



## Science Curriculum Overview

Our curriculum includes many common aspects and themes that are woven through all year groups and across all subjects:

- It is broadly topic based
- The curriculum allows the children to relate their learning and skills to our school values of appreciation, compassion, love, perseverance, respect and trust and live their lives by them.
- Children are encouraged to learn from first hand experiences and exploration, which is built upon to learn about increasingly less familiar and more abstract ideas, concepts and places.
- Life skills are progressively taught and embedded which children can transfer to the next phase of their education, and in time to the wider world of work and the outside world
- The school grounds and immediate locality are made good use of for learning, where possible, and the children are encouraged to develop a greater understanding of Reading's place in national and international affairs, in addition to its place in the Thames Valley.

### Intent

At St Mary and All Saints CE Primary School, we will give our children all the skills they need to be critical thinkers, understand the process of scientific enquiry and have the scientific knowledge to understand the implications of science now and in the future. We will develop children's ability to question and challenge the world around them and deepen their curiosity in science, as well as equipping them with the relevant skills to investigate their own questions.

Careful links are made between the learning that children make in maths, English and other subjects to their learning in science where ever they are appropriate.

### Implementation

Our whole curriculum is shaped by our school vision which enable all children, regardless of background, ability and additional needs, to become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. There will be an emphasis in all science lessons on practical exploration and discovery. Teachers will create exciting and interesting opportunities for children to have hands-on experiences that are relevant to real life science, which may include trips and visitors, when possible.

Specific science units are taught in each year group, building on from previously taught units and skill coverage. Teachers may to change the order areas are taught to make cross curricular links as long as all areas are covered over the year.

Each year we will hold a science challenge week. During this week, children will experience a variety of science activities in order to broaden their breadth and depth of the subject. This may include visits from scientists and other experts in the field of science. This is a good opportunity for deeper

learning with the 'working scientifically' section of the curriculum and these opportunities may spark greater awe and wonder in the subject.

### **Impact**

We intend for our children to be able to think independently as well as to ask and answer questions about the scientific world around them. Our children will be able to identify anomalies in investigations and discuss misconceptions of their own and their peers in order to resolve them.

From their experience of investigative work at school within familiar scientific topic areas, we want our learners to be able to translate their scientific skills and knowledge to other, new and less familiar topics by being able to make connections and predict new concepts based upon the ones they are already familiar with.

Our science curriculum will encourage children to become life-long learners who are enthused, curious and inquisitive and confident to ask 'Big Questions' in science and who are well prepared for their future in the ever-changing scientific world.