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Foundation – Level 2	Levels 3 and 4	Levels 5 and 6
Science Understanding		
Science as a human endeavour		
People use science in their daily lives	Science knowledge helps people to understand the effects of their actions	Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives
<p>Everyday material changes – sustaining sourcing materials (Scroll to page 77) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Sustainable Harvesting (Scroll to page 112) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>First Nations treatment of infections (Scroll to page 193) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>Bush Food & Medicines http://livingknowledge.anu.edu.au/learningsites/kooricoast/06_bush.htm</p> <p>First Nations development of pigments and dyes – biology & geology aspects also formation of mixtures (Scroll to page 106) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>The Australian Indigenous Astronomy - Amazing Website for Indigenous Astronomy for all levels by Indigenous Astronomists http://www.aboriginalastronomy.com.au</p> <p>Energy transfer – First people's traditional clothing & blankets (Scroll to page 138) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p>	<p>Sensitive fire application (scroll to page 149) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Fire Management;(Scroll to page 143) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf https://www.creativespirits.info/aboriginalculture/land/aboriginal-fire-management</p> <p>First Nations treatment of infections (Scroll to page 193) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>History of Aboriginal Astronomy - Video of Kirsten Banks – Indigenous Astronomer https://www.youtube.com/watch?v=mYr7ZCn04eA&fbclid=IwAR0oVg0UqARwnwplC2chkWk8LWAqB1hd49pS_u-t9iu972D5Dx-InMYMkqk</p> <p>David Unaipon scientific Knowledge to invent shearers and helicopter principle (overlaps level 5 & 6 inventions) http://www.murrayriver.com.au/education/david-unaipon/ https://wiki.kidzsearch.com/wiki/David_Unaipon https://www.youtube.com/watch?v=xV4hgl_sl9Y (Unaipon's sheep shearing invention) https://www.youtube.com/watch?v=7iMppk8lop8 (Great biography video on his inventions) https://www.youtube.com/watch?v=JwCszs3B66A</p>	<p>David Unaipon – Australia's Da Vinci http://www.murrayriver.com.au/education/david-unaipon/ https://wiki.kidzsearch.com/wiki/David_Unaipon https://www.youtube.com/watch?v=xV4hgl_sl9Y (sheep shearing invention) https://www.youtube.com/watch?v=7iMppk8lop8 (Great biography video) https://www.youtube.com/watch?v=JwCszs3B66A</p> <p>Traditional ecological knowledge & sustainable harvesting (scroll to page 241) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Contemporary water management-developing technology (scroll to page 246) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>First Nations Indigenous Ballistics – interaction of forces (Scroll to page 59) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf_2</p> <p>First Nations Indigenous Ballistics – motion of objects (Scroll to page 185) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf_3</p> <p>First Nations Fire by Friction – energy transformation (Scroll to page 97) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf_4</p> <p>Sound energy –traditional sound knowledges and practices (Scroll to page 134) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf_5</p>
Biological sciences		
Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met	Living things can be grouped on the basis of observable features and can be distinguished from non-living things	Living things have structural features and adaptations that help them to survive in their environment
Living things grow, change and have offspring similar to themselves	Different living things have different life cycles and depend on each other and the environment to survive	The growth and survival of living things are affected by the physical conditions of their environment
<p>Caring for country Living things have basic needs, food and water (scroll Page 27) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Living things have external features (scroll to page 48) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p>	<p>Indigenous classification system – grouping (scroll to page118) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Indigenous classification comparing and contrasting taxonomy (scroll to page 123) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>First Nations food web/food chain restoration – influence on ecosystems (Scroll to page 31) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>First Nations maintaining the ecosystem, abiotic & biotic factors & ecocentric perspectives (Scroll to page 122) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>Life cycles – knowledge & use of fauna and flora life (scroll to page 164) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Living things depend on environment - interconnected world view (scroll to page 171) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p>	<p>Knowledge & exploitation of adaptations (scroll to page 212) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Growth & survival traditional ecological knowledge/restoration (scroll to page 263) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>First Nations Classifications (Scroll to page 27) https://australiancurriculum.edu.au/media/5157/ccp-tbi-7-10.pdf</p> <p>Indigenous classification of Fungi https://www.anbg.gov.au/funqi/aboriginal.html</p>
Chemical sciences		
Objects are made of materials that have observable properties	A change of state between solid and liquid can be caused by adding or removing heat	Solids, liquids and gases behave in different ways and have observable properties that help to classify them
Everyday materials can be physically changed or combined with other materials in a variety of ways for particular purposes	Natural and processed materials have a range of physical properties; these properties can influence their use	Changes to materials can be reversible, including melting, freezing, evaporating, or irreversible, including burning and rusting
<p>Everyday materials can be physically changed (scroll to page 53) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Different materials have a particular purpose – hafting, manipulating & joining (scroll to page 90) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p>	<p>States of matter (scroll to page128) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Experts in the properties of natural & processed materials (scroll to page 176)</p>	<p>Knowledge of evaporation (scroll to page 218) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf</p> <p>Knowledge of states of matter (scroll to page 223)</p>

	https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Paints - Experts in the properties of natural & processed materials (scroll to page 184) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Reversible/Irreversible change (scroll to page 270) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Earth and space sciences		
Observable changes occur in the sky and landscape; daily and seasonal changes affect everyday life	Earth's rotation on its axis causes regular changes, including night and day	Earth is part of a system of planets orbiting around a star (the Sun)
