



CURRICULUM PLAN

2019-20

SUBJECT

SCIENCE

OVERVIEW

Science is present in every aspect of our lives from the food we eat, the environments we live in and how we move through to the various technologies we use to keep our world moving forwards. Science is all about trying to understand why things happen the way they do and then applying new ideas learnt to solve problems. Our Science curriculum is designed to help our students engage in this important subject through lessons that link their everyday experiences of science to key theories and investigations which are all linked to the outcomes defined within the national curriculum. Science should engage students interest and challenge their mis-conceptions to help them to develop scientific problem solving skills.

KEY STAGE 3

Our KS3 Science course is designed to visit all the key areas of Biology, Chemistry and Physics to give students a sound basis in each subject before they start on their KS4 studies. They follow a two year course with nine topics in both years 7 and 8. Both years are split equally between the three sciences so that a balanced experience of each is acquired by the end of year 8. Students will develop their investigative skills in a range of practical activities by applying the scientific process in a methodical and accurate way. They will learn about their body systems, food chains and ecological relationships as well as the importance of chemical reactions in all aspects of our lives. Students will also be able to describe how forces interact and how energy stores and transfers are always involved in everything we do. Links between current topic and previous ones are made clear to help the students reinforce their understanding all the way through this course.

KEY STAGE 4

Our KS4 science curriculum starts in year 9 and follows the AQA Trilogy Coordinated science specification. This specification is a double award qualification so the students gain two GCSEs at the end of the course. They study topics on a rotation through the course so that they can focus on a section of the Biology curriculum, followed by some Chemistry and then a Physics section. This process enables a recap of each subject to happen regularly when we return to the next part. During their studies, the students complete a series of core practicals which include theory and skills that will be assessed as part of their final examinations. The course finishes with two exams per subject area so plenty of practice of exam questions and techniques are practiced all the way through the course. There is a science entry level certificate option available for any students who struggle with the more complex theory within this curriculum but all are encouraged to aim high for GCSE if possible.