

Science: Intent, Implementation and Impact

Children are intrinsically curious about their world. They ask questions and seek answers, just like scientists. An inclusive and meaningful scheme of work is required so that all pupils make connections between their Science lessons and their lives outside of school. We aim to encourage the development of natural curiosity into critical thinking; to empower all pupils to appreciate how new knowledge and skills can be crucial to solving arising global challenges.

We have chosen to use the Kapow Science curriculum, which enables pupils in Key Stage 1 and Key Stage 2 to meet the end of Key stage attainment targets in the National curriculum and the aims also align with those set out in the National curriculum.

The curriculum is divided into 3 key strands:

1. Scientific knowledge and understanding of the disciplines:
 - Biology – the study of living organisms and processes
 - Chemistry – the study of matter and their properties
 - Physics – how natural phenomena work
2. Working scientifically: practical work using process and methods to answer questions about the world around us
3. Science in action – uses and implications of Science historically, currently and in the future

Pupils' skills and knowledge is developed from National Curriculum content into 6 key areas:

- Plants
- Animals, including humans
- Living things and their habitats
- Materials
- Energy
- Forces, Earth and space

A variety of teaching strategies including paired and group tasks, creative and practical work, computer-based and collaborative activities ensure pupil engagement across all abilities and learning styles. Lessons are adapted to ensure and support inclusive learning while provision is made for extending learning when required.

Each unit has opportunities for assessing pupils' knowledge and skills. Knowledge organisers, alongside quizzes and knowledge catchers are provided. Expert-produced videos ensure that pupils' misconceptions are challenged in a timely fashion and correct learning is consolidated.

After attainment at the end of Key Stage 2, pupils will be enabled to approach Key Stage 3 Science with confidence and secure knowledge. They will be equipped to continue to questions the world around them and continue their journey as life-long learners.