

## Lancaster Lane Statement for Science

### *Purpose*

The successful approach at Lancaster Lane Primary results in a fun, engaging, high-quality science education, that provides children with the foundations for understanding the world. We encourage children to be curious about the world around them and inspire a sense of wonder about natural phenomena. Our lessons involve children carrying out enquiry based activities to help them answer scientific questions. We feel it is so important to foster a love and curiosity of science as our children will be the scientists of the future. We aim to help our children understand the uses and implications of science, today and for the future.

### *Knowledge and Skills*

At Lancaster Lane, we ensure high standards of teaching and learning in science which links to our personalised curriculum wherever possible. We aim to equip our children with the knowledge and skills they need to become super scientists! Planning for science ensures coverage of all the National Curriculum and for Science and Understanding of the World in the Early Years Foundations Stage. The use of ASE Knowledge Matrices, along with careful mapping of scientific enquiry skills, allows for full coverage of skills and supports assessment across topics. Our personalised curriculum not only shows a progression of skills, but builds upon previous learning through effective and vocabulary rich teaching. Each learning sequence is carefully planned to include all of the relevant key features of scientific enquiry: observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources. Each topic begins with questioning of prior and existing knowledge. This helps the teacher to plan a targeted and personalised unit of learning. These pre-assessments allow the children's knowledge and misconceptions to be explored and corrected. Science lessons are taught weekly to ensure that the skills and knowledge are acquired throughout the term and can be developed and revisited throughout the year.

### *Enrichment*

Children at Lancaster Lane have access to a science club to enhance their awe and love of science phenomena. We have an area of school devoted to growing vegetables and planters for flowers which are accessed by all year groups. We devote days to science learning, in particular 'Electricity Day', where the children are fully immersed in a topic, leading to enriched lessons that are engaging and inspiring. Our school open door policy means that we regularly invite visitors in to speak to the children. This gives them the opportunity to

see a range of careers in science including nurses and electricians so the children can build on their science capital.

#### *Our Local Area*

Our teachers enhance the science curriculum using our local area as much as possible. For Year 1, 2 and 5's plants topic, we use our local park 'Cuerden Valley' to explore and classify plants. We welcome parents and members of our local community, who contribute to science, and show our children how a firm understanding of the subject can help support them in future jobs. We have outside companies that visit school to enhance our teaching and develop our children's awe and love of science.

#### *Monitoring / evaluation / assessment*

Teachers use ongoing formative assessment using Lancashire OTrack. This is assessed through questioning, observations and recording of information. This helps to identify gaps in learning and helps to form teachers' summative assessment. Teachers also use TAPS (Teacher Assessment in Primary Science) to assess knowledge and scientific skills covered in topics. These TAPS lessons help to identify misconceptions part way through a topic, giving the teachers time to address these. Summative assessments are collated at the end of every term and are reported to parents at the end of the year.

To be reviewed September 2022.