

## **Intent**

At Weaver Primary School, it is our aim to provide high quality science education to all pupils and give them a sense of curiosity and wonder about the world around them.

Teachers will ensure that all children are exposed to high quality teaching and learning experiences, and so through scientific investigation, enquiry, questioning, exploring, analysing and summarising their findings, the children will build upon the strands of biology, chemistry and physics.

Core scientific knowledge and skills will be taught through direct teaching, experimentation and exploration. Our intent is for all our children to be life-long learners who are: inquisitive, independent thinkers and are well prepared for their future in the ever changing world.

## **Implementation**

We teach the National Curriculum, supported by a clear scientific skills and knowledge progression, as laid out in the 'Deep Learning' and 'End Points' documents. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

Each unit is planned with prior learning in mind and the unit outcomes 'End Points' are at the heart of the learning process. All teachers therefore have a clear understanding of learning that has taken place previously and are able to build upon that. At the start of a topic, teachers ensure that the prior learning knowledge is secure and that all children have a good understanding before moving on. Children will be provided with a 'learning journey' sheet, showing previous knowledge learnt, the end point of their new unit of work and the knowledge they will gain as they move further up the school and beyond.

A variety of teaching and learning styles are used in science lessons with the aim of developing children's knowledge, understanding and skills. This could be through whole class teaching, investigation or research based activities. Children are encouraged to ask and answer scientific questions. Science lessons provide the opportunity for data to be collected and technology to be used. Wherever possible, children are engaged in real scientific problem-solving activities that allows for Science to be brought to life. Key vocabulary is displayed, and teachers are responsible for continually updating their classroom working wall.

## **Impact**

The approach to the teaching of Science at Weaver Primary School will result in fun, engaging, high quality science lessons, that provide our children with the foundations for understanding the world around them. Being given opportunities to work scientifically, our aim is for the children to develop a love of the subject, that will take them through their primary education and beyond. We also aim for the children to be able to articulate their understanding of scientific concepts, using a wide range of scientific language and vocabulary and to organise and record their findings using mathematical skills.

Assessment at Weaver is teacher based and also formed using the 'PLAN – Planning for Assessment' sheets and a range of other informal strategies (concept maps, verbal/written outcomes, quizzes, reflection tasks/presentations). This allows for misconceptions and gaps to be addressed more immediately rather than building on insecure scientific foundations.