

Science Department

About us

There are 11 Science teachers here at ASA and 1 Science technician.

With a huge wealth of knowledge and experience, we aim to connect the curricula to the world around us.

Science is a fundamental part of learning and can answer some of the most abstract questions.

“Science is simply the word we use to describe a method of organising our curiosity.”

Our lessons

All lessons follow the same format so students know what is expected of them in each part of the lesson cycle.

We link abstract concepts with our reality whilst connecting and threading the 3 disciplines together.

Our ambitious and inspiring curriculum for all

We have focused on building a 5 year helical curriculum which allows students to revisit, reapply and strengthen knowledge over time.

Additionally to combined Science, we also offer an aspirational Separate Science

Areas for development

This year we aim to develop the implementation of the curriculum, to build resilience and depth of understanding of students.

We will continue to focus on building bridges between the three disciplines to

Curriculum enrichment

Advanced Content: Providing more challenging material for students who have mastered the basics.

Interdisciplinary Learning: Integrating subjects within Science like geography, history & PSHE help us to offer a more holistic education.

Experiential Learning: Incorporating experiments or hands-on activities that relate directly to what students are learning in the classroom.

Extracurricular Activities: Offer Science club to KS3 students which relates to curriculum content but provides additional learning experiences.

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Our curriculum intent

There are four main goals for our curriculum.

Foster scientific literacy – Ensure students gain a deep understanding of core scientific concepts and principles.

Develop critical thinking and problem-solving skills – Encourage students to apply the scientific method, analyze data, and think critically about evidence, fostering skills that are transferable beyond science.

Cultivate curiosity and inquiry – Inspire a love of learning and curiosity about the natural world through practical experiments, observations, and hands-on activities.

Promote environmental and social responsibility – Help students understand their role in addressing global challenges such as climate change, health issues, and sustainability, empowering them to make informed decisions.

Marking and feedback

Misconceptions are anticipated through our MTP using BEST research. Misconceptions are then addressed through connect activities and through repair & rebuild lessons which feature in every topic. AfL techniques vary across the department but AoL uses appropriate exam questions

Intervention

Triple Science students have a subject specialist tutor to support with learning.

Students are selected for lesson 6 on a weekly basis - but some staff offer additional support throughout the week.

Teachers will frequently communicate with parents if additional support is required

Quality assurance

Centrally and collaboratively planned lessons are QA'd to ensure students receive a high standard of learning. We frequently visit lessons and look through books to ensure we progress forward

Home learning

KS4 homework is set weekly via GCSE Pod.

At KS3 homework is set every 2 weeks. The tasks vary depending on the content being taught