



<b>DURATION OF SUBJECT</b>	FULL YEAR	<b>FINANCIAL COMMITMENT</b>	INCL. IN STUDENT RESOURCE SCHEME
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### COURSE CONTENT

UNIT 1	UNIT 2	UNIT 3	UNIT 4
<p><b>Steam Punk</b></p> <p>Examine, inquire and explain ways in which energy can be transferred through different mediums using the particle model. They build their knowledge of energy transfer to include the wave-based models of energy transfer including sound and light.</p> <p>Students investigate wave motion and the variations to sound and light transfer caused by differing materials. They explore ways in which humans have used and controlled sound and light energy transfer for practical purposes.</p>	<p><b>Don't Blow your Top</b></p> <p>The relationships between aspects of the living, physical and chemical world that are applied to systems on a local and global scale and this enables them to predict how changes will affect equilibrium within these systems</p>	<p><b>The World we live in</b></p> <p>They explore ways in which the human body as a system responds to its external environment and the interdependencies between biotic and abiotic components of ecosystems.</p>	<p><b>Experiment Radioactivity</b></p> <p>Chemical processes and natural radioactivity in terms of atoms and energy transfers and describe examples of important chemical reactions.</p>
ASSESSMENT	ASSESSMENT	SUMMATIVE ASSESSMENT	SUMMATIVE ASSESSMENT
Experimental Investigation	Research Investigation	Experimental Investigation	Exam

### COURSE REQUIREMENTS

Contribution to the resources scheme offers student access to:

Use of:

- Microscopes
- Science Text (to be advised)

Materials for Classroom activities:

- photocopied class notes
- glassware - beakers, test-tubes, stirring rods, measuring cylinders, watch glasses
- bunsen burners, tripods, test racks, metal stands and clamps, spatulas, scalpel
- electrical equipment - power packs, wiring, light boxes

- probes, dissecting boards, tweezers
- chemicals - copper sulphate, calcium carbonate, marble chips, hydrochloric acid, vinegar,
- metals - aluminium, copper, iron
- geology materials - rock samples - igneous, metamorphic, sedimentary
- safety equipment - aprons, safety goggles
- glassware and chemicals

### CAREER PATHWAYS

Engineer, Oceanographer, Electrician, Radio Technician, Architect, Environmental Health Officer, Hydrologist, Physicist, Lab Technician, Dentist, Optometrist, Doctor, Audiologist, Agricultural Scientist, Taxidermist, Science Teacher, Metallurgist, Chemist, Forensic Scientist, Forest Ranger, Pathologist, Radiographer Bacteriologist, Dietician, Zoologist, Veterinarian, Mineralogist.

