

Year 5 Design Technologies

Achievement

Learning area achievement standard

By the end of Year 6 students explain how people design products, services and environments to meet the needs of communities, including sustainability. For each of the 3 prescribed technologies contexts students explain how the features of technologies impact on design decisions and they create designed solutions. They process data and show how digital systems represent data, design algorithms involving complex branching and iteration, and implement them as visual programs including variables. They select and justify design ideas and solutions against design criteria. Students share and communicate ideas or content to an audience using technical terms, graphical representation techniques and appropriate digital tools. They develop project plans, including production processes, and select technologies and techniques to safely produce designed or digital solutions. Students securely access and use multiple digital systems and describe their components and how they interact to process and transmit data. They identify their digital footprint and recognise its permanence.

Assessment Elements

An overall level of achievement in this subject is determined by the teacher's on-balance judgment of the evidence presented in students' summative assessment across the following:

- **Knowledge and Understanding**
- **Processes and Production Skills**

Delivery (mode, requirements, lessons)

Students will be offered a blended model of delivery with live lessons and independent study on their program to complete lessons, tasks and assessment in accordance with the Work Rate Calendar.

Student Requirements

Computer, internet access, email, printer, scanner, headset with microphone, stationery, resource list and SRS list.

Units, Learning Experiences and Summative Assessment		
Semester 1	Term 1	Unit 1 Food Production In this Design and Technologies unit, students will investigate how and why food and fibre are produced in managed environments, using sustainable methods. They will also explore how people in design and technologies occupations address competing considerations, including sustainability. The unit culminates in students following the design process by designing, preparing and producing a healthy dish, considering safety, nutrition and sustainability.
		Summative Assessment: Are you the next Master Chef? Your task is to design, produce and present a tasty, healthy meal using sustainable utensils. The dish must reflect the needs, wants, preferences and values of an individual or group.
	Term 2	Unit 2: Technological Advancements In this unit, students will explore the transformation of electrical energy into light and the properties of light through a series of lessons that culminate in the design and construction of a sturdy model of a focusing camera obscura. They will use the design process to plan, create, test, and refine their models, understanding how light can be refracted and travels in a straight line.
		Summative assessment: Students will design and create a sturdy model of a focusing camera obscuras that shows how light can be refracted and travels in a straight line.

Disclaimer All of the above information is accurate at the time of development.