

Biology Year 9

Autumn 1 (September – October) to Autumn 2 (October – December)	Inheritance and evolution This topic encourages students to see how biology is related to them through the study of variation in their class and humans' part to play in preserving biodiversity. It builds on middle school learning about basic cell structure, specifically the role of DNA. Later in the topic we study evolution to introduce a topic that will be developed in key stage 4.
Spring 1 (January – February), Spring 2 (February – March) and Summer 1 (April – June)	Cell division and transport This topic starts GCSE content and builds on key stage 3 cells knowledge. It covers fundamental principles of biology required before organisation topic.
Summer 2 (June – July)	Organisation in animals -Circulatory and digestive system Macroscale topic building on microscale in previous topic. Animal organisation is before plant organisation as more accessible for students.

Chemistry Year 9

Autumn 1 (September – October)	Chemical reactions This topic includes lots of practical opportunities and so supports the development of practical skills in a lab. It builds on many areas of study from middle school including the pH scale, the test for hydrogen, word equations and provides opportunity to build on prior learning throughout.
Autumn 2 (October – December) to Spring 1 (January – February)	Energy in chemical reactions This topic starts GCSE content and builds on KS3 understanding. It includes particle theory, changes of state and energy changes in reactions including bond energy calculations.
Spring 2 (February – March) to Summer 1 (April – June)	Atomic structure and the periodic table This topic covers the foundation knowledge that underpins the rest of GCSE science. Follows recap of the idea of particles in previous topic.

Physics Year 9

<p>Autumn 1 (September – October) to Autumn 2 (October – December)</p>	<p>Space This topic provides an opportunity for all students to study our solar system and the universe. It develops their appreciation of the scale of physics and how it affects their lives. It provides a range of skills development opportunities such as graph practice and simple calculations and students will undertake a small research project.</p>
<p>Spring 1 (January – February) to Spring 2 (February – March) & Summer 1 (April – June) to Summer 2 (June – July)</p>	<p>Energy This topic starts GCSE content and covers one of the most fundamental ideas in physics. It provides students the opportunity to recap energy transfers such as electric current, forces and heat from previous KS3 content. It will provide an understanding of energy as the fundamental knowledge for GCSE physics as it contains energy transfers that link into future topics.</p>