



Science Policy

Reviewed:

July 2020



Aims and Objectives:

Science at Ryhill Junior School aims to teach our children the skills, knowledge and understanding they need to question and understand concepts that occur in the world around them. The National Curriculum for Science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

As well as these, Ryhill Junior, Infant and Nursery School aims to:

- enable pupils to make decisions about the uses and values of scientific work and achievements
- enable pupils to develop an understanding and respect for the natural world
- enable pupils to question, hypothesize, test and discover for themselves about our world
- develop the skills required to investigate the world around them

Leadership Role:

The Science Co-Ordinator is responsible for ensuring that the aims of the Science Policy are met. In addition to this, the Science Co-Ordinator should:

- encourage and support staff in the implementation of the curriculum and school approaches to Science teaching
- co-ordinate assessment procedures and record keeping to ensure progression and development throughout the school
- monitor the teaching and learning of Science throughout the school
- organise and review all science-based resources, ensuring they are readily available and maintained.
- support staff by encouraging the sharing of ideas and organising training as appropriate

Science in EYFS:

We teach science in the Foundation stage as an integral part of the topic work covered during the year. It comes under Understanding the World in the EYFS. Children must be supported in developing the knowledge, skills and understanding that help them to make sense of the world. Their learning must be supported through offering opportunities for them to encounter creatures, people, plants and objects in their natural environments and in real-life situations; undertake practical 'experiments'; and work with a range of materials. The EYFS strand 'Understanding the World' leads directly to scientific elements of the curriculum and leads to more formalised Science learning in KS1 and then KS2.

Teaching and Planning:

The areas of study are outlined by the National Curriculum and these have been divided and allocated to year groups, with specific content to cover. These are outlined on a long-term plan, allowing an overview of the progression of science teaching throughout the school. Activities should be planned to meet the needs of all pupils. Differentiation is achieved through careful planning and organisation. Learners should be supported and challenged to progress within science. Ryhill, Junior and Infant School looks to integrate practical Science whenever possible, making learning engaging and fun. Children should be encouraged to predict, hypothesise, collect evidence, analyse and question the results they gather and evaluate what they have learnt. Pupils are encouraged to work in groups or individually where appropriate.

Assessment:

Teachers will assess children's science work in a variety of ways to ensure they gain a full understanding of what each child has learnt, and what is needed to progress their understanding. Teachers will observe and provide written and oral feedback throughout the year before making an overall judgement of scientific ability at the end of the year. Progression in science will be monitored and relevant targets and actions will be considered.

Safe Practice:

Teachers will provide a safe and secure environment for children to learn at all times as well as encouraging children to consider their own safety and the safety of others around them. Any experiments or activities which are considered a particular risk will need to be risk assessed by the class teacher. Support and guidance for teachers on risk assessing any activities can be found on the CLEAPPS website. (Please refer to the Health and Safety in Primary Science Policy for more information on this area.)

Equipment and Resources:

There is a wide range of resources available to the school which will be maintained and monitored by the Science Co-Ordinator. The resources are a collective responsibility for the whole school and pupils are encouraged to treat resources carefully and safely. Children are expected to, where appropriate, choose their own equipment. This should be done under adult supervision with Health and Safety requirements in mind. By doing so, they:

- make sensible choices about which equipment to use
- treat the equipment with care
- use the equipment with their own and other's safety in mind
- become independent learners

Other Opportunities to Learn:

Additional opportunities are provided in science such as science days for the children, science fairs in school and educational visits linked to the science

curriculum. We endeavor to ensure that the experiences we provide within science will give children the confidence and motivation to continue to further develop their skills into the next stage of their education and life experiences.