

# Digital Technologies

Introducing the Victorian Curriculum:  
Digital Technologies F–6

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Digital Technologies

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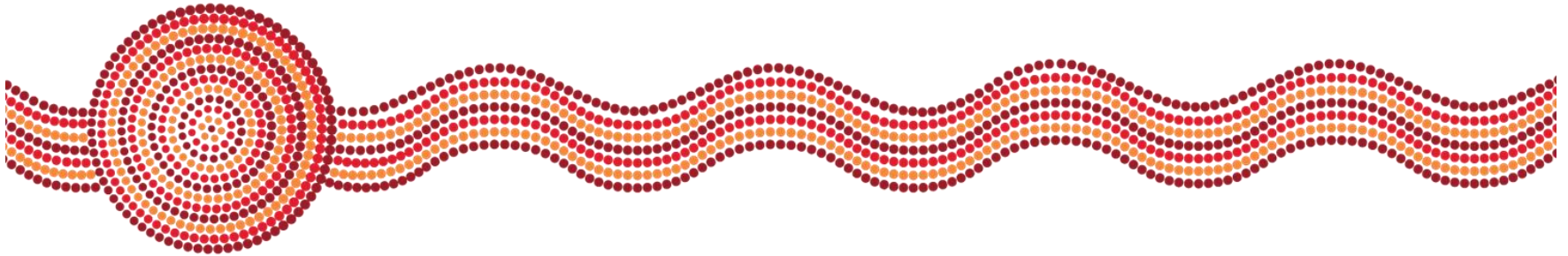
# Acknowledgement of Country

*I would like to acknowledge the traditional custodians of the many lands across Victoria on which each of you are living, learning and working from today.*

*For myself and those of us in the Melbourne metropolitan area, we acknowledge the traditional custodians of the Kulin Nations.*

*When acknowledging country, we recognise Aboriginal and Torres Strait Islander peoples' spiritual and cultural connection to country and acknowledge their continued care of the lands and waterways over generations, while celebrating the continuation of a living culture that has a unique role in this region.*

*I would like to pay my respects to Elders past, present and emerging, for they hold the memories, traditions, culture and hopes of all Aboriginal and Torres Strait Islander peoples across the nation, and hope they will walk with us on our journey.*



# Outline of the session

The session will explore:

- the aims of the curriculum
- how it is structured
- where to find both curriculum documentation and support resources
- and how to assess against the Achievement Standards.

# Aims

# Aims of the Digital Technologies curriculum

The Digital Technologies curriculum aims to ensure that students can:

- design, create, manage and evaluate sustainable and innovative digital solutions to meet and redefine current and future needs
- use computational thinking and the key concepts of abstraction; data collection, representation and interpretation; specification, algorithms and development to create digital solutions
- apply systems thinking to monitor, analyse, predict and shape the interactions within and between information systems and the impact of these systems on individuals, societies, economies and environments
- confidently use digital systems to efficiently and effectively automate the transformation of data into information and to creatively communicate ideas in a range of settings
- apply protocols and legal practices that support safe, ethical and respectful communications and collaboration with known and unknown audiences.

# DT vs dt vs ICT

## Digital Technologies

- Provides students with the opportunity to acquire and apply specific ways of thinking about problem solving to create innovative, purpose-designed digital solutions.
- It is a way of analysing problems and precisely and logically designing solutions that can be understood and carried out through the use of programming languages. Design and systems thinking also contribute to the problem-solving approach in this curriculum.

## digital technologies

- These are the digital resources, such as tablets, notebooks, cameras, phones and data probes that allow data and information to be manipulated, stored and communicated.

## ICT

- Involves developing students as confident users and consumers of digital systems.







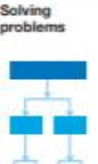



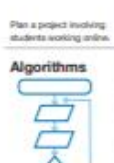


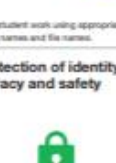

# Digital Technologies vs ICT

- This poster was developed to show the difference between the Digital Technologies Curriculum and ICT.
- It provides examples of the Digital Technologies Curriculum and ICT.
- This is to help teachers to visualise the content of each.

<https://www.vcaa.vic.edu.au/curriculum/foundation-10/resources/digital-technologies/Pages/Help-me-find-a-teaching-resource.aspx>

## The difference between the Victorian Digital Technologies Curriculum and ICT

F-6

Digital Technologies Curriculum			ICT	
<b>Hardware, software and networks</b>  Examine the components of a network.	<b>Data representation</b>  Visually represent different types of data.	<b>Data acquisition</b>  Collect and use data to create a chart.	<b>Locate data</b>  Locate data relating to a topic using a search engine.	<b>Organise data and create solutions</b>  Use software to create a solution for a specific audience.
<b>Creating and communicating ideas</b>  Plan a project involving students working online.	<b>Solving problems</b>  Define a problem and break down into parts.	<b>User interface design</b>  Create a mock-up to show design ideas.	<b>Manage and maintain data</b>  Save student work using appropriate folder names and file names.	<b>Share ideas</b>  Use a class blog to share ideas and content.
<b>Algorithms</b>  Design an algorithm involving a sequence of steps.	<b>Programming</b>  Develop a simple visual program to control a robot.	<b>Solution evaluation</b>  Evaluate a classroom's software solution.	<b>Protection of identity, privacy and safety</b>  Use strong passwords to protect student data.	<b>Apply social protocols</b>  Use appropriate etiquette when communicating online.

