

## Greenfield Primary School Science Policy

### **OVERVIEW**

At Greenfield Primary School children are Scientist. As Scientists, we promote a healthy curiosity in children about our universe and promote respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. We ensure that the Working Scientifically skills are built-on and developed throughout their school career so that they can use equipment, conduct experiments, build arguments, explain concepts confidently, continue to ask questions and be curious about their surroundings. Our children will understand what it means to be a Scientist and how Scientists play a part in our day-to-day life.

### **INTENT**

1. To promote and develop children's enjoyment and enthusiasm for science through exciting, practical, first-hand learning and opportunities to experiment, explore and investigate.
2. To ensure that the statutory requirements of the National Curriculum (2014) for science are taught well and that where appropriate their scientific knowledge skills and understanding are applied across all subjects of the curriculum.
3. To ensure that the school's schemes of work and guidelines for science are taught, thoroughly, systematically and progressively to all pupils by all staff.
4. To help pupils to become scientists by developing their problem solving and reasoning skills so that they can apply their scientific thinking across the curriculum.
5. To ensure that from the EYFS onwards, pupils are confident in their understanding and application of their basic skills in science and that they build upon their prior learning at every stage.
6. To encourage children to use their increasing knowledge, skills and understanding of science to investigate, ask questions and solve challenging problems.
7. To develop pupils' confidence and skill in scientific methods as they explore the areas of science and address increasingly complex problems.
8. To bring science to life and make it real so that children understand the importance of science in the world and in their everyday day lives.
9. To ensure that all children particularly those with special needs or disability; those who are 'stuck' or those finding it hard, are well supported.
10. To teach pupils to work with proper regard for their own safety and that of others, using safety equipment where necessary.

### **IMPLEMENTATION**

1. Science will be taught in planned blocks by the class teacher which will have an enquiry-based approach. This is a strategy to enable the achievement of a greater depth of knowledge and capture pupils' interests.
2. Teachers will use the schemes of work and guidelines, supported by an appropriate range of teaching and learning resources, to develop the knowledge, skills and understanding of every child, ensuring that all pupils, including those with SEND, achieve high standards for their ability and make appropriate progress.
3. Through our planning, we involve problem-solving opportunities that allow children to explore for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. Through the lessons children are taught the skills and knowledge needed. Our scientists then have the opportunity to practice these new skills through a practical application which is designed as a big question.
4. Teachers will make use of the immediate and wider environment to help pupils apply their scientific knowledge skills and understanding to see the relevance of science to their own lives. They will set challenging work, tasks and problems to increase children's' knowledge, skills and understanding, to extend their thinking and build their self-confidence.
5. Teachers will assess children's work in science through formative and summative judgements by; asking questions, observing learners during lessons, observing pupils solving practical problems and listening to pupils' discussions.
6. The science leader will support the teaching and learning of science by; providing strategic leadership and direction, monitoring progress and standards across the school, reviewing and revising the science policy, monitoring and supporting teachers in the teaching of science, keeping staff up to date on new developments in science, monitoring the effectiveness of the planning and development of science, auditing, monitoring the effective and appropriate use of resources and obtaining new resources.

### **IMPACT**

This policy will result in all pupils becoming confident scientists. Effective teaching will be high-quality, fun and engaging, and will ensure that children can solve problems by applying their scientific knowledge, understanding and skills therefore providing children with the foundations for understanding the world.