanding of the world around them by building on knowledge from previous years and devolving into how things work.

**Year 6** look at animals (including humans) and 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 also look at light and electricity building on previous learning helping them to understanding movement of light and how to build a circuit in different ways.

### 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.

### Progress

Units of work are carefully sequenced so prior knowledge and concepts are built upon.

Regular formative assessment and immediate feedback ensures gaps are filled.

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

Progress and attainment within units is recorded and shared with all teaching staff.

Opportunities for revisiting content or apply learning in greater depth. Key ideas, concepts and facts recorded in knowledge organisers.