Write the Digital Technologies Curriculum's Creating Digital Solutions strand below the problem-solving/investigating stages of Analysis, Design, Development and Evaluation.

Information Communication Technologies (ICT) follows the four elements of Creating, Inquiring, Communicating and Problem Solving.

# Ways of thinking

Known as the ways of thinking there are three types of thinking:

- computational thinking
- design thinking
- systems thinking

This forms the basis of problem-solving where students learn to:

- **analyse** a problem or need
- **design** a solution to a problem or a need
- **develop** the solution
- **evaluate** the solution to see if it met requirements

This works well with the Creating Digital Solutions strand.



# Ways of thinking

## Computational thinking:

- decomposition – breaking the problem down
- organising data logically
- developing algorithms

## Design thinking:

- generating creative and innovative ideas
- mock-ups, prototypes, etc.
- analysing and evaluating ideas against criteria

## Systems thinking:

- interactions and interrelationships between components, devices and people are analysed

# Structure



VICTORIAN CURRICULUM  
AND ASSESSMENT AUTHORITY




VICTORIA  
State  
Government

# Digital Technologies Curriculum



Home Overview **Curriculum** ▾ Levels ▾

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## Digital Technologies

**Introduction** Curriculum

### Rationale and Aims

Structure

Learning in Digital Technologies

Scope and Sequence

Resources

Glossary

## Rationale and Aims

 [Print this page](#)

### Rationale

The Digital Technologies curriculum enables students to become confident and creative developers of digital solutions through the application of information systems and specific ways of thinking about problem solving.

Students acquire a deep knowledge and understanding of digital systems, data and information and the processes associated with creating digital solutions so they can take up an active role in meeting current and future needs.

# Scope and Sequence F-10

Foundation – Level 2		Levels 3 and 4		Levels 5 and 6		Levels 7 and 8		Levels 9 and 10	
<b>Digital Systems</b>									
Identify and explore digital systems (hardware and software components) for a purpose	Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data	Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data	Investigate how data are transmitted and secured in wired, wireless and mobile networks	Investigate the role of hardware and software in managing, controlling and securing the movement of and access to data in networked digital systems					
<b>Data and Information</b>									
Recognise and explore patterns in data and represent data as pictures, symbols and diagrams	Recognise different types of data and explore how the same data can be represented in different ways	Examine how whole numbers are used as the basis for representing all types of data in digital systems	Investigate how digital systems represent text, image and sound data in binary	Analyse simple compression of data and how content data are separated from presentation					
Collect, explore and sort data, and use digital systems to present the data creatively	Collect, access and present different types of data using simple software to create information and solve problems	Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information	Acquire data from a range of sources and evaluate their authenticity, accuracy and timeliness	Develop techniques for acquiring, storing and validating quantitative and qualitative data from a range of sources, considering privacy and security requirements					
Independently and with others create and organise ideas and information using information systems, and share these with known people in safe online environments	Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols	Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols	Analyse and visualise data using a range of software to create information, and use structured data to model objects or events	Analyse and visualise data to create information and address complex problems, and model processes, entities and their relationships using structured data					
			Manage, create and communicate interactive ideas, information and projects collaboratively online, taking safety and social contexts into account	Manage and collaboratively create interactive solutions for sharing ideas and information online, taking into account social contexts and legal responsibilities					
<b>Creating Digital Solutions</b>									
Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems	Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them	Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities	Define the user experience of a digital system, generating and communicating alternative design ideas	Design the user experience of a digital system, evaluating alternative designs against criteria including functionality, accessibility, usability and aesthetics					
		Design, modify and follow simple algorithms represented diagrammatically and in English, involving sequences of steps, branching, and iteration	Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors	Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases					
	Develop simple solutions as visual programs	Develop digital solutions as simple visual programs	Develop and modify programs with user interfaces involving branching, iteration and functions using a general-purpose programming language	Develop modular programs, applying selected algorithms and data structures including using an object-oriented programming language					
Explore how people safely use common information systems to meet information, communication and recreation needs	Explain how student-developed solutions and existing information systems meet common personal, school or community needs	Explain how student-developed solutions and existing information systems meet current and future community and sustainability needs	Evaluate how well student-developed solutions and existing information systems meet needs, are innovative and take account of future risks and sustainability	Evaluate critically how well student-developed solutions and existing information systems and policies take account of future risks and sustainability and provide opportunities for innovation					
<b>Achievement Standard</b>									
By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.	By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes. Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols. Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.	By the end of Level 6, students explain the functions of digital system components and how digital systems are connected to form networks that transmit data. Students explain how digital systems use whole numbers as a basis for representing a variety of data types. They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols. Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program. Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.	By the end of Level 8, students distinguish between different types of networks and their suitability in meeting defined purposes. Students explain how text, image and sound data can be represented and secured in digital systems and presented using digital systems. They analyse and evaluate data from a range of sources to model solutions and create information. They manage the collaborative creation of interactive ideas, information and projects and use appropriate codes of conduct when communicating online. Students define and decompose problems in terms of functional requirements and constraints. They design user experiences and algorithms incorporating branching and iterations, and develop, test, and modify digital solutions. Students evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability.	By the end of Level 10, students explain the control and management of networked digital systems and the data security implications of the interaction between hardware, software and users. Students explain simple data compression, and why content data are separated from presentation. They take account of privacy and security requirements when selecting and validating data and use digital systems to analyse, visualise and model salient aspects of data. Students share and collaborate online, establishing protocols for the legal and safe use, transmission and maintenance of data and projects. Students define and decompose complex problems in terms of functional and non-functional requirements. They design and evaluate user experiences and algorithms, and develop and test modular programs, including an object-oriented program. Students evaluate their solutions and information systems in terms of risk, sustainability and potential for innovation.					

