Design and Technologies

Years 5 and 6 Band Plan 2025

The *K–12 Curriculum, assessment and reporting framework* (K–12 Framework) requires schools to document, retain, and monitor or review their three levels of planning. This template provides an overview of the curriculum and assessment coverage. Teachers may modify this template to suit their school context and the decisions about the provision of the curriculum.

In alignment with the K–12 Curriculum, Assessment and Reporting Framework, Technologies is provided in at least one semester across the band (Year 5 and 6), with teaching and assessment designed to ensure effective coverage of the relevant achievement standard by the end of the band.

Sequence of units	Year 5	Year 6
	Semester 2	**Semester 2**
Unit description	In this unit, students explore how light behaves, including how it travels, reflects, and can be manipulated using mirrors. They investigate how technologies are designed to meet needs and solve problems. Students apply this knowledge to plan and create a working mirror maze that redirects light from a torch through a path to a target. They reflect on how their design worked, use criteria for success to evaluate it, and consider sustainability in their design choices. Students design and build a mirror maze that guides light through a path to reach a target.	In this unit, students explore the properties and features of 3D objects by applying their knowledge to a real-world design challenge. They investigate how technologies can be used creatively and sustainably to solve problems and meet consumer needs. Students take on the role of toy designers, responding to a design brief from a fictional client to create a new and exciting robot toy. Through the design process, students generate ideas, develop annotated scale drawings, select materials, and construct a 3D model using nets of prisms and pyramids. Throughout the unit, students reflect on the effectiveness of their design, justify material choices, and evaluate how their robot meets social, technical, and sustainability considerations.

Assessment		Unit 1	Unit 2
		Assessment task	**Assessment task**
Range and balance of assessment conventions[1]	**Technique** **If *other*, or more than one, specify**	Project	Project
	Mode	☒ Written ☒ Practical ☒ Multimodal	☒ Written ☒ Multimodal
	Conditions	*Refer to task sheet*	*Refer to task sheet*
Aspects of the achievement standard ☼ Design and Technologies		Shade the cells to indicate aspects covered in the assessment	
describe competing considerations in the design of products, services and environments, taking into account sustainability.			
describe how design and technologies contribute to meeting present and future needs.			
explain how the features of technologies impact on designed solutions for each of the prescribed technologies contexts.			
create designed solutions for each of the prescribed technologies contexts suitable for identified needs or opportunities.			
suggest criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions.			
combine design ideas and communicate these to audiences using graphical representation techniques and technical terms.			
record project plans including production processes.			
select and use appropriate technologies and techniques correctly and safely to produce designed solutions.			