



# **Shardlow Primary School**



## **Science Provision- Intent, Implementation and Impact**

**Part of Willows  
Aspire, Achieve,**



**Academy Trust  
Thrive**

## **The Intent, implementation and Impact of our Science Curriculum**

### **Intent**

At Shardlow Primary School we believe that a high quality science education provides the foundations for understanding the world. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of reasoning and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills. The staff at Shardlow Primary School ensure that all children are exposed to high quality teaching and learning experiences, including exploring their outdoor environment, whilst developing their scientific enquiry and investigative skills. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. We intend to provide all children regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum.

### **Implementation**

In ensuring high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school.

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage. Science teaching at Shardlow Primary School involves adapting and extending the curriculum to match all pupils' needs. Where possible, Science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage. Due to one mixed year group classes in our school, Science units are taught on a two year rolling programme (with the exception of Reception). This ensures progression between year groups and guarantees topics are covered.

Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

We ensure that all children are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future.
- Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas.

- Help develop and extend our children's scientific concept of their world.
- Build on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language, recording and techniques.
- Develop the use of computing in investigating and recording.
- Make links between science and other subjects.

Science is taught consistently, once a week for up to two hours, but is discretely taught in many different contexts throughout all areas of the curriculum. For example, writing an information leaflet on dental hygiene, or presenting data from investigations in bar charts and line graphs.

At Shardlow Primary School we aspire to promote children's independence and for all children to take responsibility in their own learning, therefore we have implemented self/teacher success criteria assessment grids, which the children use each lesson. We use a range of formative assessment techniques, applied at the start and end of a topic. Staff RAG rate each pupil against National Curriculum objectives throughout each topic and send these trackers to the co-ordinator half termly.

Misconceptions and corrections/ improvements are identified early through weekly marking, and children are expected to respond to these.

### **Impact**

The impact and measure of this is to ensure children not only acquire the appropriate age related knowledge linked to the science curriculum, but also develop enquiry skills which equip them to problem solve within and beyond their everyday lives.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- A richer vocabulary which will enable to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.