# Components

The screenshot shows a curriculum page for Digital Technologies. At the top, there are navigation tabs for 'Introduction' and 'Curriculum'. Below that, there are filter options for levels and strands. The main content is organized into three columns representing different levels: 'Foundation to Level 2', 'Levels 3 and 4', and 'Levels 5 and 6'. Each column contains a description, content descriptions, and a list of strands. Red arrows point from the labels 'Bands', 'Strands', 'Content Descriptions', and 'Link to Elaborations' on the left to the corresponding elements in the curriculum grid.

## Digital Technologies

Introduction Curriculum

Filter Showing all levels Showing all strands **Apply filters** Clear filters

View    Show  Level descriptions  Content descriptions  Achievement standards  Print this page

◀ Previous A B C D F-2 3-4 5-6 7-8 9-10 Next ▶

Foundation to Level 2	Levels 3 and 4	Levels 5 and 6
<b>Foundation to Level 2 Description</b> In Foundation to Level 2, students are introduced to common digital systems and patterns that exist within data they collect. Students organise, manipulate and present this data, including numerical...	<b>Levels 3 and 4 Description</b> In Levels 3 and 4, students explore digital systems in terms of their components and peripheral devices such as digital microscopes, cameras and interactive whiteboards. They collect, manipulate...	<b>Levels 5 and 6 Description</b> In Levels 5 and 6, students develop an understanding of the role individual components of digital systems play in the processing and representation of data. They acquire, validate, interpret, track...
<b>Foundation to Level 2 Content Descriptions</b>	<b>Levels 3 and 4 Content Descriptions</b>	<b>Levels 5 and 6 Content Descriptions</b>
<b>Digital Systems</b> Identify and explore digital systems (hardware and software components) for a purpose (VCDTDS013)	<b>Digital Systems</b> Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (VCDTDS019)	<b>Digital Systems</b> Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data (VCDTDS026)
<b>Data and Information</b> Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (VCDTDI014) Collect, explore and sort data, and use digital systems to present the data creatively (VCDTDI015)	<b>Data and Information</b> Recognise different types of data and explore how the same data can be represented in different ways (VCDTDI020) Collect, access and present different types of data using simple software to create information and solve problems (VCDTDI021)	<b>Data and Information</b> Examine how whole numbers are used as the basis for representing all types of data in digital systems (VCDTDI027) Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information (VCDTDI028)
<b>Creating Digital Solutions</b> Independently and with others create and organise ideas and information using information systems, and share these with known people in safe online environments (VCDTDI016) Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (VCDTCD017)	<b>Creating Digital Solutions</b> Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols (VCDTDI022) Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them (VCDTCD023)	<b>Creating Digital Solutions</b> Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols (VCDTDI029) Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities (VCDTCD030)

**Bands**

**Strands**

**Content Descriptions**

**Link to Elaborations**

# Content Descriptions

Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them

# Elaborations

## Digital Technologies / Levels 3 and 4 / Creating Digital Solutions

### Content description

Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them

### Elaborations

- stating the nature of the problem and some of its features, such as what need is associated with the problem, who has the problem and why does the problem exist
- describing, using drawings, pictures and text, the sequence of steps and decisions in a solution, for example preparing a chart to show the order of events in a game and the decisions that a player must make
- experimenting with different ways of describing a set of instructions, for example writing two versions of the same simple set of instructions for a programmable robotic device
- explaining to others how to follow technical instructions, for example demonstrating how to capture and download images from a mobile device
- defining and describing the sequence of steps needed to incorporate multiple types of data in a solution, for example charting the sequence of steps in selecting and downloading images and sound to create a book trailer

### Code

VCDTCD023

### ScOT catalogue terms

[Algorithms](#)

# Strands

Strands	Digital Systems	Data and Information	Creating Digital Solutions
	<p>Focuses on the hardware, software and network components of digital systems. Students initially learn about a range of hardware and software, and progress to an understanding of how data are transmitted between components within a system, and how the hardware and software interact to form networks.</p>	<p>Focuses on the properties of data, how it is collected and represented, and how it is interpreted in context to produce information. Students learn how data is represented and structured symbolically for use by digital systems, as well as techniques for collecting, managing and organising data that is used to solve problems and create and communicate ideas and information.</p>	<p>Explores the interrelated processes and associated skills by which students create digital solutions. Students engage in the four processes of analysing, designing, developing and evaluating. Creating Digital Solutions requires skills in using digital systems and computational, design and systems thinking, and interacting safely by using appropriate technical and social protocols.</p>



