

# Science

At Shrivenham CE Primary School, we believe that learning science enables our children to understand, enjoy and marvel at the world around them, through enquiry-based lessons that challenge their thinking. We aim to provide them with a secure foundation to prepare them for the study of the sciences beyond KS2, promote a passion for STEM study and a love of science. The curriculum will help to develop lifelong learners who aspire to become the scientists of the future.



## Our Intent

Create curious learners who question and explore the world around them

Build a connected knowledge base of key scientific concepts and the relationships between them.

Model the scientific enquiry types and skills which build a disciplinary knowledge of science.

To use focused practical enquiries which build upon prior knowledge.

Model and enrich scientific vocabulary to articulate learning in written and spoken word

Utilise the STEM capital from our local community to develop high aspirations



## Our Implementation

### Science curriculum

- Children are taught using the mastery approach where scientific concepts are introduced to all children in small, manageable steps to develop knowledge.
- Relationships between key scientific concepts have been identified and are made explicit through the curriculum.
- Each unit begins with an elicitation of children's current knowledge of key vocabulary

### Scientific enquiry types and working scientifically

- Scientific skills are planned into lessons, and these are explicitly modelled to children in practical work.
- Practical work in science has a clear purpose and is used to develop and build the children's knowledge base.
- Key vocabulary is modelled to all children and displayed on science working walls.

### Scientific Curiosity and Capital

- During the elicitation of a topic children can identify questions about the topic and these are incorporated into the planning of each unit.
- STEM capital from within the trust and the local community provides further support to enhance the children's aspirations and learning.
- Visitors and trips are identified to enhance children's learning.
- Science lessons are based on previous learning as well as real life contexts and current issues to make learning relevant where possible.

### Assessment and Inclusion

- A range of summative and formative assessment strategies will be used throughout the unit to identify misconceptions and inform future teaching and learning.
- Adaptive teaching strategies (EEF 5-a-day principles) are used by teachers so all children can make progress from their individual starting points.
- Opportunities for greater depth learning are provided for all children to apply their knowledge of science to wider contexts and build upon the relevance of the knowledge in their daily lives.



## Our Impact

Children will have a curiosity and interest in the world we live and how they can be part of it.

Children will build a connected knowledge base of interrelating scientific concepts.

Children will understand how the scientific enquiry types build our knowledge of scientific concepts.

Children will use a range of working scientifically skills when carrying out practical tasks.

Children will be able to articulate their scientific learning using a range of scientific vocabulary.

Children will have a range of opportunities to connect with STEM related experiences.