

YEAR 9 SCIENCE WORK PLAN: Semester 1, 2017 - Mr Polkinghorne, Mrs Jennings, Mr Moore



UNIT	TERM 1 TOPICS	ASSESSMENT	DATE
<p>Ch 1</p> <p>Life in the Balance</p> <p>Ch's 2 & 3</p> <p>10</p>	<p>Science Toolkit (3 Weeks) 1.1: Scientists can test manufacturer's claims 1.2: Scientists must be aware of experimental errors 1.3: Scientists prepare material safety data sheets 1.4: Scientists present their data accurately 1.5: Scientists investigate consumer products Experiments pp 178-179 (1.1, 1.2c)</p> <p>Ecosystems (3 Weeks) 2.1: All living things are dependent on each other and the environment around them 2.2: Relationships between organisms may be beneficial or detrimental 2.3: Population size depends upon abiotic and biotic factors</p> <p>2.4: Introducing a new species may disrupt the balance in an ecosystem 2.5: Energy enters the ecosystem through photosynthesis 2.6: Energy flows through an ecosystem 2.7: Matter is recycled in ecosystems 2.8: Natural events can disrupt an ecosystem 2.9: Human activity can disrupt an ecosystem 2.10: Human management of ecosystems continues to change. Experiments pp 179-187 (2.1c, 2.1, 2.2, 2.3)</p> <p>Control and Regulation (3 Weeks) 3.1: Receptors detect stimuli 3.2: Nerve cells are called neurons 3.3: The nervous system provides fast control of the body 3.4: The CNS receives information from the PNS 3.5: Things can go wrong with the nervous system 3.6: The endocrine system is slower but more sensitive to change 3.7: Homeostasis regulates through negative feedback 3.8: Hormones are used in sport 3.9 Pathogens cause disease 3.10: The immune system protects our body in an organised way 3.11 Things can go wrong with the immune system Experiments pp 188-193 (3.1,3.2,3.3S,3.3B,3.4, 3.6,3.7,3.9,3.10)</p>	<p>Task 1: PR Criteria 1: Understanding 2: Skills</p> <p>Task 2 SA 1: Understanding (Test 2 Part A) 2: Skills (Test 2 Part B)</p>	<p>Hand out: Week 3 9ABCD Tuesday 7/2 Due: Week 4 9AC Tuesday 14/2 9BD Weds 15/2</p> <p>Week 10 9ABCD Exam Block Tuesday 28th March L3&4</p>
UNIT	TERM 2 TOPICS	ASSESSMENT	DATE
<p>Ch 4</p> <p>Light, Sound, Action</p> <p>Ch 5</p>	<p>Sound and Light (5 Weeks) 4.1: Vibrating particles pass on sound 4.2: Sound can travel at different speeds 4.3: Our ears hear sound 4.4: Things can go wrong with our hearing 4.5: Visible light is a small part of the electromagnetic spectrum 4.6: Light reflects off a mirror 4.7 Light refracts when moving in and out of substances 4.8: Different wavelengths of light are different colours 4.9 The electromagnetic spectrum has many uses 4.10: Our eyes detect light 4.11 Things can go wrong with our eyes Experiments pp 193-205 (4.1,4.2A,4.2B,4.3,4.6S,4.6AB,4.7B,4.8,4.10c, 4.10,4.11)</p> <p>Heat and Electricity (4 Weeks) 5.1: Thermal energy moves down the temperature gradient 5.2: Conduction transfers kinetic energy between particles. Convection causes the particles to move. 5.3: Thermal energy can radiate through a vacuum 5.4: The ability to use energy efficiently is considered a benefit to society 5.5: Electricity is the presence and flow of electric charges 5.6: Electrical current results from the movement of charges around a closed circuit 5.7: Current can flow through series and parallel circuits 5.8: Voltage is the difference in energy between two parts of a circuit. Resistance makes it difficult for current to flow in a circuit. Experiments pp 206-213 (3.1,3.2,3.3S,3.3B,3.4, 3.6,3.7,3.9,3.10)</p>	<p>Task 3: PR - Practical report</p> <p>Criteria 1: Understanding 2: Skills</p> <p>Test 4 SA - (Ch's 4 & 5) Criteria 1: Understanding 2: Skills</p>	<p>Hand out: Week 5 9ABCD Tuesday 16/5 Due: Week 6 9AC Tuesday 23/5 9BD Weds 24/5</p> <p>Exam Block</p>