

Science

"The practice of science happens at the border between the known and the unknown.

Standing on the shoulders of giants, we peer into the darkness with eyes opened not in fear but in wonder." Brian Cox

"One of the great joys of science is to understand something for the first time—to really understand, which is very different from, and far more satisfying than, knowing the facts."

Brian Cox

Intent

- Teach children to be inquisitive and excited about the world in which they live
- Excite children about scientific concepts to promote deep learning to meet a range of abilities.
- Identify and address misconceptions
- Explore what constitutes evidence and how we establish cause and effect
- Engage in a range of practical activities to develop knowledge, understanding and safe practice to allow all students to access the curriculum without literacy being a barrier. And to allow all young people

to work towards an appropriate science qualification.

- Build resilience and determination to enable young people to develop and thrive.
- Explore contemporary science and scientists to inspire and explore career choices and further education.

Implementation

- Within a whole school plan, a KS2
 science curriculum with two topics
 each term which will carefully plans
 for progression of learning, deeper
 understanding and consolidation of
 knowledge
- Planning and teaching sequenced lessons with a range of discussions and a focus on practical activities to allow success for students of all abilities.
- Completing practical activities in a sequence of planning, investigating, recording and analysing allowing students to transfer skills across topics.
- Use of progression statements ensuring children build upon prior knowledge and skills.
- Using assessment system to highlight gaps in children's understanding and to inform planning and next steps

	 Trips and visits to enhance the learning experience.
Impact	 Measured progress (Using Learning Ladders package and achievement belts) Evidence of progression, confidence in and engagement with science Children will apply scientific processes with increasing sophistication increasing depth of learning and mastery of scientific concepts. Children will be able to use appropriate scientific vocabulary to support literacy development and help them have meaningful dialogue about post 16 pathways. Children can progress confidently throughout the school and leave with an appropriate academic qualification.