# Digital Systems

Foundation – Level 2	Levels 3 and 4	Levels 5 and 6	Levels 7 and 8	Levels 9 and 10
<b>Digital Systems</b>				
Identify and explore digital systems (hardware and software components) for a purpose	Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data	Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data	Investigate how data are transmitted and secured in wired, wireless and mobile networks	Investigate the role of hardware and software in managing, controlling and securing the movement of and access to data in networked digital systems
<b>Achievement Standard</b>				
By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.	By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes. Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols. Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.	By the end of Level 6, students explain the functions of digital system components and how digital systems are connected to form networks that transmit data. Students explain how digital systems use whole numbers as a basis for representing a variety of data types. They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols. Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program. Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.	By the end of Level 8, students distinguish between different types of networks and their suitability in meeting defined purposes. Students explain how text, image and sound data can be represented and secured in digital systems and presented using digital systems. They analyse and evaluate data from a range of sources to model solutions and create information. They manage the collaborative creation of interactive ideas, information and projects and use appropriate codes of conduct when communicating online. Students define and decompose problems in terms of functional requirements and constraints. They design user experiences and algorithms incorporating branching and iterations, and develop, test, and modify digital solutions. Students evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability.	By the end of Level 10, students explain the control and management of networked digital systems and the data security implications of the interaction between hardware, software and users. Students explain simple data compression, and why content data are separated from presentation. They take account of privacy and security requirements when selecting and validating data and use digital systems to analyse, visualise and model salient aspects of data. Students share and collaborate online, establishing protocols for the legal and safe use, transmission and maintenance of data and projects. Students define and decompose complex problems in terms of functional and non-functional requirements. They design and evaluate user experiences and algorithms, and develop and test modular programs, including an object-oriented program. Students evaluate their solutions and information systems in terms of risk, sustainability and potential for innovation.

Continuum

# Data and Information

Foundation – Level 2	Levels 3 and 4	Levels 5 and 6	Levels 7 and 8	Levels 9 and 10
<p><b>Data and Information</b></p> <p>Recognise and explore patterns in data and represent data as pictures, symbols and diagrams</p> <p>Collect, explore and sort data, and use digital systems to present the data creatively</p> <p>Independently and with others create and organise ideas and information using information systems, and share these with known people in safe online environments</p>				
<p>Recognise different types of data and explore how the same data can be represented in different ways</p> <p>Collect, access and present different types of data using simple software to create information and solve problems</p> <p>Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols</p>	<p>Recognise how whole numbers are used as the basis for representing all types of data in digital systems</p> <p>Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information</p> <p>Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols</p>	<p>Investigate how digital systems represent text, image and sound data in binary</p> <p>Acquire data from a range of sources and evaluate their authenticity, accuracy and timeliness</p> <p>Analyse and visualise data using a range of software to create information, and use structured data to model objects or events</p> <p>Manage, create and communicate interactive ideas, information and projects collaboratively online, taking safety and social contexts into account</p>	<p>Analyse simple compression of data and how content data are separated from presentation</p> <p>Develop techniques for acquiring, storing and validating quantitative and qualitative data from a range of sources, considering privacy and security requirements</p> <p>Analyse and visualise data to create information and address complex problems, and model processes, entities and their relationships using structured data</p> <p>Manage and collaboratively create interactive solutions for sharing ideas and information online, taking into account social contexts and legal responsibilities</p>	
<p><b>Achievement Standard</b></p> <p>By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.</p>				
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# Creating Digital Solutions



Foundation – Level 2	Levels 3 and 4	Levels 5 and 6	Levels 7 and 8	Levels 9 and 10
<b>Creating Digital Solutions</b>				
Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems	Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them	Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities	Define and decompose real-world problems taking into account functional requirements and sustainability (economic, environmental, social), technical and usability constraints	Define and decompose real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs
		Design a user interface for a digital system, generating and considering alternative design ideas	Design the user experience of a digital system, generating, evaluating and communicating alternative designs	Design the user experience of a digital system, evaluating alternative designs against criteria including functionality, accessibility, usability and aesthetics
		Design, modify and follow simple algorithms represented diagrammatically and in English, involving sequences of steps, branching, and iteration	Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors	Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases
	Develop simple solutions as visual programs	Develop digital solutions as simple visual programs	Develop and modify programs with user interfaces involving branching, iteration and functions using a general-purpose programming language	Develop modular programs, applying selected algorithms and data structures including using an object-oriented programming language
Explore how people safely use common information systems to meet information, communication and recreation needs	Explain how student-developed solutions and existing information systems meet common personal, school or community needs	Explain how student-developed solutions and existing information systems meet current and future community and sustainability needs	Evaluate how well student-developed solutions and existing information systems meet needs, are innovative and take account of future risks and sustainability	Evaluate critically how well student-developed solutions and existing information systems and policies take account of future risks and sustainability and provide opportunities for innovation
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Continuum



