

Science at Blackminster Middle School

Intent

Here in the science department, we are passionate and committed to the teaching and learning in science. Our intentions are to produce students who are independent learners with enquiring minds, who can question and discuss science-based issues that may affect their own lives; and also to foster a lifelong interest and enjoyment in the learning of science.

The curriculum is designed to allow students to investigate science through practical work, whilst allowing them to gain knowledge, develop interpersonal skills, build resilience, and build upon their prior learning. We feel it is our responsibility to use science as a tool to excite students' curiosity about phenomena and events in the world around them.

Implementation

Our students complete our bespoke curriculum. In KS2, this is a combination of AQA Snap Science and our own Scheme of Work. In KS3, we follow the AQA Scheme of Work. We implement this through the delivery of a high quality of lessons which places learning at the forefront of planning. Students are assessed in a variety of ways, including assessing their practical skills during experiments, feedback on their ability to answer exam questions in formative assessments as well as end-of-topic tests, peer and self-assessment and verbal feedback. This enables our students experience a smooth transition into the local high schools where they will sit their AQA GCSE exams in year 11.

Science is taught over the 3 years with 6 lessons per fortnight for KS3 and 4 lessons for KS2. All classes are taught in our fantastic state-of-the-art laboratories which means that all students use high school standard equipment. The topics taught over the 3 years include all 3 sciences, including

Science Skills, Electricity, Genes, The Periodic Table and Ecosystems. Lessons are designed to be fun and engaging and can vary from using skittles as electrons to tell us about the Periodic Table through to dissecting chicken legs to see our tendons.

The overview shows which topics are taught and when.

Overview of the year topics 2024

Year 6

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Introduction To Science Classification of living things	Evolution and inheritance	What light does	Human circulation	Electricity, changing circuits	Body health

Year 7

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cells Reproduction	Particles and their behaviour Elements, atoms and compounds	Reactions Acids and Alkalis	Forces 2 Space	Structure and function of body systems	Sound Light

Year 8

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Motion and Pressure Electricity and magnetism	Energy	The Periodic Table Separation techniques	Health and lifestyle Biological processes	Metals and other materials Earth	Ecosystems and adaptation Inheritance

Impact

This leads onto our **impact**, where we are dedicated to ensuring our students leave Blackminster having made progress in line with their ability, having a solid foundation of knowledge, the skills and confidence to make decisions and the ability to challenge themselves in their own learning.