Science Curriculum Statement

At Buglawton Primary School, we believe in the unlimited potential in every child. We believe that every child should be given every chance, every day.

INTENT

Rationale:

At Buglawton we believe that all children can achieve in Science. We do not put ceilings on what children can achieve and we do not hold pre-conceptions about any child's ability to make progress.

We believe through learning Science, children will become enquiry-based learners and develop curiosity about natural phenomena, a sense of excitement, predict and analyse.

Ambition:

Our intent is for our children to:

- Be curious and develop a deeper understanding about the world which we live in.
- Develop a secure substantive knowledge within the three aspects of science: biology, physics and chemistry.
- Participate in purposeful, practical enquiries which link to the 6 different enquiry types: fair/ comparative testing, research, observation over time, pattern seeking, identifying, grouping and classifying and problem solving.
- Progressively develop their disciplinary knowledge and Working Scientifically skills.
- Make connections in their learning and to know more, remember more and do more each year leading to academic success and enjoyment in this subject.
- Converse with confidence orally and in writing in a range of contexts using subject specific vocabulary. Our intent is to provide children with a science curriculum which enables them to confidently explore the world around them and have a deeper understanding of the ever-changing world in which they live. We aim to nurture children's curiosity and motivate children to be inquisitive learners throughout their time at Buglawton and beyond.

IMPLEMENTATION

The National Curriculum is the starting point of our curriculum design. It has been used to drive our curriculum design, in order to ensure the aims of the National Curriculum are met, and it has been used to inform the choices we have made about the content that we teach at Buglawton Primary School. We create a positive attitude towards science learning and develop and embed children's scientific knowledge, skills and understanding through our carefully sequenced planning across the school. Our whole school approach towards science involves the following:

- In EYFS, a high-quality learning environment encourages and provokes children to develop their understanding of the world. Children in KS1 and KS2 take part in a minimum of 1 hour of science learning per week, which focuses and builds upon the objectives which are set out in the 2014 Science National Curriculum and have been mapped out in our Buglawton Curriculum Maps.
- Working Scientifically skills are mapped out Working Scientifically document.
- Children are immersed in subject-specific vocabulary and given sentence stems in order to develop their oracy within science. Knowledge organisers are used for each unit to provide consistency and progression in scientific language throughout the school.
- Knowledge catchers are used for children to reflect on their learning each lesson and to represent it in a way that is meaningful to them.
- Children have the opportunity to participate in a wide range of purposeful, real life and hands-on experiences which are used alongside high-quality secondary sources to enable children to ask and answer scientific questions. • Each year, children in KS2 have the opportunity to attend a Science Club after school.
- Flashback 4's are used to assess children's prior knowledge.

•Children are assessed on six key questions at the end of each topic

• Safe practice is highlighted and modelled in the teaching and learning of science. Children are encouraged to plan and reflect upon personal safety within their practical enquiries.

IMPACT

•We are aspirational for all children, therefore we aim for all children to achieve age related expectations at their end of each academic year.

•Staff will analyse through formative and summative assessments. They will use our 6 key questions to assess children's knowledge of the science unit taught.

•Children will retain and build on knowledge that is pertinent to Science with a real life context.

•Children will be able to question ideas and reflect on knowledge.

•Children will work collaboratively and practically to investigate and experiment.

•Children will be able to explain the process they have taken and be able to reason scientifically.

•Children will use and understand Science specific vocabulary.