Earth's resources are used in a variety of ways	Earth's surface changes over time as a result of natural processes and human activity	Sudden geological changes or extreme weather conditions can affect Earth's surface
Daily & seasonal changes (scroll to page 37) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Changes in sky and landscape https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Finite resource conservation/management (scroll to page 97) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Day & Night Earth's rotation on its axis causes regular change (scroll to page 134) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Managed country - Earth's surface (scroll to page 190) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Time keeping (scroll to page 171) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Earthquakes & volcanoes (scroll to page 277) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Physical sciences		
The way objects move depends on a variety of factors including their size and shape: a push or a pull affects how an object moves or changes shape	Heat can be produced in many ways and can move from one object to another; a change in the temperature of an object is related to the gain or loss of heat by the object	Light from a source forms shadows and can be absorbed, reflected and refracted
Light and sound are produced by a range of sources and can be sensed	Forces can be exerted by one object on another through direct contact or from a distance	Energy from a variety of sources can be used to generate electricity; electric circuits enable this energy to be transferred to another place and then to be transformed into another form of energy
Movement related to size & shape (scroll to page 32) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Light & sound are produced & sensed – musical instruments (scroll to page 65) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Pushes & pulls – how objects moves or changes shape instructive toys (scroll to page 102) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Heat Transfer (scroll to page 139) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Toy Science – Forces (scroll to page 198) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Knowledge of application of refraction & reflection (scroll to page 236) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Science Inquiry Skills		
Questioning and predicting		
Respond to and pose questions, and make predictions about familiar objects and events	With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge	With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be based on previous experiences or general rules
Asking questions & observing (scroll to page 41) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Knowledge of the seasons when to harvest – questions changes in objects & events (scroll to page 72) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Acknowledging knowledge of life cycles & migrations (scroll to page 209) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Acknowledging knowledge & use of organism adaptations (scroll to page 260) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Consulting local knowledge – what's changed? (scroll to page 171) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Planning and conducting		
Participate in guided investigations, including making observations using the senses, to explore and answer questions	Suggest ways to plan and conduct investigations to find answers to questions including consideration of the elements of fair tests	With guidance, plan appropriate investigation types to answer questions or solve problems and use equipment, technologies and materials safely, identifying potential risks
	Safely use appropriate materials, tools, equipment and technologies	Decide which variables should be changed, measured and controlled in fair tests and accurately observe, measure and record data
Indigenous observations of life cycles (Scroll to page 107) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Consulting local knowledge – what's dangerous? (scroll to page 159) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Consulting local knowledge – what's here (scroll to page 161) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Consulting local knowledge – field work considerations (scroll to page 257) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf Consulting local knowledge – what's dangerous? (scroll to page 159) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Recording and processing		
Use informal measurements in the collection and recording of observations	Use formal measurements in the collection and recording of observations	Construct and use a range of representations, including tables and graphs, to record, represent and describe observations, patterns or relationships in data
Use a range of methods, including drawings and provided tables, to sort information	Use a range of methods including tables and column graphs to represent data and to identify patterns and trends	
Classification, sorting & estimation (scroll to page 203) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Classification, sorting & estimation (scroll to page 203) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	First Nations' contributions to deeper science understanding (scroll to page 294) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Analysing and evaluating		
Compare observations and predictions with those of others	Compare results with predictions, suggesting possible reasons for findings Reflect on an investigation, including whether a test was fair or not	Compare data with predictions and use as evidence in developing explanations Suggest improvements to the methods used to investigate a question or solve a problem
Consulting local knowledge, what made this track? Native or pest? (Scroll to page 87) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Applied use of astronomy (scroll to page 143) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	First nations' navigation (scroll to page 251) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf The first scientists (scroll to page 282)

		https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf First Nation led bushfire reduction strategy (scroll to page 289) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf
Communicating		
Represent and communicate observations and ideas about changes in objects and events in a variety of ways	Represent and communicate observations, ideas and findings to show patterns and relationships using formal and informal scientific language	Communicate ideas and processes using evidence to develop explanations of events and phenomena and to identify simple cause-and-effect relationships
Acknowledging local knowledge- whose tracks are those? (Scroll to page 85) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Consulting local knowledge (scroll to page 155) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf acknowledging understanding of anatomy (scroll to page 157) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf	Understanding structural adaptations communicated (scroll to page 258) https://www.australiancurriculum.edu.au/media/5653/ccp-tbi-f-6-ver5-online.pdf