

Year 10 Entry				
Term	Unit	Big Idea	Key Concepts	Suggested TADS (Teacher Devised Assessments)
AUT	1	Biology: Human Body	Cells, tissues, organs, body systems, respiration, lifestyle, diseases, drugs, coordination, hormones, menstrual cycle, fertility, contraception.	Compare the energy released by burning a 'low fat' crisp with a normal one  Investigate the effect of exercise on pulse rate  Investigate the effect of caffeine drinks on pulse rate  Use pre-inoculated agar in Petri dishes to evaluate the effect of disinfectants and antibiotics
	1	Biology: Human Body	Exam/TDA	Compare the speed of the catching reflex of two people.
	2	Biology: Environment, evolution and Inheritance	Photosynthesis, adaptation, food webs, competition, evolution, reproduction, genetics	Investigate the rate of photosynthesis in pondweed  Investigate the use of choice chambers, eg with woodlice or maggots
SPR	2	Biology: Environment, evolution and Inheritance	Exam/TDA	Compare the quality of water from different sources  investigate whether or not two characteristics are linked
	3	Chemistry: Elements, Compounds and Mixtures	Periodic table, chemical reactions, states of matter, separating mixtures, metals and alloys, polymers	Compare the melting points of a range different substances  Compare the time needed to filter mixtures of water and calcium carbonate that have different particle sizes
SUM	3	Chemistry: Elements, Compounds and Mixtures	Exam/TDA	Compare the properties, such as conductivity or density, of some metals

				Compare the biodegradability of different polymers and other materials
	4	Chemistry: Chemistry in our World	Reactions with acids, acids and alkalis, energy and rates of reactions, earth's atmosphere, Fuels and human impacts on the atmosphere, water for drinking	Investigate the amount of hydrogen produced when acids react with different metals  Compare the amount of carbon dioxide in fresh air and exhaled air.
	4	Chemistry: Chemistry in our World	Exam/TDA	Investigate the amount of dissolved solids in water from different locations by evaporating samples and weighing residues.

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AUT	5	Physics: Energy, forces and the structure of matter	Energy, energy transfers and energy resources, forces and work, speed and stopping distances, atoms and nuclear radiation	<p>Investigate factors that affect the rate of cooling of a container of water, e.g. surface area, initial temperature, types of insulation, colour of the container</p> <p>Investigate how different surfaces affect the amount of friction on a moving block.</p> <p>Investigate how the speed of a trolley changes as it rolls down a slope.</p>
	5	Physics: Energy, forces and the structure of matter	Exam/TDA	
SPR	6	Physics: Electricity, magnetism and waves	Electrical Current, domestic electricity, magnetism and electromagnetism, different types of waves, electromagnetic waves	<p>Investigate which materials are the best electrical conductors</p> <p>Investigate factors that affect the strength of an electromagnet.</p> <p>Testing visual acuity in different colours of light.</p> <p>Investigate the range over which a Bluetooth device is effective.</p>
	6	Physics:	Exam/TDA	