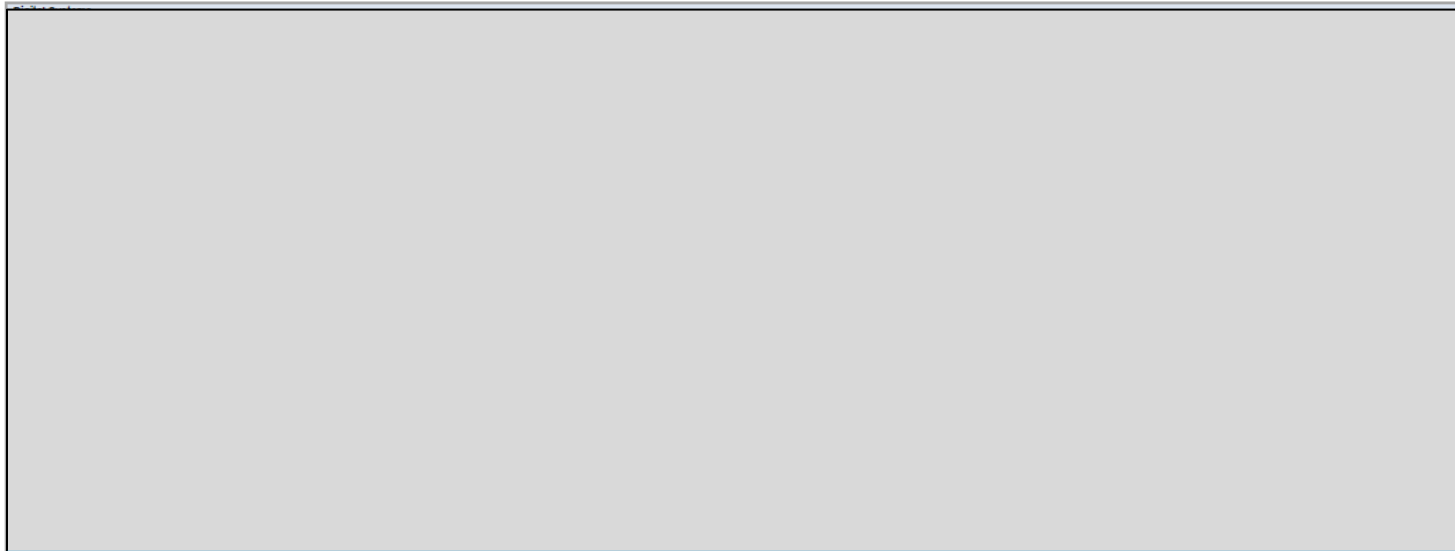
Foundation – Level 2

Levels 3 and 4

Levels 5 and 6

Levels 7 and 8

Levels 9 and 10



**Achievement Standard**

By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.

By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes. Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols. Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.

By the end of Level 6, students explain the functions of digital system components and how digital systems are connected to form networks that transmit data. Students explain how digital systems use whole numbers as a basis for representing a variety of data types. They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols. Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program. Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.

By the end of Level 8, students distinguish between different types of networks and their suitability in meeting defined purposes. Students explain how text, image and sound data can be represented and secured in digital systems and presented using digital systems. They analyse and evaluate data from a range of sources to model solutions and create information. They manage the collaborative creation of interactive ideas, information and projects and use appropriate codes of conduct when communicating online. Students define and decompose problems in terms of functional requirements and constraints. They design user experiences and algorithms incorporating branching and iterations, and develop, test, and modify digital solutions. Students evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability.

By the end of Level 10, students explain the control and management of networked digital systems and the data security implications of the interaction between hardware, software and users. Students explain simple data compression, and why content data are separated from presentation. They take account of privacy and security requirements when selecting and validating data and use digital systems to analyse, visualise and model salient aspects of data. Students share and collaborate online, establishing protocols for the legal and safe use, transmission and maintenance of data and projects. Students define and decompose complex problems in terms of functional and non-functional requirements. They design and evaluate user experiences and algorithms, and develop and test modular programs, including an object-oriented program. Students evaluate their solutions and information systems in terms of risk, sustainability and potential for innovation.

# Achievement Standards



Continuum



# Achievement Standards

## Content Descriptions

### Levels 3 and 4

Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data

Recognise different types of data and explore how the same data can be represented in different ways

Collect, access and present different types of data using simple software to create information and solve problems

Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols

Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them

Develop simple solutions as visual programs

Explain how student-developed solutions and existing information systems meet common personal, school or community needs

## Achievement Standard

By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes.

Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols.

Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.

# Achievement Standards

## Foundation – Level 2

By the end of Level 2, students identify how common digital systems are used to meet specific purposes.

Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning.

Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.

## Levels 3 and 4

By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes.

Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols.

Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.

## Levels 5 and 6

By the end of Level 6, students explain the functions of digital system components and how digital systems are connected to form networks that transmit data.

Students explain how digital systems use whole numbers as a basis for representing a variety of data types. They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols.

Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program. Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.

