

## Year 8 Science

The Year 8 course continues the Key Stage 3 work which builds upon knowledge and skills developed during Year 7 and the Key Stage 2 curriculum. The 10 topics from Year 7 are revisited and further develop the key scientific ideas of key stage three. The basic principles from Year 7 are built upon during Year 8 to develop a broader understanding. A higher level of challenge in the work prepares the students for even greater challenging next year when the GCSE starts. Core scientific principles are developed through a combination of theory and investigative learning. All three scientific disciplines are covered and all of the strands are touched on within the year's work.

Methods of deepening and securing knowledge:	
Retrieval practice	Retrieval practice is embedded into lessons. This usually includes recall question from previous lessons at a recap of prior learning.
Interleaving	Retrieval practice includes interleaved questions from previous topics, making connections between topics where possible.

	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Topic(s)	<b>Biology</b> - Breathing - Digestion  <b>Chemistry</b> - Periodic table - Elements - Chemical energy - Types of reaction  <b>Physics</b> - Electromagnets - Magnetism	<b>Biology</b> - Breathing - Digestion  <b>Chemistry</b> - Periodic table - Elements - Chemical energy - Types of reaction  <b>Physics</b> - Electromagnets - Magnetism	<b>Biology</b> - Evolution - Inheritance  <b>Physics</b> - Wave Effects - Wave properties - Contact forces - Pressure	<b>Biology</b> - Evolution - Inheritance  <b>Physics</b> - Wave Effects - Wave properties - Contact forces - Pressure	<b>Biology</b> - Respiration - Photosynthesis  <b>Chemistry</b> - Climate - Earth Resources  <b>Physics</b> - Work - Heating and Cooling	<b>Biology</b> - Respiration - Photosynthesis  <b>Chemistry</b> - Climate - Earth Resources  <b>Physics</b> - Work - Heating and Cooling
Assessment		Aiming High 1 test – covers the topics taught so far in Year 8				Aiming High 2 test – covers all Year 8 topics

#### Homework:

Independent learning is a core part of learning and serves to support the learning in class, enrich the student experience and develop knowledge and skills. There are two types of independent learning set in science: knowledge or skills-based work – usually questions that embed or extend understanding developed in lesson, and literacy of learning questions that involved reading extended pieces of writing and answering questions on that. Preparing for assessment is an essential part of each topic as each assessment allows teachers and students to see their progress. It is crucial that revision is completed so students can show off what they know.