

Curriculum map: Science

Learning and achievement for all: a curriculum rich in knowledge about our world

Intent: Through links made with the British Zoological Society, our science curriculum is enriched with activities led by experts from Banham Zoo and visits to the zoo. In science, we introduce pupils to knowledge that will inform and inspire. We unpick a wide range of scientific ideas and how these influence our daily life and the future of our planet. We ensure that conservation, sustainability and explanations of the work of different scientists are woven through KS2 and are revisited often. Our curriculum is carefully sequenced to provide opportunities to revisit and remember, enriching vocabulary and explicit links that build schemata and therefore encourage both curiosity and critical thinking.

Implementation: Our carefully planned provision encourages pupils to ask questions, join in debates and make links with other areas of learning, particularly sustainability, conservation and ecology. Key ideas are revisited and built year on year. Quizzes support memory and explicitly taught vocabulary supports understanding of key concepts. We provide opportunities for pupils to foster an understanding of the nature, processes and methods of science through a range of practical activities and produce high-quality independent work that demonstrates growing knowledge and understanding in a creative way, including double page spreads.

Impact: Pupils can talk about the things they have learnt and remembered, and can make links between areas of scientific knowledge. Pupils can also explain how conservation, sustainability and global warming is likely to impact the future of our planet. Pupils can demonstrate their developing understanding of the work of scientists especially ecologists, zoologists and biologists. They can take an active part in discussion and debate and can use their understanding of the ways in which science has influenced them to think critically about real issues. Learned skills can be applied to other areas of the curriculum. They understand the scientific process and have the capability to raise questions and carry out age-appropriate practical investigations. They understand conventions for communicating their findings and can do so with clarity and accuracy.

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Year 3 | Biology: Animals | Biology: Plants 1 | Biology: Plants 2 | Physics: Forces and Magnets | Chemistry: Rocks | Physics: Light |
| Year 4 | Chemistry: States of matter | Physics: Sound | Physics: Electricity | Biology: Animals and Humans - Digestion | Biology: Living things and their habitats | |
| Year 5 | Physics: Earth in space | Chemistry: properties of materials | Biology: Living things in their habitats | Physics: Forces | Biology: Animals including humans | |
| Year 6 | Physics: light | Physics: electricity | Biology: Evolution and Inheritance | Biology: Evolution and inheritance | Biology: Living Things and Their Habitats | Chemistry: Mixtures, particles, states of matter |