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	Biology										Chemistry					Earth and Space						Physics						General Science		Templates	
	Cells	Plant Cells	Stem Cells	Classification	Kingdoms	Food Chains and Food Webs	Invasive Species	Body Systems	Reproduction	Healthy Eating	Mixtures	Separation techniques	States of Matter	Physical & Chemical Change	Elements and Compounds	Our Place In Space	Tides	Resources	The Water Cycle	Active Earth	Minerals	Forces	Simple Machines	Energy	Heat	Light	Sound	Introduction to Science	Science News	Engineering Challenges	Science Investigations
Level 7 and 8																															
Science as a human endeavour																															
Scientific knowledge and understanding of the world changes as new evidence becomes available; science knowledge can develop through collaboration and connecting ideas across the disciplines and practice of science VCSSU089	✓	✓	✓	✓	✓	✓		✓	✓							✓				✓	✓	✓	✓	✓		✓		✓	✓		
Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations VCSSU090	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Science inquiry skills																															
Identify questions, problems and claims that can be investigated scientifically and make predictions based on scientific knowledge VCSIS107	✓	✓	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed VCSIS108	✓	✓		✓		✓	✓	✓			✓		✓	✓	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓	✓			✓
In fair tests, measure and control variables, and select equipment to collect data with accuracy appropriate to the task VCSIS109	✓					✓					✓		✓	✓	✓				✓	✓		✓	✓	✓	✓			✓			✓
Construct and use a range of representations including graphs, keys and models to record and summarise data from students' own investigations and secondary sources, and to represent and analyse patterns and relationships VCSIS110	✓			✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓	✓	✓			✓
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	✓					✓		✓	✓		✓		✓	✓	✓	✓		✓		✓	✓	✓			✓	✓		✓	✓		✓
Biology																															
Science understanding																															
There are differences within and between groups of organisms; classification helps organise this diversity VCSSU091				✓	✓																										

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Cells are the basic units of living things; they have specialised structures and functions	VCSSU092	✓	✓	✓																												
Interactions between organisms can be described in terms of food chains and food webs and can be affected by human activity	VCSSU093						✓	✓																								
Multi-cellular organisms contain systems of organs carrying out specialised functions that enable them to survive and reproduce	VCSSU094								✓	✓	✓																					
Chemistry																																
Science understanding																																
Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques	VCSSU095											✓	✓																			
Properties of the different states of matter can be explained in terms of the motion and arrangement of particles	VCSSU096													✓																		
Differences between elements, compounds and mixtures can be described at a particle level	VCSSU097											✓				✓																
Chemical change involves substances reacting to form new substances	VCSSU098														✓																	
Earth and Space																																
Science understanding																																
Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the sun, Earth and the moon	VCSSU099																✓	✓														
Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable	VCSSU100																		✓	✓												
Water is an important resource that cycles through the environment	VCSSU101																			✓												
Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales	VCSSU102																				✓	✓										
Physics																																
Science understanding																																
Change to an object's motion is caused by unbalanced forces acting on the object; Earth's gravity pulls objects towards the centre of Earth	VCSSU103																						✓	✓								

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Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems VCSSU104																								✓	✓						
Light can form images using the reflective feature of curved mirrors and the refractive feature of lenses, and can disperse to produce a spectrum which is part of a larger spectrum of radiation VCSSU105																										✓					
The properties of sound can be explained by a wave model VCSSU106																											✓				

