



# Science Policy

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Head Teacher's Signature/Date	N. J. Mande 3/4/25
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### 1. Subject intent

The 2014 national curriculum for science aims to ensure that all pupils:

- 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
- are equipped with the scientific skills required to understand the uses and implications of science, today and for the future.

At Coundon, we encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group, as well as the application of scientific skills. We ensure that the working scientifically skills are built-on and developed throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings.

### 2. Subject Implementation

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following:

- Science is taught weekly allowed children to build on knowledge each week during the unit.
- Cover pages and knowledge organisers are stuck in books at the start of units and referred to throughout the unit.
- Elicitation takes place at the start of units to understand the children's starting point.
- New vocabulary is taught to ensure this is not a barrier to learning.
- Recaps form part of the lesson to ensure that children are continually revisiting key knowledge and remembering this over time.
- Units have been carefully sequenced to facilitate the highest standards in the teaching and learning of science. Planning documents can be found on the school server and website.
- Planning ensures that children can apply knowledge and find out answers for themselves.
- Precise questioning is used to test conceptual knowledge and skills and assess children regularly to identify any gaps in learning.
- Children are encouraged to ask questions and be curious.
- Knowledge and skill development is built upon each year.
- Working scientifically skills are embedded into lessons to ensure these are developed throughout the children's school career. All classes have the symbols for the skills displayed.
- Misconceptions are planned for and quickly addressed.
- Extra opportunities such as STEM club, science week and trips enhance the school's science curriculum.
- Boost learning is used as a planning tool to ensure high-quality and consistency in resourcing.
- A dedicated science lab that children can regularly access.





### 3. Subject Impact

The successful approach at Coundon results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. We want children to enjoy and value science and appreciate the range of skills it will provide them with. An essential part of the children becoming scientists is promoting curiosity and encouraging the children to ask questions. By the end of KS2, our expectation is that children will be able to develop their own questions, plan different types of enquiries to answer those questions and communicate their findings in a variety of ways. Children will understand that part of science is failing and that problem solving helps us to overcome these failures. They will have a clear understanding of how scientists both past and present have contributed to society's understanding of the world around them and they will understand the role that science and other STEM subjects play in solving some of the key problems facing the world. Progress of our science curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.

### 4. Assessment

The impact of science teaching and learning can be monitored continuously through both formative and summative assessment:

- Teachers ensure that children are given feedback every lesson. Verbal feedback is given in lessons and each lesson is also marked in line with the school's marking and feedback policy.
- Planning facilitates opportunities for formative assessment through the use of questioning and quizzes to test the children's knowledge.
- At the start of units, children complete an activity that shows what they already know and at the end of the
  unit, an activity to identify what they have learned. This shows the progression in their knowledge.
- Summative assessment is completed on target tracker at the end of the year to assess how children have performed in science across the year. This data is then analysis to identify trends and target particular areas of science/particular groups of children.

### 5. Equality and Inclusion

We aim to provide an inclusive science curriculum that is accessible to all learners, including those with additional needs or language barriers. Tasks are adapted, simplified or scaffolded to ensure that all pupils can succeed in their language learning. Adults provide targeted support within lessons. Research shows that poor literacy skills is one of the biggest challenges to children accessing the science curriculum; class teachers will carefully task design to ensure that pressures on writing are removed.

### 6. Quality Assurance

The effectiveness of teaching and learning will be quality assured through:

- Book looks and feedback
- Professional discussions with members of staff
- Analysis of assessment
- Lesson drop ins
- Pupil voice

### 7. Role of the Subject Leader

It is the responsibility of the subject leader to monitor the standards of children's work. The subject leader is also responsible for supporting colleagues in their teaching, for being informed about current developments in the





subject, and for providing a strategic lead and direction for science in the school. The subject leader monitors the budget, resources science topics and books trips and workshops to support learning. The subject leader has specially-allocated time for fulfilling the task of reviewing samples of children's work, training, liaising with other subject leaders from other schools and organising science week.