

Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 1.1	1 and 2	Introduction to Science	Expectations and Books Lab Safety Lab Equipment Hazard Symbols	Summarise the key expectations in Science Apply your knowledge to identify dangers in the lab Construct a set of lab safety rules Write a risk assessment Use your knowledge to identify lab equipment Draw scientific diagrams for lab equipment Apply your knowledge to explain what each piece of lab equipment is used for Use your knowledge to identify hazard symbols Interpret hazard symbols Write a risk assessment for items with a hazard symbol	Learners will use this week to remember key safety skills and expectations that will be required throughout Year 7. Through practice, learners will embed these rules and routines into every Science lesson (VAA Hardworking).
	3	Introduction to Scientific Skills	Bunsen Burner License Investigation Salt and Boiling Point	Use your knowledge to identify lab equipment Draw scientific diagrams for lab equipment Apply your knowledge to explain what each piece of lab equipment is used for Use your knowledge to identify variables Choose the correct titles for a scientific table Collect results from a scientific investigation	Learners will have the opportunity to develop their ability to listen to the views of others and be willing and able to work in teams to complete basic practical skills (VAA Empathetic). Learners will also be able to develop their ability to follow a step-by-step method, record results and construct valid conclusions (ACP Analysing)
	4	Introduction to Scientific Skills	Salt and Boiling Point Graph Investigating Heart Rate Investigating Heart Rate Graphs	Justify the type of graph for a set of results Draw a graph for your results Interpret the graph you have drawn Use your knowledge to identify variables Choose the correct titles for a scientific table Collect results from a scientific investigation	Learners will be developing their ability to present their data in the form of a graph. Learners will be aiming to construct scale and plot points with speed and accuracy (ACP Realising). Learners will be testing their hypothesis to construct a valid conclusion supported by evidence from their practical, possibly having to

					review and change their opinions (ACP Creating and Analysing).
	5	Scientific Skills Retrieval Exploring Forces	Scientific Skill Retrieval Practice and Feedback Forces Introduction Balanced and Unbalanced Forces	Evaluate your knowledge of the Scientific Skills topic Use your knowledge to define a force Interpret scenarios to identify forces Distinguish between contact and non-contact forces Interpret diagrams to identify balanced or unbalanced forces Calculate resultant force Draw and interpret force diagrams	Learners will have the opportunity to connect their learning through the Scientific Skills topic to seek generalisations and apply to retrieval questions (ACP Linking), while developing their skills of self-correction when reviewing their answers (ACP Metathinking).
	6	Exploring Forces	Friction Investigation Friction Investigation Analysis	Use your knowledge to identify variables Choose the correct titles for a scientific table Collect results from a scientific investigation Justify the type of graph for a set of results Draw a graph for your results Interpret the graph you have drawn	Learners will have the opportunity the approach this new investigation while connecting it to their existing knowledge that was developed in the Scientific Skills unit to determine a suitable approach to the task (ACP Metathinking). Learners will be seeking general conclusions about friction that can be applied to real world scenarios (ACP Linking).
	7	Exploring Forces	Hooke's Law Forces Retrieval Practice and Feedback	Use your knowledge to identify scientific equipment and define key terms. Draw a graph. Interpret results Evaluate your knowledge of the Forces topic	Learners will have the opportunity to self-evaluate their knowledge by using their knowledge to create responses to retrieval questions about Forces (ACP Metathinking). Learners will have the opportunity to take risks and speculate when predicting the outcome of their Hooke's Law investigation (VAA Agile). Learners will need to adapt their approach as they experiment to ensure that they

