



Intent

At Northowram Primary School through our Science Curriculum we aim to offer a knowledge-based curriculum which provides children with a high-quality science education embedded with meaningful and memorable learning experiences. We go above the National Curriculum by teaching the children in KS1 about Electricity and Astronomy. In lower KS2 the children learn about Ecology and in upper KS2 they are taught about Meteorology and Reproduction. We aim to develop the aspirations of children and give them knowledge about what it would be like to be a scientist and prepare our children for a life in an increasingly scientific world. This is done by taking part in practical experiments from the early years up to Year 6. Some examples of this are children in KS1 find out what seasons it is by using wind vanes, thermometers and rain gauges and KS2 children create circuits to light up bulbs. Children are provided with scientific vocabulary during lessons to support their learning. Through retrieval in every Science lesson, children can build on prior learning and then link this with new learning. At Northowram we aim to develop children's scientific vocabulary and increase their knowledge.

Implementation

Science at Northowram Primary School is taught through the PKC curriculum and is taught for one hour per week. The PKC curriculum covers biology, chemistry, physics and Earth Sciences. Biology is taught across all year groups and includes learning about the human body, animals and plants. Throughout physics children are taught about space, astronomy and electricity and Chemistry is taught through materials and magnets. Earth Science is taught through topics such as seasons and weather and rocks. The curriculum ensures that knowledge is valued and specified, well sequenced and taught to remember. It is carefully planned to ensure that children's learning is built upon not only lesson by lesson in retrieval questions and quizzes but also year by year. The children are taught to write like scientists and are taught the necessary vocabulary to do this. Through the early years, KS1 and KS2 topics are re-visited and re-built on including new learning. The clearly planned curriculum allows children to re-visit prior learning and talk about their knowledge using scientific vocabulary. During Science lessons children are given the opportunities to work scientifically and use their knowledge in practical tasks. Scientific enquiry is also used within lessons and allows children to record data in different ways such as charts and graphs. Children also research famous scientists such as Pierre Curie and Jane Goodall learn about what impact they have made. Adaptions are made during Science lessons and children are given different opportunities for recording their results therefore ensuring all their needs are met.

Impact

We aim to offer a wide variety of skills linked to both scientific knowledge and understanding and provide children with meaningful and memorable experiences. We want the children to be confident to use and explain scientific vocabulary as well as being able to ask questions about their scientific learning and reflect on their knowledge. We aspire to give the children an understanding that Science has changed our lives and that it is vital for the world's posterity.

At Northowram Primary school we measure the impact of the science curriculum by various monitoring work. We also work with the national PKC consultant. We listen to the children's thoughts and opinions about Science and what they enjoy and what we could do better. The children take part in regular retrieval quizzes to assess their knowledge and understanding.