



Learning happily together

Science

Subject Intent

At Lowe's Wong Infant School it is our intention to develop in our children a lifelong curiosity and interest in the Sciences. We believe that by learning happily together we can develop children's ideas and ways of working, to enable them to make sense of the world in which they live.

Science is a body of knowledge built up through the experimental testing of ideas and through our carefully planned curriculum we intend to develop the practical way in which our children can begin to find answers to questions they may ask about the world around them. Through our Science teaching we will encourage all children to develop a positive attitude towards Science. The children will have a deeper understanding of plants, animals, including humans, uses of everyday materials and their properties, seasonal changes, living things and their habitats. Children steadily build on their scientific knowledge and vocabulary as they move through the school starting in EYFS. Science will be taught through cross curricular enquiry themes that will inspire our children to ask questions and explore answers through practical hands-on experiences whenever possible.

Children will leave Lowe's Wong Infant School with an enquiring mind that gives them a sense of excitement and curiosity about natural phenomena, and a wonder about the world.

It is our intent to help them to develop and extend their scientific concepts, and to encourage them to ask deeper questions about the world around them. We will enable children to become effective communicators of scientific ideas, facts and data.

Subject Implementation Plan

Timetabling

At Lowe's Wong Infant School Science is taught in blocks linked where possible to our enquiry themes. There will be Science teaching every term in both KS1 and EYFS.

In EYFS, Science opportunities are continually provided during 'Explore and Investigate' activities (child-initiated time). There is also planned teaching of scientific concepts from the Understanding of the World strand of Development Matters, these are shown on the long-term plans.

In KS1, Science lessons are taught in blocks linked to the cross curricular enquiry themes. This is clearly mapped out on the long-term plans for each year group. Each block of teaching also includes planned opportunities for working scientifically.

How Science is taught

In EYFS Science is taught using the sequence and structure in the Understanding the World strand of Development matters. It is delivered through planned, purposeful play and through a mix of adult-led and child-initiated activities. Some scientific concepts will be explicitly taught through whole class discussions. Science based learning will take place within the classroom, in the courtyard and also through a weekly Muddy Explorers lesson.

In Science at Key Stage One we follow the National Curriculum, which sequences and structures the teaching into the year groups. These sequences are planned into blocks linked to our enquiry themes.

Classes within year groups follow parallel activities and study to ensure equal opportunities and consistency. Although where specific gaps or needs have been identified then some adaptations will be made.

Within Science lessons there are opportunities for children to recap and recall learning and prior knowledge.

Children will be actively encouraged to participate through questions and answers, partner talk and engaging in working scientifically skills. These skills will be explicitly taught during Science lessons. Outdoor learning will be used as a part of teaching and learning in Science when it is appropriate.

Resources

There are two cupboards of Science resources in the small dining room. There are a large selection of non-fiction books in the library and staff can order extra books through the Education Library Service.

Purple Mash has some resources for teaching and learning in Science. BBC Bitesize and other suitable websites are also used to help teach Scientific concepts and knowledge.

Marking, feedback and assessment

Teachers acknowledge work with a tick and comments may also be used to provide feedback linked to the Learning Objective. The Learning Objective should be RAG rated to show understanding.

Teachers use their marking, informal observations and discussions with the children to complete a data drop at the end of each term. This will be monitored by the Science lead and findings shared with staff.

Teachers should mark according to the Feedback and Marking Policy.

In EYFS annotated photographs are used to show the children's understanding of a concept. Feedback will often be verbal and at the point of discussion, staff use this opportunity to move the learning forward in the moment. Teachers use their marking, informal observations and discussions with the children to complete a data drop at the end of each term. The Natural world strand of Understanding the World data will be monitored by the Science lead and findings shared with staff.

Recording work

In KS1 children record their Science work in their English and Topic book. Each piece of work has a date and a clear learning objective. The learning objectives include knowledge and skills. Any recording/activity sheets are stuck into books neatly and children have regular opportunities to record in their own way including pictures, diagrams and simple written reports.

Some scientific work may be recorded in the class floor book, with appropriate annotations by the children or staff.

In EYFS much of the recorded work will be photographs in their Learning Journey books with annotations to show the children's understanding.

Learning Environment

The resources used in Science will be of good quality with enough of them to support all the children. There are displays in the classrooms that reflect the enquiry theme. These include key vocabulary and examples of the children's work.

Equality and Diversity

Through the use of a range of appropriately adapted resources all children have equal access to the Science Curriculum.

Through practical activities and the enquiry themes we aim to broaden the children's knowledge and experience. The White Rose slides used to support Science teaching depict a diverse representation of children.

Curriculum Enrichment

The Science curriculum at Lowe's Wong is enhanced through educational visits and regular outside learning opportunities.

SEND

All our children will have equal access to the Science curriculum. Adaptive Teaching is used to meet their needs, and this may include adult support to access the learning in the classroom.

Behaviour

All children are expected to demonstrate good sitting during Science lessons whether on their chair or the carpet and not touching the equipment, until asked. All children are to demonstrate good looking by looking at the member of staff, rather than their equipment. All children are to demonstrate good listening by sitting quietly, not talking to others and listening to the teacher. During practical work and when recording in their books teachers use the visual prompt cards – Whispering Whales or Silent Snails to determine the level of noise for the activity.

Children are expected to handle the scientific resources with care and to help tidy up after any practical work.

Good behaviour will be rewarded in line with the school's behaviour policy.

It is expected that teachers will respond to any misbehaviour promptly during Science lessons by following the school's agreed behaviour policy of warnings, reflection and time outs.