



## Science at The Duke of Bedford

### Intent

Our Science curriculum at The Duke of Bedford will give pupils the opportunity to extend their knowledge and understanding of the Scientific world around them, helping them to develop a wide understanding of what, why and how the world exists.

Pupils will experience a range of engaging and inspiration lessons which enable them to effectively use subject specific scientific vocabulary.

Children will be challenged to identify and talk about similarities and differences when looking at different concepts and will be expected to recognise and explain links across scientific topics.

Our children will be given opportunities to work with a range of scientific equipment and to experience all seven enquiry types in their learning. They will be asked a range of open questions to elicit their understanding and will be challenged to give detailed reasoning in their responses, where they will be expected to explain their thinking using specific scientific vocabulary.

Children will be given opportunities to link their learning to other subjects, their local community and the wider world. They will use mathematical skills to support them in Science as well as applying skills from all areas of the national curriculum.

Children will have the experience of a yearly Science Week where they can use prior knowledge, new experiences and exciting Scientific opportunities to investigate the chosen theme and share this knowledge with their peers, families and the wider community.

### Implementation

We use resources from the Science Bug scheme of learning, alongside other sources for planning science lessons to help support our teachers in the planning and resourcing of Science lessons.

Our long term planning shows teachers which order to cover the 6 yearly units in across the academic year.

Our progression mapping document for Science shows teachers what key knowledge to teach pupils in each lesson and allows them to see the knowledge that has been taught previously. The implementation of our Science curriculum ensures a broad and balanced coverage of the National Curriculum requirements.

Pupils in our school take part in weekly, timetabled Science lessons, all Science lessons begin with 'knowledge checks' to ensure previously taught knowledge has been embedded into long term memory.

Teachers and subject leaders ensure that embedded within all units across the yearly cycle pupils are accessing and experiencing Scientific learning that is underpinned by the 7 areas of scientific enquiry:

- Asking scientific questions
- Comparative and fair testing
- Identifying, classifying and grouping
- Observing over time
- Pattern seeking
- Recording results
- Researching using secondary sources



### Impact

The impact of our Science curriculum is monitored through both summative and formative assessment opportunities.

The end of each unit allows for an assessment task to take place which allows pupils to present the knowledge gained in various formats for differing purposes. Within these tasks pupils use knowledge and vocabulary acquired within each unit to share what they have learned. Teachers submit termly teacher assessment data for Science which is reviewed and quality assured by the Science lead.

Pupils will leave The Duke of Bedford with a range of skills and progressive knowledge which will enable them to succeed in their secondary education. They will possess both factual and procedural knowledge that will enable them to become keen and successful scientists at secondary school.