Shardlow Primary School

Science Policy

Approved by:	Academy Governing Body
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Part of Willows Academy Trust

Aspire, Achieve, Thrive

Version Control

Version	Date	Author	Changes
V1.1	Dec 2020	H Berry	Updated template Amended resources storage due to conversion of the hub.

It is the policy of Shardlow Primary School to provide a broad, balanced, relevant and interesting Science Curriculum for all pupils.

Science education is about fostering a sense of enquiry, problem solving and extending pupil's understanding of the world around them. STEM is increasingly important in career development, and this should be reflected in the curriculum. Science is extremely cross curricular and offers many skills which can be used in other subjects, including technology, maths, English, computing and PE.

Aims

Pupils are offered the opportunity to:-

- Ask questions and consider explanations through experimental evidence.
- Develop the skills and processes of scientific enquiry as laid down in the 2014 National Curriculum programmes of study.
- Learn ways of predicting, investigating and communicating ideas.
- Encourage creativity and enjoyment through collaboration with others.
- Apply technical language and mathematical skills in relevant contexts.
- Develop a respect for the living and non living environment.
- Foster a sense of responsibility for their own and others health and safety.

Organisation

We follow the 2014 National Curriculum. Teaching is done in a two year cycle to ensure that all pupils have full coverage and the school's long term plan is developed alongside this. The science objectives for the upcoming year are contained within topics and reviewed at the annual curriculum planning meeting. Progression of skills and knowledge through school are outlined on our science progression map. This is also subject to review as the cycle is implemented.

Practical activities and first-hand experience are central to primary science. Children are given opportunities to work individually, in small groups and as a whole class. Enhancement activities are encouraged and many are embedded as part of the yearly timetable.

The skills map includes a variety of recording methods. ICT is used to support work in science where appropriate.

Equal Opportunities and Differentiation

Every child is entitled to a broad, balanced and relevant science curriculum in line with the requirements set out in the Equalities Act. Both boys and girls are encouraged to take an active part in scientific investigation.

Provision is made for all children at both ends of the learning spectrum so that all children may contribute and succeed at a level which will provide them with an appropriate level of challenge. Differentiated activities are planned either by task or by outcome. Children who need extra support receive it in a variety of ways, such as additional input from an adult or through resources.

Assessment and record keeping

Teacher assessment is a continuous part of the teaching/learning process in science. As well as on-going formative assessment, lesson objectives are measured against success criteria. An assessment tracker (against the NC objectives) is also used to monitor pupil progress and to identify gaps/ areas for development, as individuals and as a class. These are shared with the co-ordinator termly.

Safety in Science

We accept a responsibility to plan safe activities in science, thinking ahead about potential risks and to make pupils aware of any potential hazards in practical activities. Equipment given to children to use is in good condition and suitable for the purpose for which it is intended. Teachers are aware of the 'Be safe' document, (published by the Association for Science Education), which can be used as a point of reference. All teachers perform a visual health and safety check whenever practical work is undertaken.

Resources

1. General science and technology equipment is stored in the attic.
2. Books – a range of teacher and children's reference books are available in the library and attic.
3. The school environment such as displays, and the surrounding area (field/ garden).
4. Visits/ trips, after school clubs and visiting speakers/ workshops as arranged.
5. LEGO coding kits are stored in Erewash class.
6. Data loggers, Beebots, DVDs, robotic packs and a digital microscope are now kept in the attic.

Staff Development

In Autumn 2017 the school was awarded a Primary Science Quality Mark, (Bronze) which the co-ordinator had worked on for a year. The co-ordinator also attended a nine day, three part course, 'Science for the Experienced Primary Leader', at the National Stem Centre, which was completed in Summer 2018.
January 2019- A member of teaching staff attended a 2 day course at the National STEM Centre, 'Excellence in Science for Upper Key Stage 2'.
The Co-ordinator provides internal INSET to all teaching staff according to need, usually twice a year- although this may alter if required.