

Burrowmoor Primary School Science Policy

Date of policy: June 2020

Review of policy: June 2022

Responsibility of: Charlotte Norman

Intent

At Burrowmoor 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.

Children will:

- 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. We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this.

Implementation.

At Burrowmoor Primary school, 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 this subject. Our whole school approach to the teaching and learning of science involves the following;

- We teach an allocated Science lesson each week in all year groups from Years 1-6. The lesson takes place on the same afternoon for each particular year group. We have prioritised Science in our school as we recognise that Teaching technological literacy, critical thinking and problem-solving through science education gives our pupils the skills and knowledge they need to succeed in school and beyond.
- Ensure that science in both written and practical work is recorded in a separate science book. This allows us to clearly see the progression of subjects and skills that children are making as pupils move through KS1 and KS2.

- Plan that for every unit of work, investigations (SC1) are conducted in small groups or carried out individually. Teachers plan for the children to do these investigations independently, where possible.
- Look at the coverage of units of work and decide when they are conducted at appropriate times in the year e.g. Plants and Living things taught in the Spring term. We build upon the knowledge and skill development of the previous years. As the children's knowledge and understanding increases, and they become more proficient, in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Ensure that progression is made apparent between each year group by using the curriculum coverage overview and NC. Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge. Teachers use precise questioning in class to test conceptual knowledge and skills.
- Carry out a Science Week each year, which allows all pupils to come off-timetable, to provide a broader provision and acquisition and application of knowledge and skills. There are a range of experiments and investigations that take place on at least three afternoons throughout the week.
- As a staff, give science specific feedback, both verbal and written to pupils when all work is marked.
- 'Topic Tasters' take place each term. Our pupils' parents have the opportunity to explore the learning taking place in school and this in turn, complements and broadens the curriculum that we offer in school. These 'Topic Tasters' are purposeful and link with the knowledge and skills being taught in class.

Impact

The intended impact of the Science curriculum is that the majority of children in each year group are working at or above the expected level for their age. Teachers will assess children against key objectives from the Science curriculum. In addition, it is the intended impact that the children;

- Are inspired by the Science curriculum and want to learn more
- Show the progression in their skills, knowledge and understanding in their work
- Can discuss their learning and remember what they have learned
- Can identify some key scientists and talk about the impact that their work has had on the world