

Shiplake C.E. Primary School Memorial Avenue Shiplake , Oxon RG9 4DN 0118 940 2024 office.3810@shiplake.oxon.sch.uk

'I will instruct you and teach you in the way you should go; I will counsel you with my loving eye on you' Psalm 32.8

POLICY STATEMENT: SCIENCE

CURRICULUM INTENT

At Shiplake Primary School it is our intention that the science curriculum encourages children to be curious. Our curriculum intends to capture the excitement of scientific discovery, through providing children with a wide range of interesting and enjoyable experiences. This allows the children to raise and answer questions about the world around them in a meaningful way and helps them to develop their scientific knowledge, skills and vocabulary. As the children progress through the school they become more independent in leading their own learning and lines of enquiry. In this way, we intend to bring science to life for all pupils.

DEFINITION

Science is a way of working which allows children to develop their knowledge and understanding of the world they live in. Developed knowledge and understanding is achieved through practical first hand experiences and secondary sources which allow children to observe, investigate, evaluate, and communicate findings.

<u>AIMS</u>

To encourage children to:

- develop a questioning mind through a range of interesting and enjoyable experiences
- develop a systematic and logical way of working
- apply skills and knowledge to investigations
- come to a gradually deepening understanding of scientific concepts
- work safely and carefully.

GUIDELINES

Teaching and Learning

All the children have access to science. It is organised in year groups and fulfils the requirements for the National Curriculum (2014).

Children are given the opportunity to work in a variety of ways and groupings. These are dependent on the skills, knowledge and understanding to be studied.



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Foundation Stage

Foundation stage follows the Statutory framework for the early years foundation stage Curriculum (2017). Science at this level is taught through play based activities based on first hand experiences, which are either child initiated or adult focused. Detailed assessments are collated and maintained by the teacher. This record includes a variety of assessments such as observations, photographs, children's drawings and recorded dialogues between teachers and child. At the end of the Foundation year a child is assessed against the early learning goals and the results are sent to the LEA as required nationally.

Science Investigations

Children will be taught to devise and plan experimental work, make predictions, and obtain and consider evidence. Investigations may be used at different points in a unit of work. They may be used as a way of finding out what children already know, to assess how well children have understood the work they have been doing, or as a way for children to acquire new understanding. Children will be encouraged to pose questions and discover answers to them.

Skills and Attitudes

In our science activities we hope to develop the following skills: observing, raising questions, predicting, hypothesising, planning, fair testing and controlling variables, measuring, collecting and interpreting data, explaining evidence and communicating findings in a variety of ways.

Through science we endeavour to foster the following qualities within a safe environment: curiosity, perseverance, open-mindedness, self-discipline, sensitivity to others, independence, adaptability, co-operation, health and safety considerations and care for living things.

Differentiation

Teachers allow for all children to reach their full potential in Science through appropriate planning, and through adapting tasks to individual pupil's needs. Tasks are differentiated in a variety of ways across the school in order to allow for pupils to access learning and meet their potential.

Equal Opportunities

Throughout the planning stages we ensure that the science curriculum is available to all pupils, with equal and appropriate access regardless of sex, race, faith and disability.

ICT

The use of ICT within science is encouraged. Where appropriate, children are provided with the opportunity to communicate through ICT as well as using it to collect and present data.



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Teachers and children in both key stages use the interactive whiteboard and digital cameras as teaching and learning tools within this subject.

Records and Assessment

Children are assessed after each science topic using the Rising Stars scheme of work. Results are then passed onto the science coordinator who tracks pupil progress across the school.

Safety

It is important that children are taught to observe the rules of safety when carrying out experiments and investigations. Materials and equipment need to be handled sensibly and we try to ensure that children do this. Teachers have been provided with a copy of "Be Safe" (published by the Association of Science Education) to provide them with guidance on safe working within the science curriculum. A copy of the document is also available in the staff room.

Resources

A range of science resources are available from the science resource cupboard. Resources are grouped according to topics and are available to all members of staff.

Science Co-ordinator

The Science co-ordinator will take responsibility for ensuring coverage and continuity of science skills, understanding and knowledge across the primary years. This will be achieved through regular learning walks and book scrutinies, and through overseeing the tracking of pupils across the school. Observations from these methods will inform school actions and targets.

Reviewed by Anthony Tugwell (Science Subject Leader) February 2021 3 year review – February 2024