



STANGROUND ACADEMY

## SCIENCE - INTENT

Our aim is for our students to be equipped with the knowledge and skills in how science works to become scientifically literate citizens. This will enable them to embrace a technological future and engage in ethical debate.

At Stanground Academy we use 'Big Ideas' in science which under-pin the content of our 7-year curriculum. We do this by delivering a clearly sequenced and spiral curriculum and our planning prioritises the importance of key concepts, knowledge retrieval and low stakes testing in our planning.

During year's 7 and 8, students will learn the key scientific principles of these big ideas. In year 9, students continue to build on the key concepts and big ideas from year 7 and 8 and transition into the key concepts covered in the GCSE. These are the fundamental concepts that enable students to fully understand the detailed information within the GCSE.

In years 10 and 11, the students are all completing all three sciences following the AQA syllabus for the Combined science: Trilogy award unless they opt in for the three separate sciences (GCSE Biology, GCSE Chemistry and GCSE Physics).

Students are actively encouraged to continue their education in science and continue to study these big ideas in years 12 and 13 following the OCR A syllabus for A-level biology, chemistry, and physics.

Literacy, numeracy, modelling, and practical skills are crucial throughout the science curriculum as proficiency in these fields is required for pupils to excel in science learning.

The Science curriculum contributes to Stanground Academies curriculum by the delivery of a unique mix of knowledge, skills, and practical work. We use contextualisation of scientific concepts in order to improve pupil enjoyment, engagement, widen pupils' awareness of the applications of science throughout society, and to provide opportunities for pupils to begin exploring their ability to apply concepts to unfamiliar contexts; embracing the creative nature of science.

Students will be inspired by the Science curriculum and their aspirations for the future will be elevated through the promotion of Science-related careers and

science skills, which are beneficial to employment in a wide-range of fields including; observational skills, data presentation and data analysis.

We are developing an extracurricular science / STEM club. We will be raising our student's enjoyment and confidence in the subject whilst providing students with experiences and contacts to show them what possible careers are out there and to allow students to realise their potential.