# Assessing against the Achievement Standards – Example 1 (F–2)

## Achievement Standard extract

By the end of Level 2, students identify how common digital systems are used to meet specific purposes.

## Content Description

Identify and explore digital systems (hardware and software components) for a purpose ([VCDTDS013](#))

## Idea for an assessment activity

A worksheet that enables students to identify and describe a range of hardware and software components for a number of digital devices



# Assessing against the Achievement Standards – Example 1 (F–2)

## Ideas for delivery of unit

- Introduce students to the components that make up a computer or digital system.
- Students draw a diagram of a known digital system from memory and label as many parts as they can.
- Introduce students to the difference between hardware and software components.
- Identify and explore different hardware and software components of a digital system.
- Develop a list of hardware components, software applications and operating systems.
- Students look around their home or school and record the different types of digital systems they find, for example laptops, tablet devices, desktop computers, smartphones, printers, robotic devices.
- Students choose two different digital devices and complete a Venn diagram listing the similarities and differences between their chosen digital devices. Two different devices could be a laptop and a tablet device.



# Questions



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# Programming



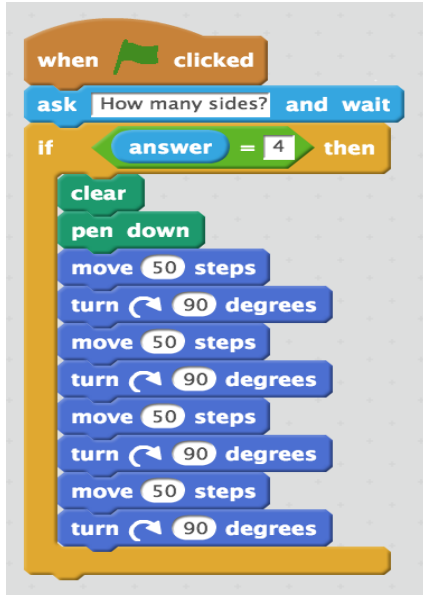
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AND ASSESSMENT AUTHORITY



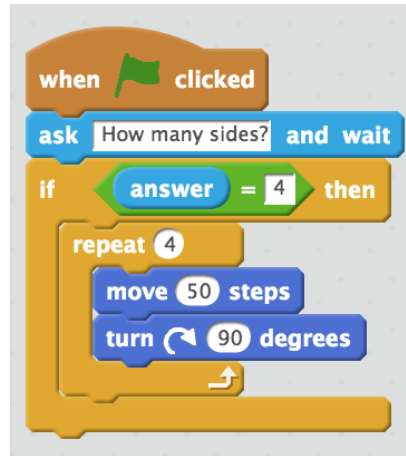
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# Visual programming

Using a visual programming language to draw a square – using Scratch



**Levels 3 and 4** – Using Scratch  
– **branching** using IF statements



**Levels 5 and 6** – Using Scratch  
– **branching** using IF statements  
– **iteration** using a Repeat statement

*Examples provided by Specialist Teachers - Eduard Schaepman and Megan van der Velden*

# Visual programming

Represented and created visually rather than as text.

Examples of visual programming languages include:

- Alice
- GameMaker
- Kodu
- Lego Mindstorms
- MIT App Inventor
- Scratch (Build Your Own Blocks and Snap).

# Curriculum planning support resources



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# Glossary

- A six page glossary for Digital Technologies is available on the Victorian Curriculum F–10 website for Digital Technologies.
- The glossary defines a list of terminology that is relevant to the learning area.
- Teachers are encouraged to make themselves familiar with this terminology.

## Digital Technologies Glossary

### Abstraction

The process of reducing complexity to formulate generalised ideas or concepts, for example reducing a computing problem to its fundamental concepts.

### Algorithm

A description of the steps and decisions required to solve a problem. For example, to find the largest number in a list of positive numbers:

1. Note the first number as the largest
2. Look through the remaining numbers, in turn, and if a number is larger than the number found in 1, note it as the largest.
3. Repeat this process until complete. The last noted number is the largest in the list.

Flowcharts are often useful in visualising an algorithm.

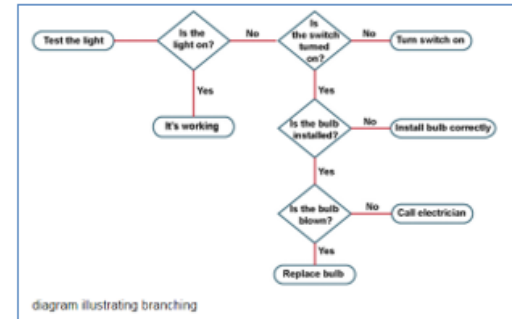
### Binary

The use of two states or permissible values to represent data, such as the on and off position of a light switch or the transistors in a computer silicon chip that can be in either the electrical state of ON or OFF.

Binary data are typically represented as a series of single digits referred to as binary digits (or bits) due to each taking on the value of either 0 or 1. For example, if we wanted to represent a four-colour system (e.g. CMYK - cyan, magenta, yellow, and key [black]) in binary the two-digit codes 00, 01, 10 and 11 could be used.

### Branching

Branching occurs when an algorithm makes a choice to do one of two or more actions depending on sets of conditions and the data provided.



