Department: Science	Year 8

Plan Of Learning For The Year (Unit/Topic/Project Context)	
Half Term 1 - 2- 3 Rota basis Organisms – Breathing and digestion Matter - Periodic table and elements Energy – Work and heating and cooling Genes - Evolution and inheritance Forces- Contact forces and pressure	**Half Term 4 -5- 6 Rota basis** Waves – Wave effects and wave properties Reactions – Chemical energy and types of reaction Electromagnets – Electromagnets and magnets Ecosystem – Respiration and photosynthesis Earth – Climate and Earth resources

Feedback, Retrieval & Assessment	Super curriculum opportunities / extra-curricular activities	Cultural Capital, SMSC, Careers and Futures

• Self and peer assessment
  • On-going formative assessment during lessons by teacher
  • Student/teacher one-to-one discussions
  • Termly teacher assessed tasks
  • Formal assessments
	• Year homework projects based on the topic covered and test yourselves with feedback set on SENECA Learning.
	• Literacy tasks throughout SOW
		• Each topic has a link to a career link to be presented in class when covering a suitable topic
		• Sensitive topics (Biology) covered with sensitivity and awareness of how correct terminology is used by all in the classroom.
		• Climate and Earth resources relate to community efforts to reduce energy use.

Common misconceptions	Connecting New Knowledge	Challenge for all

• • Air doesn't weigh anything.
• • Sugar disappears when dissolved.
• • The space between particles is full of air.
• • Electricity is used up when it goes around a circuit.
• • To keep an object moving a force must be kept on it.
• Booklet on science misconceptions available as they are plentiful and part of everyday science teaching.
	• Regular revisiting of core keywords.
	• Links between topics identified by teachers
	  • Use of Knowledge Organisers to see where new learning fits with bigger picture
	  • Use of numeracy sheet
	  • Use of curriculum map
		• Knowledge Organisers to support with vocabulary and key grammar points in each unit.
		  • Regular use of scaffolds and structured practice
		  • Clearly defined success criteria and use of skills matrix to show next steps to improve
		  • Stretch activities built into each lesson