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	Biology							Chemistry							Earth and Space						Physics							Science News	Templates	
	The Nervous System	The Endocrine System	The Immune System	Microbiomes	Genetics and Simple Inheritance	Evolution	Ecosystems	Atoms	Chemical Reactions	Acids and Bases	Reactions and Energy	Reaction Types	The Periodic Table	Metals	Active Earth	Earthquakes	Earth Systems	The Universe	Comets	Mass extinctions	Heat	Radiation	Electrical circuits	Magnets	Energy Conservation	Kinematics	Newtons Laws of Motion	Science News	Engineering Challenges	Science Investigations
Level 9 and 10																														
Science as a human endeavour																														
Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community VCSSU114		✓	✓		✓	✓	✓	✓		✓			✓		✓	✓	✓	✓	✓	✓				✓				✓		
Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries VCSSU115			✓		✓	✓	✓	✓	✓				✓		✓		✓	✓			✓	✓		✓		✓	✓	✓		
The values and needs of contemporary society can influence the focus of scientific research VCSSU116	✓	✓	✓	✓			✓		✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓		
Science inquiry skills																														
Formulate questions or hypotheses that can be investigated scientifically VCSIS134			✓				✓		✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓	✓		✓	✓			✓
Independently plan, select and use appropriate investigation types, including fieldwork and laboratory experimentation, to collect reliable data, assess risk and address ethical issues associated with these investigation types VCSIS135			✓				✓		✓	✓	✓			✓	✓		✓	✓			✓		✓	✓		✓	✓			✓
Select and use appropriate equipment and technologies to systematically collect and record accurate and reliable data, and use repeat trials to improve accuracy, precision and reliability VCSIS136			✓				✓		✓	✓		✓	✓	✓	✓		✓				✓		✓	✓		✓	✓			✓
Construct and use a range of representations, including graphs, keys, models and formulas, to record and summarise data from students' own investigations and secondary sources, to represent qualitative and quantitative patterns or relationships, and distinguish between discrete and continuous data VCSIS137			✓		✓		✓	✓	✓	✓	✓		✓	✓	✓		✓				✓			✓		✓	✓			✓
Analyse patterns and trends in data, including describing relationships between variables, identifying inconsistencies in data and sources of uncertainty, and drawing conclusions that are consistent with evidence VCSIS138	✓	✓	✓				✓	✓	✓	✓	✓				✓		✓	✓			✓		✓	✓		✓	✓	✓		✓
Use knowledge of scientific concepts to evaluate investigation conclusions, including assessing the approaches used to solve problems, critically analysing the validity of information obtained from primary and secondary sources, suggesting possible alternative explanations and describing specific ways to improve the quality of data VCSIS139	✓		✓	✓	✓	✓	✓		✓				✓		✓		✓			✓	✓			✓	✓	✓	✓	✓		✓
Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations VCSIS140		✓	✓		✓	✓	✓	✓		✓	✓				✓		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓
Biology																														

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Science understanding																														
Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment VCSSU117	✓	✓	✓	✓																										
An animal's response to a stimulus is coordinated by its central nervous system (brain and spinal cord); neurons transmit electrical impulses and are connected by synapses VCSSU118	✓																													
Transmission of heritable characteristics from one generation to the next involves DNA and genes VCSSU119					✓																									
The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence VCSSU120						✓																								
Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems VCSSU121							✓										✓													
Chemistry																														
Science understanding																														
All matter is made of atoms that are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms VCSSU122								✓	✓																					
The atomic structure and properties of elements are used to organise them in the Periodic Table VCSSU123													✓	✓																
Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed VCSSU124							✓		✓	✓	✓	✓																		
Different types of chemical reactions are used to produce a range of products and can occur at different rates; chemical reactions may be represented by balanced chemical equations VCSSU125									✓	✓	✓	✓																		
Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer VCSSU126							✓			✓	✓	✓																		
Earth and Space																														
Science understanding																														
The theory of plate tectonics explains global patterns of geological activity and continental movement VCSSU127															✓	✓														
Global systems, including the carbon cycle, rely on interactions involving the atmosphere, biosphere, hydrosphere and lithosphere VCSSU128																	✓													
The universe contains features including galaxies, stars and solar systems, and the Big Bang theory can be used to explain the origin of the universe VCSSU129																		✓	✓	✓										

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Physics																														
Science understanding																														
Electric circuits can be designed for diverse purposes using different components; the operation of circuits can be explained by the concepts of voltage and current VCSSU130																							✓							
The interaction of magnets can be explained by a field model; magnets are used in the generation of electricity and the operation of motors VCSSU131																								✓						
Energy flow in Earth's atmosphere can be explained by the processes of heat transfer VCSSU132																	✓				✓									
The description and explanation of the motion of objects involves the interaction of forces and the exchange of energy and can be described and predicted using the laws of physics VCSSU133																									✓	✓	✓			