Year 4 Digital Technologies

Achievement Standard

Learning area achievement standard

By the end of Year 4 students describe how people design products, services and environments to meet the needs of people, including sustainability. They process and represent data for different purposes, follow and describe simple algorithms involving branching and iteration, and implement them as visual programs. For each of the 2 prescribed technologies contexts they describe the features and uses of technologies and create designed solutions. Students select design ideas against design criteria. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They communicate design ideas using models and drawings including annotations and symbols. Students plan and sequence steps and use technologies and techniques to safely produce designed solutions. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and its risks.

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.

Year 4 Digital Technologies

Units, Learning Experiences and Summative Assessment

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<td rowspan="2">Semester 2</td>
<td rowspan="2">Term 3</td>
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<p>Unit 1 Be an Esafe Kid
Empower students to protect their online privacy and personal information that identifies them. Students will learn about the skills required to create safer online environments.</p>
<p>Unit 2: Digital Systems and Data
Students will delve into the fascinating world of Digital Systems, Peripherals, and Data. They will learn how computers work, the various devices that can be connected to them, and how data is processed and represented. Students will also focus on securely accessing and using digital systems and peripherals to transmit data.</p>
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<p>Summative Assessment: Esafe Campaign
Purpose of Assessment Task: To identify how to keep their personal information and data secure and use the core common features of digital tools following agreed behaviours. Develop and Esafe Campaign</p>
<p>Summative Assessment: Digital Systems
Students will complete the assessment task attached and submit through Qlearn by the due date. Students will be required to:</p>

Identify Peripheral devices.
Identify the functions and purpose of at least 3 peripheral devices.
Select at least one data set provided and display the data appropriately in a graph using excel.

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<td rowspan="2">Term 4</td>
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<p>Unit 2: Algorithms
Students learn how three different types of algorithms function in computers, that looping makes algorithms more efficient, and understand that conditions and branching present alternate paths. Students are introduced to pixels and how they form digital images on a computer. Practical activities include following a pseudocode to create origami fish, writing algorithms to create a digital pixel image and create a branching flowchart and digital die. Digital Technologies Processes and Production Skills, such as describing, implementing, defining and planning are developed throughout</p>
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<p>Summative assessment:
Use simple design criteria to plan a simple algorithm including branching and implement Scratch.</p>
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Disclaimer   All of the above information is accurate at the time of development.