					are generating reliable data which proves Hooke's Law.
Term 1.2	1	Investigating Waves and Light	Waves Introduction Sound Reflection	<p>Interpret images to define a wave. Apply your knowledge to label a wave. Distinguish between transverse and longitudinal waves.</p> <p>Interpret information to describe how sound travels. Use your knowledge to define amplitude and frequency. Relate frequency and amplitude to wavelength and pitch.</p> <p>Use your knowledge to describe how light travels and define reflection. Demonstrate the law of reflection. Distinguish between specular and diffuse reflection.</p>	Learners demonstrate the ability to approach a new learning strategy while interpreting demonstrations regarding waves to connect to theory (ACP Metathinking). Learners will need to use their logical thinking to hypothesis the results from the demonstration and use this as evidence to support their generalisations linking frequency and amplitude (ACP Analysing).
	2	Investigating Waves and Light	Refraction Colour	<p>Use your knowledge to define refraction Relate refraction, density and speed Research how a concave lens works</p> <p>Use your knowledge to list the primary colours Investigate how different filters affect light Apply your knowledge to explain why objects have certain colours</p>	Learners will demonstrate their curiosity while exploring reflection and refraction through the practical investigation while challenging the conclusions drawn in the theory lessons (VAA Agile). Learners will develop their abilities to collaborate with their peers when completing the practical investigation by reviewing the strategy, considering the steps to complete successfully and be willing to listen to the views of their team (VAA Empathetic).

	3	Investigating Waves and Light Exploring Space	Waves and Light Retrieval Practice and Feedback The Solar System	Evaluate your knowledge of the Waves and Light topic Use your knowledge to define key terms Create a mnemonic to remember the planet's name and list them in order Model the solar system to scale	Learners will have the opportunity to self-evaluate their knowledge by using their knowledge to create responses to retrieval questions about Waves and Light (ACP Metathinking).
	4	Exploring Space	Our Earth (2/3 lessons based on presentations) Our Moon	Use your knowledge to explain what causes day and night Justify what causes seasons Evaluate a peer's presentation Justify why the moon looks different Create a model of the phases of the moon and name them Outline the causes of a solar and lunar eclipse	Learners will have the opportunity to demonstrate their ability to evolve their thinking regarding the planets and moons to create models to represent key phases (ACP Creating). Learners will demonstrate their ability to review the information shared by their peers to determine if they need to adapt their own thinking while having the confidence to present their own views for evaluation (VAA Empathetic).
	5	Exploring Space	Mass and Weight Space Retrieval Practice and Feedback	Distinguish the difference between mass and weight Rearrange formula. Calculate your weight on different planets Evaluate your knowledge of the Space topic	Learners will have the opportunity to self-evaluate their knowledge by using their knowledge to create responses to retrieval questions about Space (ACP Metathinking).
	6	Revise key aspects of the Physics Unit	Revision will be created to cover different aspects of the Physics content to ensure learners have had the opportunity for retrieval practice. Teachers will create revision for their class based on their areas of development identified	The success criteria explored for the Physics term will be reviewed	Through revision for the Physics synoptic, learners will have the opportunity to demonstrate their perseverance when answering challenging questions to assess their learning and be flexible when applying their knowledge to new and unfamiliar scenarios (VAA Hardworking and Agile). Learners will need to use their generalisations

			from the end-of-topic retrieval questions.		constructed during the term to support their answering of the questions while finding connections between content and skills across the Physics topics (ACP Linking).
	7	Physics Synoptic and Feedback Week	Physics Synoptic Feedback and Actions	<p>The success criteria explored for the Physics term will be assessed</p> <p>Evaluate your knowledge of the Physics content explored</p> <p>Determine the skill (Recall, Application, HSW, Maths) that is your area of strength and area of development to inform focus for next term</p> <p>Analyse your performance for each of the HPL Skills to determine your area of strength and area of development to inform focus for next term</p>	Through revision for the Physics synoptic, learners will have the opportunity to demonstrate their perseverance when answering challenging questions to assess their learning and be flexible when applying their knowledge to new and unfamiliar scenarios (VAA Hardworking and Agile). Learners will need to use their generalisations constructed during the term to support their answering of the questions while finding connections between content and skills across the Physics topics (ACP Linking).