

# Furness Vale Primary and Nursery School



## Science



### INTENT

At Furness Vale Primary School, our vision is to give children a science curriculum which enables them to confidently explore and discover the world around them, so that they gain a deeper understanding of the world in which we live. This supports our whole school vision to develop enquiring minds and promising futures. We aim to create fun and stimulating science lessons that where possible complement the thematic approach to our curriculum. We provide hands-on, enquiry-based lessons which promote questioning, challenge, working practically, investigating, evaluating, making choices and working independently. We always encourage and model the use of correct scientific vocabulary. While our children make progress we feel it is vitally important that they develop a secure understanding of each key block of knowledge and concepts, which is the rationale behind our spiral based 2-year cycle. We feel it is vitally important that our children also develop an understanding of how important and relevant science is to their lives, now and in the future.

### IMPLEMENTATION

#### EYFS

In EYFS, children begin their Science learning journey by following the Early Learning Goal: Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.

Within EYFS Science is taught through continuous provision. There is a yearly plan which ensures opportunity is given to explore the three main areas of science: biology, chemistry and physics throughout the year.

Children's activities and learning is recorded in a whole class science book.

#### KS1

We have created a two-year cycle for key stage 1 ensuring biology, chemistry and physics are visited on a yearly basis. In creating this cycle, it ensures us the flexibility to teach two year groups the same content while ensuring their key knowledge, vocabulary and scientific skills follow a spiral developmental process. At the start of each topic children complete a concept map sharing their current knowledge and understanding in order to ensure progression is considered in the lessons planned. The children are also encouraged to write down any questions they have around the subject being studied to ensure these can be answered by the end of the unit.

Teachers are provided with a knowledge organiser and key vocabulary lists for each unit.

Children's learning is recorded in a class book.

Each topic should include at least one investigation which is to be planned and recorded using our discovery dog investigation template.

Formative assessments of children's learning are made and assessed through observations and classwork. These assessments are recorded on our tracker sheets for each cycle and contribute to a summative judgement at the end of KS1 as required nationally.

Science is taught in an afternoon session each week, timings vary slightly over each unit and termly topic.

#### LOWER and UPPER KS2

We have created a two-year cycle for both lower and upper KS2 enabling us to teach our mixed age classes the same content at the same time but ensure full coverage of the programmes of study set out in the national curriculum by the end of each stage. At the start of each topic children complete a concept map sharing their current knowledge and understanding in order to ensure progression is considered in the lessons planned. The children are also encouraged to write down any questions they have around the subject being studied to ensure these can be answered by the end of the unit.

Teachers are provided with a knowledge organiser and key vocabulary lists for each unit.

Children's learning is recorded in individual science books. Each topic should include at least one investigation which is planned and recorded on our investigation templates, one for lower KS2 and one for upper KS2.

Formative assessments of children's learning are made and assessed through observations and classwork. These assessments are recorded on our tracker sheets for each cycle and contribute to a summative judgement at the end of KS2 as required nationally.

Science is taught in an afternoon session each week, timings vary slightly over each unit and termly topic.