Curriculum Summary Documents

Year 8 Science

Module/Unit of Learning	Taught During	What will students learn?	How does this deepen understanding and enrich experience?	Links to other Subjects
Working scientifically	**Autumn 1**	Continue to develop fundamental practical and working scientifically skills needed for the 5-year journey through science.	Having good scientific skills and being able to work safely are crucial for the rest of their science journey. These skills will be used throughout their 5 years.	**Maths**
Space **Physics**	**Autumn 1**	Students will learn about the solar system and Earth's place within it. They will also learn about stars and their lifecycles.	Space is an engaging topic and students are curious about it. Students have previously begun to learn about forces earlier in the year which will be built upon during the weight lesson. Space is one of the Physics only modules covered in Y11 triple science, but this gives all students the chance to cover some space.	**Maths**
Healthy Living **Biology**	**Autumn 1/2**	Students will learn all about how to keep their bodies healthy by having a healthy diet and the effects of smoking, drugs and alcohol.	This module aims to build on prior knowledge so that students can articulate why it is important to keep our organs and organ systems healthy to function correctly. The module also builds students cultural capital knowledge of the effects of issues such as smoking, drugs and alcohol.	**PSHE** **Child Development**
Chemical Changes **Chemistry**	**Spring 1**	Students will learn about metal reactivity and how metals are extracted. They will then study metal and acid reactions which leads onto neutralisation and the formation of salts	Some students will have covered parts of acids and alkalis in primary school. Link in the hazard symbols and what they mean from the first 'working scientifically' unit. The pH scale and neutralisation are key content that students need to know before studying the formation of salts and strong and weak acids at GCSE.	**Maths**
Energy **Physics**	**Spring 2**	In this module, students will learn about energy stores and transfers. They will also study domestic energy transfers and how this related to fuel bills and costs	Energy is a fundamental topic for GCSE physics but is also very conceptual and can be difficult to understand. By studying the fundamentals in Y8 students will be able to comprehend more complex systems and energy transfers in Y9	**Maths**
Bioenergetics **Biology**	**Summer 1**	Students will learn about the key biological processes of photosynthesis and respiration. They will then deepen their understanding by looking at how plants are adapted to maximise photosynthesis as well as studying the two types of respiration (aerobic and anaerobic).	Researching how farmers can maximise profits from their crops using knowledge of photosynthesis	**P. E**

Waves **Physics**	**Summer 2**	This topic will enable students to understand the science behind sound waves (why we can hear) and light waves (why we can see).	Knowing the difference between transverse and longitudinal waves is fundamental to understanding how waves behave.	**Maths**