

CURRICULUM GRID

		Unit 1					Unit 2							
		Chapter												
		1	2	3	4	5	6	7	8	9	10	11	12	13
Science Inquiry Skills	Identify, research, construct and refine questions for investigation; propose hypotheses; and predict possible outcomes (ACSPH001 AND ACSPH040)	✓	✓		✓			✓		✓		✓		✓
	Design investigations, including the procedure/s to be followed, the materials required, and the type and amount of primary and/or secondary data to be collected; conduct risk assessments; and consider research ethics (ACSPH002 AND ACSPH041)	✓	✓				✓	✓		✓	✓	✓		✓
	Conduct investigations, including using temperature, current and potential difference measuring devices (ACSPH003), the manipulation of devices to measure motion and the direction of light rays, safely, competently and methodically for the collection of valid and reliable data (ACSPH042)	✓	✓		✓	✓	✓	✓		✓		✓		✓
	Represent data in meaningful and useful ways, including using appropriate Système Internationale (SI) units and symbols; organise and analyse data to identify trends, patterns and relationships; identify sources of random and systematic error and estimate their effect on measurement results; identify anomalous data and calculate the measurement discrepancy between experimental results and a currently accepted value, expressed as a percentage; and select, synthesise and use evidence to make and justify conclusions (ACSPH004 AND ACSPH043)	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
	Interpret a range of scientific and media texts, and evaluate processes, claims and conclusions by considering the quality of available evidence; and use reasoning to construct scientific arguments (ACSPH005 AND ACSPH044)	✓	✓	✓			✓	✓	✓	✓	✓			✓
	Select, construct and use appropriate representations, including text and graphic representations of empirical and theoretical relationships, flow diagrams, nuclear equations and circuit diagrams, vector diagrams, free body/force diagrams, wave diagrams and ray diagrams, to communicate conceptual understanding, solve problems and make predictions (ACSPH006 AND ACSPH045)	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓

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	Select, use and interpret appropriate mathematical representations, including linear and non-linear graphs and algebraic relationships representing physical systems, to solve problems and make predictions (ACSPH007 AND ACSPH046)	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
	Communicate to specific audiences and for specific purposes using appropriate language, nomenclature, genres and modes, including scientific reports (ACSPH008 AND ACSPH047)	✓	✓					✓	✓	✓		✓	✓	✓
Science as a Human Endeavour	Science is a global enterprise that relies on clear communication, international conventions, peer review and reproducibility (ACSPH009 AND ACSPH053)	✓		✓	✓						✓	✓		
	Development of complex models and/ or theories often requires a wide range of evidence from multiple individuals and across disciplines (ACSPH010 AND ACSPH054)	✓	✓	✓	✓				✓	✓	✓	✓		
	Advances in science understanding in one field can influence other areas of science, technology and engineering (ACSPH011 AND ACSPH055)	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
	The use of scientific knowledge is influenced by social, economic, cultural and ethical considerations (ACSPH012 AND ACSPH056)	✓	✓	✓	✓	✓	✓		✓	✓		✓		
	The use of scientific knowledge may have beneficial and/or harmful and/or unintended consequences (ACSPH013 AND ACSPH057)	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
	Scientific knowledge can enable scientists to offer valid explanations and make reliable predictions (ACSPH014 AND ACSPH058)		✓	✓	✓		✓		✓	✓	✓	✓		
	Scientific knowledge can be used to develop and evaluate projected economic, social and environmental impacts and to design action for sustainability (ACSPH015 AND ACSPH059)				✓	✓	✓		✓	✓				