

Science

Intent

We use the National Primary Curriculum to ensure that learners develop a scientific knowledge and conceptual understanding of the world through the foundations of biology, chemistry and physics. We aim to inspire and excite learners' curiosity to develop the scientific skills and knowledge which will enable them to rationally explain the world and phenomena around them. Longleaze learners develop their scientific skills to communicate and explain what is occurring, predict how things will behave and analyse causes.

Implementation

At Longleaze, we believe science is the foundation for understanding the world around them as they grow and develop as learners. The teaching of this subject will provide learners with:

- Consistent, weekly teaching of science, where children 'work scientifically' in every lesson. Through this process learners will acquire scientific knowledge and language that is vital to understanding of scientific concepts. As they 'work scientifically' learners will also develop skills such as, observing, pattern seeking, identifying, classifying and grouping, predicting, comparative and fair testing, and researching.
- Learning journeys that will provide high quality teaching and learning in science through a progressive system of knowledge and skills based on the National Curriculum. Learning will build upon previously secured knowledge to allow genuine progression.
- Learning journeys are linked to the class topics where appropriate to provide further cross-curricular links with other subjects. This will re-inforce the scientific knowledge being taught and offer further opportunities to practise skills.
- Learner's knowledge of subjects is assessed at the beginning of a topic through discussion or KWL activities. These activities begin with the learners own knowledge (What I know) and develop their own curiosities through generating questions (What I want to know) at the start of the topic. These questions drive the planning of the learning journey. A learner's knowledge is then assessed at the end of the topic (What I have learnt) through a variety of activities.
- Exposure to age appropriate scientific language and the opportunity to develop and use this language through discussion when explaining the world around them. Learning environments will display current learning, implementing scientific vocabulary to support and scaffold learners.
- School organised trips based on key areas in the curriculum to help pupils develop and apply their scientific skills and knowledge in unfamiliar settings.
- An increasing ability to form ideas and rationally explain a viewpoint through questioning and gathering of evidence to support or refute an argument in science. These skills will be explicitly taught and developed through wider application in other subjects such as maths.

Impact

At Longleaze, the aim of our science provision will impact children in the following ways:

- Learners will aim high and take responsibility for their learning so that they develop their scientific knowledge and conceptual understanding.
- Learners will be equipped with the knowledge to understand the uses and implications of science today and for the future.
- Learners will be courageous and ask questions about the world around them.
- Learners share their own ideas as they 'work scientifically' and they are willing to listen to the views of others' to help shape and develop their own understanding.
- Learners will select and use their range of scientific skills effectively across different areas of the curriculum.

Achievement in Science is reported nationally at the end of Key Stage 2 (Year 6) in accordance with national guidelines by teacher assessment.

We monitor the impact of our science provision through termly teacher assessments, lesson observations, pupil voice and evidence in children's topic books.