



	Term 1	Term 2	Term 3	Term 4
Unit of Inquiry Name		Material Criteria (Material World) The properties of materials are considered when designing items for different purposes.	Energy Frenzy- (Physical World) - Energy and forces impact on the environment	
Duration		9 Weeks	9 Weeks	
Overview		Students take on the role of apprentice scientists to explore varying states of matter, solids, liquids and gases. They pose questions, conduct experiments and form conclusions about changing states of matter. While undergoing scientific processes the students learn about the importance of safety in the science lab and develop criteria for what makes a 'fair' test	Students review the properties of different forms of energy, discussing the effects (both positive and negative) that common forms of energy can have on their surroundings. They describe forces of motion and the properties of contact and non-contact forces with relation to the movement of objects. STEM challenges are employed to get students thinking creatively to solve problems, utilising their knowledge and understanding of forces.	
Outcomes		ST2-1WS-S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations ST1-3DP-T describes, follows and represents algorithms to solve problems ST2-6MW-S describes how adding or removing heat causes a change of state ST2-7MW-T investigates the suitability of natural and processed materials for a range of purposes.	(ST2-1WS-S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations) ST2-2DP-T selects and uses materials, tools and equipment to develop solutions for a need or opportunity ST2-8PW-ST describes the characteristics and effects of common forms of energy, such as light and heat ST2-9PW-ST describes how contact and non-contact forces affect an object's motion	
Assessment		Assessment Task 1 – Design a scientific investigation that demonstrates how adding or removing heat changes a state of matter. Assessment Task 2 - Students plan and build possum boxes, incorporating coding.	Assessment Task 1 – Investigation into heat transfer. Assessment Task 2 - Design and build a Rube Goldberg Machine that uses force, to promote responsible management of waste.	

Teachers seek opportunities for meaningful and related learning in other KLAs when planning for History.
Please note scope and sequences may be adjusted for student learning and events.