



## Ludgvan School – Science Curriculum Statement

*“The important thing in Science is not so much to obtain new facts as to discover new ways of thinking about them.”*  
*William Lawrence Bragg*

### **INTENT** - what we aim to achieve through our science curriculum:

At Ludgvan, we teach Science through exploration and discovery using ‘big questions’ to form the basis of the learning, ensuring that they also cover a range of Scientific enquiry types. Scientific enquiry is crucial in developing and sustaining curiosity. This curiosity and imagination stimulates questions, predictions and hypotheses; where we can then enable children to explore ways to investigate and test out their ideas by making observations, gathering data, presenting their findings and then explaining what they have found out scientifically.

We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this. At Ludgvan, we encourage children to be inquisitive in all aspects of their Scientific enquiry. The Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. Children in Early Years have access to Science every day in their continuous provision, Key Stage 1 cover 4 topics across the course of a year and Key Stage 2 cover 5 topics across the course of a year.

We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. We ensure that the Working Scientifically skills are built on and developed throughout the children’s time at Ludgvan so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings.

### **IMPLEMENTATION** – how we deliver our science curriculum:

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in Science. Our whole school approach to the teaching and learning of science involves the following;

- Science is taught in planned and arranged topic blocks by the class teacher. Where this fits to the class topic, it does, however in most cases it is taught as a stand-alone subject.
- Through our planning, we involve problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers.
- Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge and teachers use precise questioning in class to test conceptual knowledge and skills.
- We build upon the learning and skill development of the previous years. As the children’s knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Each topic has a Working Scientifically investigation that enables the children to use and apply the knowledge and skills that they have been taught. This is clearly labelled on each lesson.
- New and precise vocabulary and challenging concepts are introduced through direct teaching. Each year group topic also has its own visual word mat which is accessible for all and acts as a brilliant resource.
- Children are offered a wide range of extra-curricular activities, visits, trips and visitors.

### **IMPACT** – How we will know how successful our science curriculum is:

Science at Ludgvan is fun and engaging resulting in a high-quality science education, that provides children with the foundations and knowledge for understanding the world. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Frequent, continuous and progressive learning outside the classroom is embedded throughout the science curriculum.

Our annual Science Week is another great strength where we host our annual boat race, hold paired class investigations allowing children to work with different year groups of children, host dress up days and much more. The engagement is always incredibly high and families look forward to this fun-filled event.

Children at Ludgvan enjoy science and this results in motivated learners with good scientific understanding who feel they are scientists and are capable of achieving.