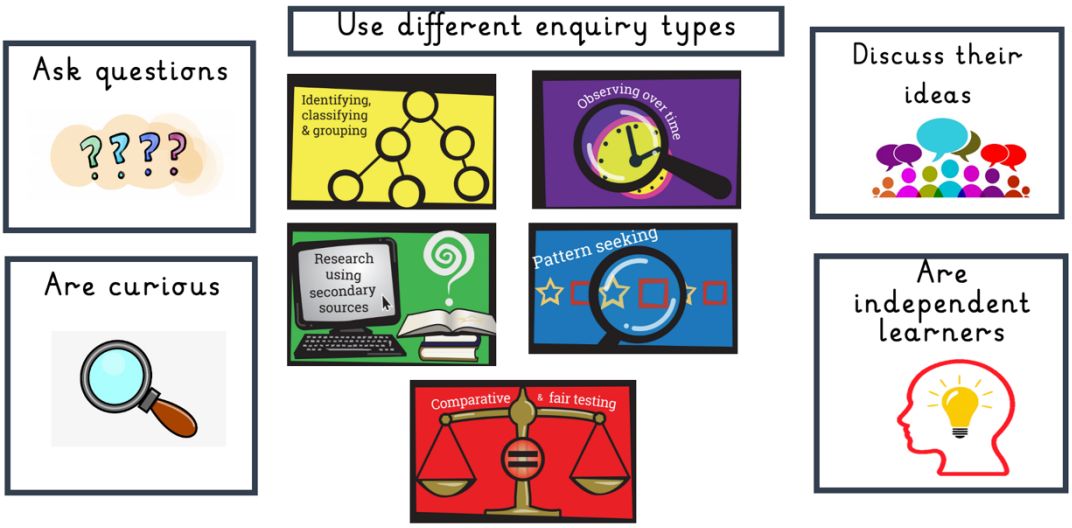
Science at Rivelin Primary School

At Rivelin Primary School, we aim for all children to show a passion for science through an exciting, engaging and challenging curriculum. Science teaches an understanding of the world and stimulates children's curiosity to ask questions and develop methods of enquiry. Children are given opportunities to explore, discuss and question to deepen their understanding of the world around them.

Scientists at Rivelin...



Intent

At Rivelin Primary School we want all children to access a broad and balanced curriculum that shows progression as the children move throughout the school. We have developed a curriculum for Science to show progression and to build on previous knowledge and skills from EYFS to KS2. This has been designed with the PLAN Assessment documents and the National Curriculum. This allows our children to develop some of the school's core values by encouraging curiosity, determination and respect. The children will develop their language knowledge as lessons and resources are designed to support children with English as an additional language. All children will develop their scientific language through oracy based lessons. Through the development of language and curiosity children will ask questions about the world around them.

Implementation

To achieve our goals for Science we provide practical and exciting lessons for children to develop their independence and encourage their curiosity and questioning. This includes a variety of scientific enquiry skills throughout the year. The science curriculum at Rivelin Primary School has been planned and sequenced using PLAN assessment documents and the National Curriculum to give the children exciting and engaging lessons and to show progression throughout the school.

Science lessons are taught in topics within in each year group in accordance with the National Curriculum. These are taught in 6 or 7 week blocks with opportunities to build upon the children's previous knowledge to deepen their understanding and show a progression of skills. To develop the children's scientific skills they predict, plan, investigate and record their findings when completing an enquiry type. In EYFS and KS1 this is completed within the class developing to independently recording in KS2.

Areas of the National Curriculum

Year 1	Year 2	Year 3
• Working Scientifically • Animals including Humans • Everyday Materials • Seasonal Changes • Plants	• Working Scientifically • Animals including Humans • Uses of Everyday Materials • Plants • Living Things and their Habitats	• Working Scientifically • Animals including Humans • Plants • Rocks • Light • Forces and Magnets
Year 4	**Year 5**	**Year 6**
• Working Scientifically • Animals including Humans • Living Things and their Habitats • States of Matter • Sound • Electricity	• Working Scientifically • Animals including Humans • Properties and Changes of Materials • Living Things and their Habitats • Earth and Space • Forces	• Working Scientifically • Animals including Humans • Living Things and their Habitats • Evolution and Inheritance • Light • Electricity

Through these lessons we support all children to develop their vocabulary with sentence stems, vocabulary mats and teaching key vocabulary in a scientific context. EAL learners have access to vocabulary mats in lessons to support their language development with these sent home with translations.

At Rivelin Primary School we promote a love of reading. This is promoted within Science topics with stories being shared within science lessons. This builds upon the children's vocabulary and curiosity which helps the children to become independent and ask questions.

Children will engage with wider school opportunities by going on trips, having visitors and workshops to develop their understanding of science outside the classroom.

Staff are given opportunities for CPD and to develop their subject knowledge. Knowledge documents have been created for teachers. This will be referred to help build upon children's previous knowledge when planning lessons to deepen their understanding of topics taught in previous year groups. This will also help with the children's recall of knowledge.

A Science Story has been created to show the progressions of science from EYFS to UKS2. It shows misconceptions, previous knowledge and further learning. This will help with planning of lessons to make them accessible for all learners and help with challenging the children's understanding.

To ensure that science learning is engaging, and all children are making progress, regular feedback to staff will give the opportunity to develop lessons and teaching.

Science is under development. To ensure all learners reach the age-related expectations, assessment is under review. A lesson bank for children with SEND is being developed to ensure all children can access the learning. To give the children a better understanding of what science is outside of lessons, science capital is being introduced into lessons.

Impact

The impact of our curriculum design is to see all children make good progress over time in the knowledge and skills of Science, relative to their starting points. Children will leave Rivelin Primary School reaching age related expectations for Science. Through various extra curricula activities including trips, visitors and workshops will lead to pupils being enthusiastic towards their Science learning and deepen their Science Capital. This will be evidenced in a variety of ways; pupil voice, children's work and learning walks.