Design and Technologies Years 3 and 4 Band Plan 2025



The <u>K-12 Curriculum, assessment and reporting framework</u> (K-12 Framework) requires schools to document, retain, and monitor or review their <u>three levels of planning</u>. 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 3 and 4), with teaching and assessment designed to ensure effective coverage of the relevant achievement standard by the end of the band.

Sequence of units	Year 3	Year 4
	Semester 2	Semester 2
Unit description	In this unit, students explore the properties and purposes of materials, tools, and equipment by designing and creating a sustainable space craft using recyclable materials. Students apply design thinking to develop imaginative solutions, plan a sequence of production steps, and manage safety considerations. They communicate design ideas using annotated diagrams and models, and reflect on the effectiveness and sustainability of their solutions. This unit develops students' understanding of sustainability, the design process, and safe work practices through a hands-on, creative project.	Students will investigate forces and how the properties of materials affect the function of a Bottle Balloon. Students will investigate how forces and the properties of materials affect the function of a product or system. Students will also explore needs and opportunities for designing, and test materials, components, tools, equipment, and processes needed to create designed solutions. Students will select and use materials, components, tools, equipment, and techniques to safely make designed solutions. They will learn to sequence steps to individually develop and create their own designed solution: a bottle rocket. Students will describe for the features of technologies can be used to produce designed solutions for technology contexts. Students will select and use materials, components, tools, equipment and techniques to safely make a designed solution, The Bottle Rocket. Students will sequence steps to individually develop create their own Bottle Rocket.

Assessment		Unit 1	Unit 2	
		Assessment task	Assessment task	
Range and balance of assessment conventions ¹	Technique	Project	Project	
	If other, or more than one, specify	Short response	Short response	
	Mode	☑ Written☑ Visual☑ Practical	☑ Written☑ Visual☑ Practical	
	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		
explain how products, services and environments are designed to best meet needs of communities and their environments.				
describe contributions of people in design and technologies occupations.				
describe how the features of technologies can be used to produce designed solutions for each of the prescribed technologies contexts.				
create designed solutions for each of the prescribed technologies contexts.				
explain needs or opportunities and evaluate ideas and designed solutions against identified criteria for success, including environmental sustainability considerations.				
develop and expand design ideas and communicate these using models and drawings including annotations and symbols.				
plan and sequence major steps in design and production.				
identify appropriate technologies and techniques and demonstrate safe work practices when producing designed solutions.				