# Curriculum planning templates

- These resources demonstrate the coverage of the content descriptions in a number of units taught across a two-year planning cycle.
- Each unit is linked to extracts from the achievement standard and outlines assessment strategies.
- There are three samples for each band.

Instruction: List the title of the unit of work in the first column and then tick the check box of the content descriptions addressed by it, which can be done electronically. Once completed, fill out the 'Assessment table'. For detailed notes regarding the purpose of this template and further instructions for completion, refer [here](#).

Strand	Digital Systems				Data and Information				Creating Digital Solutions				
	Content Description				Content Description				Content Description				
Sequence of Lessons / Unit	Semester/ Year	CD	Achievement standard #	CD	Achievement standard #	CD	Achievement standard #	CD	Achievement standard #	CD	Achievement standard #	CD	Achievement standard #
Communication – Let's Talk!													
a. Non-verbal communication	Semester 1 / Grade 3				2								
b. Communication survey	Semester 1 / Grade 3					3							
c. Investigate a communication device	Semester 1 / Grade 3		1						4				
Code-a-Bot													
a. Create an algorithm	Semester 2 / Grade 3									5			
b. Create code	Semester 2 / Grade 3										5		
c. Reflection	Semester 2 / Grade 3											6	

Foundation to Level 2 Achievement Standard	Levels 3 and 4 Achievement Standard	Levels 5 and 6 Achievement Standard
<p>By the end of Level 2</p> <ul style="list-style-type: none"> <li>Students identify how common digital systems are used to meet specific purposes.</li> <li>Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning.</li> <li>Students design solutions to simple problems using a sequence of steps and decisions.</li> <li>They create and organise ideas and information using information systems and share these in safe online environments.</li> </ul>	<p>By the end of Level 4</p> <ul style="list-style-type: none"> <li>Students describe how a range of digital systems and their peripheral devices can be used for different purposes. (1)</li> <li>Students explain how the same data sets can be represented in different ways. (2)</li> <li>They collect and manipulate different data when creating information and digital solutions. (3)</li> <li>They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols. (4)</li> <li>Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. (5)</li> <li>They explain how their developed solutions and existing information systems meet their purposes. (5)</li> </ul>	<p>By the end of Level 6</p> <ul style="list-style-type: none"> <li>Students explain the functions of digital system components and how digital systems are connected to form networks that transmit data.</li> <li>Students explain how digital systems use whole numbers as a basis for representing a variety of data types.</li> <li>They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols.</li> <li>Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems.</li> <li>They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program.</li> <li>Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.</li> </ul>

Level 3 Assessments	Assessment	Achievement Standard/s
Communication – Let's Talk! a. Non-verbal communication	Report: Students identify different ways to communicate the same data using a variety of non-verbal techniques (for example Morse code or Auslan).	2
Communication – Let's Talk! b. Communication survey	Report: A survey of different types of communication devices used at home. Students present data in a variety of ways (for example using simple spreadsheets).	3
Communication – Let's Talk! c. Investigate a communication device	Collaborative presentation of information about a communication device, considering input, output and the transmission of data.	1, 4

Level 3 Assessments	Assessment	Achievement Standard/s
Code-a-Bot a. Create an algorithm	Folio of algorithms: Navigation from a starting point in the classroom to the door.	5
Code-a-Bot b. Create code	Folio of evidence of students using algorithms to code robot to following the path to the door.	5
Code-a-Bot c. Reflection	Report: Reflection/evaluation prompt <i>Did your robot follow the path accurately? What were the challenges?</i>	6

# Curriculum area plans

These resources provide a visual representation of how the Digital Technologies curriculum could be covered across two years, showing the units by topic, the sequencing of the topics, the coverage of the three strands within the Digital Technologies curriculum and the time allocated to each strand and unit. There are three samples for each band. These are developed from the Curriculum Planning Templates.

Digital Technologies Curriculum Area Plan

## Curriculum Area Plan: Digital Technologies - Years 3 and 4 (Sample Program 2)

Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Year 3	Semester 1				Explore digital systems – 3.1.1							Recognise data types – 3.1.2				Create information and solve problems – 3.1.3				
					Mix and match							Data collection				Data representation				
Year 3	Semester 2				Create and communicate ideas – 3.2.1															
					Online collaboration															
Year 4	Semester 1											Define steps and decisions – 4.1.1			Develop simple programs – 4.1.2					
												Extended project								
Year 4	Semester 2	How solutions meet needs – 4.2.1																		
		Evaluation																		
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	

\* Based on 1 hour of teaching time per week

Key

Digital Systems

Data and Information

Creating Digital Solutions

Topic, level, semester, sequence



# Lesson planning support resources

# Unpacking Content Descriptions



## Digital Technologies: Unpacking the Content Descriptions

- When curriculum planning, one of the most important aspects for teachers is to connect the intention of the lesson/s with the appropriate content descriptions and to enable students to demonstrate progress in their learning based upon the achievement standards.

