



Year 9 Fundamental Ideas (Biology - AQA)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	B1a Cell biology Prokaryotic/eukaryotic cells, specialised cells, microscopy.	B1a Cell biology Chromosomes, mitosis, stem cells.	B1b Transport in cells Diffusion, osmosis, active transport, exchange surfaces.	B2a Organisation and systems Animal tissues, respiratory system, circulatory system.	B2a Organisation and systems Plant tissues and transport.	B2b The digestive system. Digestive system, enzymes, food tests.
Assessment	Homework and exam questions.	End of unit synoptic test	End of unit synoptic test	Homework and exam questions.	End of unit synoptic test	End of unit synoptic test End of year PPE

Building on Prior Learning	The topics taught at KS4 biology build upon student's knowledge of understanding of KS3 science. In particular cells, microscopes, exchange of substances, tissues and organ systems. Learning components at the start of lessons remind students of prior learning and point out links to previous topics.
Links with other subjects	Maths - use of fractions, decimals and percentages; proportion; graphical representations; standard form; order of operations; accuracy and interpreting data. English - comprehension and literacy skills. Food - food groups and balanced diets. PE - benefits of exercise and organ systems.
Extracurricular opportunities	STEM ambassador visits to excite and inspire students.
A successful learner in this subject will demonstrate	Students are required to memorise key facts and be able to recall them, and to apply their knowledge to real life situations. A successful student will be able to link concepts together. Demonstrate the ability to work scientifically by following a method, identifying basic apparatus, collecting data, illustrating data and drawing conclusions.
Impact on personal development	Science will help students to become logical thinkers and problem solvers with a better understanding of the world around them. Demonstrating resilience and the ability to consider moral and ethical implications of scientific developments.

Ways to support student learning in this subject
<ul style="list-style-type: none"> • Encourage the completion of homework. • Encourage discussion of science issues that arise in the news. • Discuss science lessons and their progress. • Encourage a positive attitude towards science. • Personalised learning checklists (PLC) • Encourage students to use Seneca Learning (https://www.senecalearning.com/) to consolidate knowledge and build on recall skills.



**DROITWICH SPA
HIGH SCHOOL**
AND SIXTH FORM CENTRE

Life. Changing. Learning.