

STEM Faculty – 2022 Scope & Sequence – Year 8 STEM

	1	2	3	4	5	6	7	8	9	10	11
TERM 1											
	LAUNCHES Plan and create cars from given resources	AERODYNAMICS: Do you have the need for speed? Project launch: Maker workshop (make a self-propelled toy) Final project & Legacy: (self-propelled) toy ? Outcomes Science: Physical World PW3, PW4 (SC4-11PW, SC4-4WS, SC4-5WS, SC4-6WS, SC4-7WS, SC4-8WS, SC4-9WS) Outcomes Maths: Rates (MA4-7NA) Indices (MA4-9NA) Equations (MA4-10NA) (MA4-1WM, MA4-2WM, MA4-3WM) Skills: communicating & processing and analysing data and information, tables, graphs, diagrams symbols Literacy: subject specific terminology Numeracy: interpreting and representing data, units, measurements, rates, graphs and tables Assessment: Task 1 - Portfolio (science investigation and maths interpreting numbers, distance / time graphs and speed) week 10 Term 1									

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TERM 2										
	STEM FAIR: How can we protect the living world? Project launch: field trip or stem fair or treasure hunt Final project & Legacy: Student research project for the STEM fair (HUBS to HSC night) science fair website (blue) Outcomes Science: Living World LW3, LW4, LW5 (SC4-14LW, SC4-15LW, SC4-4WS, SC4-5WS, SC4-6WS, SC4-7WS, SC4-8WS, SC4-9WS) Outcomes Maths: Single Variable Data Analysis (MA4-20SP) Linear Relationships (MA4-11NA) Probability 2 (MA4-21SP) (MA4-1WM, MA4-2WM, MA4-3WM) Skills: questioning and predicting & problem solving & processing and analysing data and information, annotated diagrams Literacy: subject specific terminology, given and new (explanation) Numeracy: interpreting and representing data, units of measurement, graphs and tables Assessment: Task 2 - Canvas quiz series including case study – week 5 Term 2 Task 3 - Project - data research – week 9 Term 2									

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TERM 3										
	Assessment: Project for the STEM fair (ready for HUBS to HSC night) – week 2 Term 3	STEM FAIR continued		KITCHEN CHEMISTRY: How can we use STEM skills to reduce global inequalities? Project launch: bakery crime scene Final project & Legacy: food drive Outcomes Science: Chemical World CW2, CW3, CW4 (SC4-16CW, SC4-17CW, SC4-4WS, SC4-5WS, SC4-6WS, SC4-7WS, SC4-8WS, SC4-9WS) Outcomes Maths: Percentages (MA4-5NA) Financial Maths (MA4-6NA) Ratios (MA4-7NA) (MA4-1WM, MA4-2WM, MA4-3WM) Skills: conducting experiments & planning investigations & processing and analysing data and information Literacy: subject specific terminology Numeracy: interpreting and representing data, units of measurements, graphs and tables Assessment: Task 6 - Investigation and flow chart – week 9 Term 3 Task 5 – Scenario response – week 9 Term 3						

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TERM 4										
	KITCHEN CHEMISTRY continued (science content only and start maths from CRYSTALS topic)			CRYSTALS: How will you show your understanding of STEM this term? Project launch: shapes artwork and scavenger hunt Final project & Legacy: portfolio of work Legacy – quality education and increased understanding in a flipped learning environment Outcomes Science: Earth and Space ES1 (SC4-12ES, SC4-13ES, SC4-4WS, SC4-5WS, SC4-6WS, SC4-7WS, SC4-8WS, SC4-9WS) Outcomes Maths: Properties of Geometric Figures 1 (MA4-17MG) Properties of Geometric Figures 2 (MA4-17MG) (MA4-1WM, MA4-2WM, MA4-3WM) Skills: processing and analysing data and information Literacy: subject specific terminology Numeracy: interpreting and representing data, units of measurements, graphs and tables Assessment: Task 7 - Canvas quiz series – week 4 Term 4						

