

C – 3 Science Policy

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| Subject Leader: | Heidi Gray |
| Subject Governor: |  |

**SCIENCE POLICY**

**PONDHU PRIMARY SCHOOL**

**Introduction**

The vision for the school is for children to leave primary school enthused about science and the world around them. Learning science is concerned with increasing pupils’ knowledge of our world, and with developing skills associated with science as a process of enquiry. Our science curriculum develops the natural curiosity of each child no matter their demographic, encourages them to have respect for living organisms, and instil in pupils the importance of caring for the natural environment.

**Aims**

Using the requirements of the Science National Curriculum as our guide, our Science lessons offer opportunities for children to:

* Develop scientific knowledge and conceptual understanding of the disciplines of Physics, Chemistry and Biology.
* Formulate their own questions about the natural world.
* Foster the confidence to ‘be wrong’ when it comes to making predictions and postulating their own theories.
* Promote an awareness of the importance of teamwork in scientific experimentation.
* Practically investigate their questions using various methods of enquiry.
* Gain competence in the science skills of planning scientific investigations, gathering and analysing data and critical evaluation of investigations across the disciplines.
* Use a range of methods to gather data from investigations and secondary sources including I.C.T., drawings, diagrams, videos and photographs.
* Present data in a variety of methods including tables, bar charts, line graphs, pictograms and pie charts.
* Have care for the safety of all individuals in lessons by developing knowledge of the hazards of the materials and equipment they handle, along with mitigating these hazards.
* Develop an enthusiasm and enjoyment of scientific learning and discovery.

**The Philosophy and Ethos**

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children can achieve high standards in science. Science will be taught as set out by the year group requirements of the National Curriculum. This is a strategy to enable the accumulation of knowledge and allows progress in repeated topics through the years.

Engaging lessons are created with each lesson having both practical and knowledge elements. Teachers use precise questioning in class to test conceptual knowledge and skills and children are regularly assessed to identify those children with gaps in learning, so that all children keep up.

We build upon the learning and skill development of previous years. As the children’s knowledge and understanding increases, and they become more proficient in selecting and using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.

Working Scientifically skills are explicit in lessons to ensure these skills are being developed throughout the children’s school career and new vocabulary and challenging concepts are introduced through direct teaching. Pupils will concentrate on one science skill per term. Term 1 will be dedicated to planning investigations, Term 2 to results gathering and analysis, and Term 3 will be spent evaluating practical work. Although each skill is related and there are links between them, there is minimum crossover as they are taught, so each becomes firmly embedded.

Through our planning, we involve problem solving opportunities, allowing children to find out for themselves how to answer questions in a variety of practical means. Children are encouraged to ask their own questions and be given appropriate equipment to use their scientific skills to discover the answers.

**Equal Opportunities**

At Pondhu Primary School we are committed to providing all children with an equal entitlement to scientific activities and opportunities regardless of race, gender, culture or class.

**Inclusion**

In school we aim to meet the needs of all our children by differentiation in our science planning and in providing a variety of approaches and tasks appropriate to ability levels. This will enable children with learning and/or physical difficulties to take an active part in scientific learning and practical activities and investigations and to achieve the goals they have been set. Some children will require closer supervision and more adult support to allow them to progress whilst more able children will be extended through differentiated activities and questioning. Through careful questioning, children’s knowledge and understanding will be stretched in order to create a profound understanding that can be applied and built upon. This will enable the more able children to progress to a higher level of knowledge and understanding appropriate to their abilities.

**Assessment and Record Keeping**

Assessment for learning is continuous throughout the planning, teaching and learning cycle using a variety of methods:-

* Observing children at work, individually, in pairs, in a group, and in classes.
* Questioning, talking and listening to children.
* Considering work/materials / investigations produced by children together with discussion about this with them.
* Beginning and end of unit quiz.

**Health and Safety**

Children are taught how to use equipment correctly and safely recognising risks and taking action to control them.Risk assessments are used when appropriate.Any trips should have been planned with due regard to the school policy on taking children on outings.

**Policy Review**

This policy was reviewed in Spring 2024 and will be reviewed every two years.

**Prepared by Heidi Gray**

**Science Subject Leader**