

Faculty: STEM **Subject:** Science **Year:** 10

	1	2	3	4	5	6	7	8	9	10	11
TERM 1	<p>Title / Unit: Chemical World Outcomes: SC5-16CW, SC5-17CW (CW3 CW4) SC5-5WS, SC5 – 6WS, SC5 – 7WS, SC5 – 9WS, SC5-1VA, SC5-2VA, SC5-3VA Content Focus: The Chemical World strand is concerned with understanding the composition and behaviour of matter. The key concepts developed in this strand are that the chemical and physical properties of substances are determined by their structure on an atomic scale and that substances change and new substances are produced in chemical reactions by rearranging atoms through atomic interactions and energy transfer. Skills: planning investigations, conducting investigations, processing and analysing data and information, communicating Preparation skills for Stage 6: data analysis, investigations, data analysis, RAW, SST, key verbs HPGE Additional information: This topic provides the prerequisite knowledge needed for stage 6 science courses. Practical work and investigations will develop students' working scientifically skills in preparation for stage 6. Assessment will have increased rigor, exposing students to the academic requirements of a stage 6 science course and include exposure to data analysis, multiple choice questions, short answer and extended response questions including verbs. Students will need to interpret and analyse results obtained in practical tasks. Assessment: Practical and Data Analysis Knowledge CANVAS quiz 25%</p>									<p>Title / Unit: Physical World</p>	

	1	2	3	4	5	6	7	8	9	10
TERM 2	<p>Title / Unit: Physical World Outcomes: SC5-10PW, SC5-11PW (PW3 PW4) SC5-5WS, SC5 – 6WS, SC5 – 7WS, SC5 – 9WS, SC5-1VA, SC5-2VA, SC5-3VA Content Focus: The Physical World strand is concerned with understanding the nature of forces and motion, and matter and energy. The two key concepts developed within this strand are that forces affect the motion and behaviour of objects and that energy can be transferred and transformed from one form to another. Through this strand students gain an understanding of how the concepts of force, motion, matter and energy apply to systems ranging in scale from atoms to the universe itself. Skills: planning investigations, conducting investigations, processing and analysing data and information, communicating Preparation skills for Stage 6: data analysis, investigations, SST, RAP, RAW, data analysis, graphs, tables, measurements, units HPGE Additional information: This topic provides the prerequisite knowledge needed for stage 6 science courses. Practical work and investigations will develop students' working scientifically skills in preparation for stage 6. Assessment will have increased rigor, exposing students to the academic requirements of a stage 6 science course and include exposure to data analysis, multiple choice questions, short answer and extended response questions including verbs and investigation design. Assessment: Knowledge & data analysis and investigation design 25%</p>						<p>Title / Unit: Independent Research Project Outcomes: SC5-4WS, SC5-5WS, SC5-6WS, SC –7WS, SC5-8WS, SC5-9WS, SC5-1VA, SC5-2VA, SC5-3VA Content Focus: Students should choose investigations related to one of the topics they have studied or to an area of interest. They should be encouraged to address problems relevant to their immediate environment and use readily available materials to undertake their investigation. Skills: planning investigations, conducting investigations, processing and analysing data and information, communicating Preparation skills for Stage 6: data analysis, investigations, ICT, communication of relevant information, grammar, spelling, punctuation, SST, RAP, RAW, data analysis, graphs, tables, measurements HPGE Additional information: This topic provides the prerequisite skills needed for stage 6 science courses, especially those relating to depth studies. Practical work and investigations will develop students' working scientifically skills in preparation for stage 6. Assessment will have increased rigor as students will need to have variables that will lead to the construction of a line graph and NOT a column graph. Assessment: Research Project 25%</p>			

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TERM 3	<p>Title / Unit: Living World Outcomes: SC5-14LW, SC5-15LW (LW3 LW4) SC5-5WS, SC5 – 6WS, SC5 – 7WS, SC5 – 9WS, SC5-1VA, SC5-2VA, SC5-3VA Content Focus: The Living World strand is concerned with understanding living things. The key concepts developed within this strand are that the cell is the basic unit of life and that there is a diverse range of living things that have evolved on Earth. Students will gain an appreciation of the interdependence of living things and how they interact with each other and the environment. Through this strand students gain an understanding of how the structure of living things relates to the functions that their body systems perform and how these features aid their survival. Skills: conducting investigations, processing and analysing data and information, communicating Preparation skills for Stage 6: data analysis, investigations, communication relevant information, SST, RAP, RAW, data analysis, graphs, tables, measurements, explain HPGE Additional information: This topic provides the prerequisite knowledge needed for stage 6 science courses. Practical work and investigations will develop students' working scientifically skills in preparation for stage 6. Assessment will have increased rigor, exposing students to the academic requirements of a stage 6 science course and include exposure to data analysis, multiple choice questions, short answer and extended response questions including verbs. Assessment: Yearly exam – data analysis and knowledge 25%</p>									

	1	2	3	4	5	6	7	8	9	10
TERM 4	<p>Title / Unit: Living World continued.....</p>			<p>Title / Unit: Space Outcomes: SC5-12ES, SC5-13ES (ES1) SC5-5WS, SC5 – 6WS, SC5 – 7WS, SC5 – 9WS, SC5-1VA, SC5-2VA, SC5-3VA Content Focus: The Earth and Space strand is concerned with the Earth's dynamic structure and its place in the cosmos. The key concepts developed within this strand are that the Earth is part of a solar system that, in turn, is part of a larger universe and that the Earth is subject to change within and on its surface, over a range of timescales, as a result of natural processes. Students explore the ways that humans use resources from the Earth and appreciate the influence of human activity on the surface of the Earth and the atmosphere. Skills: processing and analysing data and information Preparation skills for Stage 6: data analysis, investigations, SST, RAP, RAW, data analysis, graphs, tables, measurements, units HPGE Additional information: This topic provides the prerequisite knowledge needed for stage 6 science courses. Practical work and investigations will develop students' working scientifically skills in preparation for stage 6. A focus on data analysis, multiple choice, short answer and extended response questions will continue throughout the topic.</p>						