

# Australian Curriculum: 2026 Technologies — Year 5-6



CURRICULUM	Year 5	Year 6
	Semester 1	Semester 1
<b>Unit name</b>	Design Unit 3: Design for nature	Digital Unit 1: Amazing Digital Designs
<b>Unit description</b>	<p>In this unit students will investigate characteristics and properties of a range of materials, systems, components, tools and equipment, and evaluate their suitability for use. They will design a product to meet an identified need or opportunity for wildlife in their local area.</p> <p>They will explore the role of people in a range of technologies occupations and the tools and techniques they use.</p> <p>Students will apply these processes and production skills:</p> <ul style="list-style-type: none"> <li>Investigating and defining by:                             <ul style="list-style-type: none"> <li>analysing needs and opportunities for designing</li> <li>analysing technologies and design features used in wildlife management</li> <li>testing tools and techniques with a range of materials</li> </ul> </li> <li>Generating and documenting design ideas for a wildlife management product</li> <li>Producing and implementing a wildlife management product for an identified need</li> <li>Evaluating design ideas, processes and solutions against negotiated criteria for success</li> <li>Collaborating as well as working individually throughout the process</li> <li>Managing by developing project plans that include resources</li> </ul>	<p>In this unit students engage in a number of activities, including:</p> <ul style="list-style-type: none"> <li>investigating the functions and interactions of digital components and data transmission in simple networks, as they solve problems relating to digital systems</li> <li>following, modifying and designing algorithms that include branching and repetition</li> <li>developing skills in using a visual programming language within a maze game context</li> <li>working collaboratively to create a new maze game.</li> </ul> <p>Students will apply a range of skills and processes when creating digital solutions. They will:</p> <ul style="list-style-type: none"> <li>define problems by identifying appropriate data and functional requirements</li> <li>design a user interface, considering design principles</li> <li>follow, modify and design algorithms using simple statements, relating particular programming language statements (steps and decisions) to actions in the game</li> <li>implement their game using visual programming</li> <li>evaluate how well their solutions meet needs</li> <li>plan, create and communicate ideas within a collaborative project, and apply agreed protocols when negotiating, providing feedback, developing plans and sharing online.</li> </ul>

ASSESSMENT		Year 5	Year 6
		Semester 1	Semester 1
<b>Range and balance of summative assessment conventions</b>	<b>Assessment</b>	Design for nature	Amazing digital designs
	<b>Technique</b>	Project	Project
	<b>Type of text</b>	Portfolio	Portfolio
	<b>Mode</b>	Multimodal	Multimodal
<b>Aspects of the achievement standard</b>			
<b>Technologies Achievement Standard</b>	explain how social, ethical, technical and sustainability considerations influence the design of solutions to meet a range of present and future needs		
	explain how the features of technologies influence design decisions and how digital systems are connected to form networks		
	describe a range of needs, opportunities or problems and define them in terms of functional requirements		
	collect and validate data from a range of sources to assist in making judgements		
	generate and record design ideas for specified audiences using appropriate technical terms, and graphical and non-graphical representation techniques including algorithms		
	plan, design, test, modify and create digital solutions that meet intended purposes including user interfaces and a visual program		
	plan and document processes and resources and safely produce designed solutions for each of the prescribed technologies contexts		
	negotiate criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas, solutions and processes		
	use ethical, social and technical protocols when collaborating, and creating and communicating ideas, information and solutions face-to-face and online		

Shaded cells indicate opportunities that summative assessments provide for students to demonstrate evidence against all aspects of the achievement standard

