

YEAR 8 SCIENCE 2017
SEMESTER TWO COURSE OUTLINE

Week	Topic	Learning Focus		
1-2	Heart	Investigate the structure and function of the heart, blood and blood vessels. Dissect a sheep's heart. Outline the causes of heart disease.	Multicellular organisms contain systems of organs that carry out specialised functions that enable them to survive and reproduce VCSSU094	
3-4	Lungs	Describe the structure and function of the respiratory system Examine a sheep's pluck		
5	Kidneys	Describe the structure and function of the kidneys and their role in maintaining the body's water balance. Dissect a sheep's kidney. Describe kidney dialysis		
6	Body systems revision & test	Revise the structure and function of the circulatory and respiratory systems and the kidneys and complete a written test.		
7	Elements and the Periodic Table	Explain the difference between elements and compounds. Describe key features of the Periodic Table and list the first 20 elements.		Chemical change involves substances reacting to form new substances VCSSU098
8	Physical and chemical changes	Identify the differences between chemical and physical changes. Identify evidence that a chemical change has taken place.		
9	Chemical reactions	Write word equations and simple chemical equations for chemical reactions.		
10	Rates of chemical reactions. Chemistry test	Understand the factors affecting the rate of a chemical reaction. Use science equipment and chemicals safely.		
11-12	Energy	Describe the different forms of energy including movement (kinetic energy), heat and potential energy. Use flow diagrams to show changes between different forms of energy. investigating the energy transformations in devices, such as toys Explain the Law of Conservation of Energy	Energy appears in different forms including movement (kinetic energy), heat, light, chemical energy and potential energy; devices can change energy from one form to another VCSSU104	
13-15	Energy in the home	Investigate energy efficiency Conduct an audit of electricity usage at home and identify ways of saving energy Design and test the effectiveness of an energy efficient house	Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society	

		Investigating the development of solar-powered vehicles	and involve ethical considerations VCSSU090
16	Science investigations	Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge.	Identify questions, problems and claims that can be investigated scientifically and make predictions based on scientific knowledge VCSIS107 Use scientific knowledge and findings from investigations to identify relationships, evaluate claims and draw conclusions VCSIS111 Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method VCSIS112 Communicate ideas, findings and solutions to problems including identifying impacts and limitations of conclusions and using appropriate scientific language and representations VCSIS113
17	Revision & Exam		
18-19	Science investigations (cont)	Carry out a scientific investigation.	