QUEEN'S DRIVE INFANT SCHOOL



SCIENCE POLICY

June 2020

Vision

To encourage and build upon children's curiosity, awe and wonder about the world around them.

Aims and intent

It is our aim in Science that children are given opportunities to observe, record and draw conclusions about their local environment. We want to expose and allow the children to experience experiments and investigations while encouraging them to become more inquisitive about the world around them.

Through teaching Science children are given opportunities to:

- 1. Develop their knowledge and understanding of important, relevant scientific ideas, processes and skills and relate these to everyday experiences.
- 2. Acquire a curious and questioning mind Be curious about things they observe, experience and explore in the world about them with all of their senses.
- 3. Develop skills of observation and investigations predicting, asking questions, making inferences, concluding and evaluating based on evidence and understanding and use these skills in investigative work
- 4. Collect, retrieve, present and communicate their findings to others in a variety of ways Develop language skills through talking about their work and presenting their own ideas using sustained and systematic writing of different kinds, use scientific and mathematical language including technical vocabulary and draw diagrams to communicate scientific ideas.
- 5. Develop a respect for the environment and living things and for their own health and safety.

Implementation / Organisation

Science is taught in units weekly through a combination of whole class teaching, group and individual support. The units are based on the National Curriculum and EYFS framework statements, alongside a long term school overview and breakdown of statements into skills. Science units are linked where possible to the topics being taught each term.

Teachers will encourage our children to have skills of observation, discussion, debate and research. In order to ensure the children receive a balanced science curriculum it is essential that elements from each of the Attainment Targets be taught each year, with particular emphasis on Scientific Investigation.

During the Foundation Stage children begin to explore the world around them, with specific Science work covered through the Early Learning Goal 'Knowledge and Understanding of the World'.

Defining and Demystifying the Destination - The children will have to opportunity to take part in experiments and investigations each half term to develop their enquiry skills and enable them to make sense of the knowledge being taught.

High expectation / challenge for all — We recognise the fact that there are children of widely differing abilities in Science and we seek to provide learning opportunities for all children by matching the challenge of the task to the ability of the child.

Feedback - | Children are moved on with their understanding through 'in the moment' feedback during lessons. Children are encouraged to use peer feedback. We celebrate errors and use misconceptions in our Science teaching.

Throughout our Science teaching we hope that our children will develop a sense of awe and wonder about the world around them.

Planning

- Long term plans are used based on the National Curriculum where progression has clearly been identified for each year group
- Teachers then use pre-assessments as the starting point to inform their planning and build on previous learning for the unit that term
- Weekly planning is then used to focus teaching and learning
- Insight is used as the school system to track learning
- Investigational Science is built into all units across the school
- Opportunities for planned to use of the outside area / garden / pond
- Resources for Science are plentiful and stored in the Science cupboard and outside in the garden shed

Impact / Assessment and monitoring

Science knowledge and skills are monitored during and the end of each topic being taught. Children are assessed on their progression from their starting point. Progress is then tracked on Insight over time. Suitable tasks include:

- Small group discussions, usually in the context of a practical task.
- Specific arrangements for particular pupils.
- Individual discussions in which children are encouraged to approve their own work and progress.

Planning is monitored by the subject leader over the year to ensure progression is effective and the school grounds are being used to their full potential.

Summative assessment takes place at the end of each term and at the end of each academic year, when a level of the child's attainment is assessed against age related expectation. This assessment may be carried out through discussion and the use of school developed assessment sheets where key skills and knowledge have been identified by staff.

The science leader is available to support colleagues in their teaching and attends regular training and engages in reading and keeps up to date with current developments in the subject.