Strand	Creating Digital Solutions
Content Description	Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems
Related extract from Achievement Standard	Students design solutions to simple problems using a sequence of steps and decisions.
Suggested focus	Lessons may focus on: <ul style="list-style-type: none"><li>introducing algorithms and following steps sequentially</li><li>discussing the terminology around algorithms</li><li>making decisions when following step-by-step instructions</li><li>solving a problem by developing an algorithm, for example writing a sequence of steps or using arrows or symbols</li></ul>

Sample activities
Unplugged – without a digital device: <ul style="list-style-type: none"><li>following basic step-by-step instructions, such as a recipe</li><li>use of terminology: start, stop, forwards, backwards, left and right</li><li>using cards with arrows or symbols to create a simple algorithm</li><li>programming a class mate as a robot, for example developing instructions for another student to follow</li><li>following instructions and steps sequentially, including decision-making</li><li>recording the steps as symbols to solve a problem, for example using arrows</li></ul>
Plugged - with a digital device: <ul style="list-style-type: none"><li>exploring the functions of buttons on a digital device</li><li>experimenting with a digital device, for example going forward and backward</li><li>programming a digital device to follow a simple sequence of steps to solve a problem, for example following a set of instructions written as arrows</li><li>programming a digital device to make a square programming a digital device to follow a path to avoid an obstacle</li></ul>

# Plugged and unplugged activities

## Digital Technologies, Foundation to Level 10 – Plugged activities

The VCAA has developed the following resource for Digital Technologies. The resource includes plugged activities across a range of content descriptions in all strands from Foundation to Level 10. Plugged activities are activities that require students to use digital systems, including hardware and software or the internet. The plugged activities in this resource can be completed by students at home, if they are working remotely, or by students working in the classroom.

This resource has been developed to assist teachers by providing examples of activities in which students can demonstrate their understanding of the curriculum. Activities are grouped by band: F-2, 3-4, 5-6, 7-8 and 9-10. The resource provides the relevant extracts of the achievement standard for the content descriptions provided. Not all the content descriptions have been included, because some are better suited to being delivered as unplugged activities. The chosen content descriptions cover the strands Digital Systems, Data and Information and Creating Digital Solutions.

Each of the content descriptions has two corresponding plugged activities for students. These plugged activities involve students using a range of digital devices to take photos, create presentations, work with images, sound and data files; and develop solutions using word processing software, drawing software, spreadsheet software, database software and data visualisation software. Students will also solve problems within the Creating Digital Solutions strand using a programming language to follow the steps of analysis, design, development and evaluation.

Teachers would need to prepare students for these activities with a range of teaching and learning activities. They may also wish to prepare student worksheets or response templates to go with these activities.

Teachers should monitor students' completion of the plugged activities and assess these against the relevant achievement standards. Students could submit evidence of these activities for teachers to assess by taking photographs of their work and emailing them to the teacher, emailing completed documents and solutions to the teacher, or uploading their images, documents and solutions to the school learning management system.

### Digital Technologies, Foundation to Level 2 – Plugged activities

#### Achievement standard

By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions.

Strand and content descriptions	Plugged activities
<b>Digital Systems</b>	
Identify and explore digital systems (hardware and software components) for a purpose <a href="#">(ACDTOS01.9)</a>	<ul style="list-style-type: none"> <li>Use a tablet device, such as an iPad, to take photographs around the school or home and insert them into a Word or Google Docs document.</li> <li>Using PowerPoint or Google Slides, create a photo story that includes text, images and audio.</li> </ul>
<b>Data and Information</b>	
Recognise and explore patterns in data and represent data as pictures, symbols and diagrams <a href="#">(ACDTOS01.4)</a>	<ul style="list-style-type: none"> <li>Use the Australian Government Bureau of Meteorology website each day for one month. Look at the image for the forecast each day and note any patterns in the weather, for example the number of days of sunshine only in the month or the number of cloudy days. Keep a record of these images for each day and then look at the images at the end of the month. Note any patterns in the weather represented by the images.</li> <li>Reduce an image file so that it could be emailed to the teacher by reducing the dimensions of the image or choosing a different image format, for example, converting an image as a stamp to a PDF.</li> </ul>
Collect, explore and sort data, and use digital systems to present the data creatively <a href="#">(ACDTOS01.5)</a>	<ul style="list-style-type: none"> <li>Use data visualisation software to create a mind map showing the relationships between characters in a story.</li> <li>Use spreadsheet software, such as Excel, Numbers or Google Sheets, to present data in a table and to present that data in a chart.</li> </ul>
Independently and with others create and organise ideas and information using information systems, and share these with known people in safe online environments <a href="#">(ACDTOS01.6)</a>	<ul style="list-style-type: none"> <li>Work collaboratively in small groups to create a photo story online, as a class blog with text, images and audio/video, to illustrate a creative story. The teacher will moderate the blog.</li> <li>Participate in a safe online space, such as the school intranet, learning management system or Google apps, to share ideas and information with classmates. The teacher will moderate the online space.</li> </ul>

## Digital Technologies, Foundation to Level 10 – Unplugged activities

The VCAA has developed the following resource for Digital Technologies. The resource includes unplugged activities across a range of content descriptions in all strands from Foundation to Level 10. Unplugged activities are activities that do not require students to use digital systems or the internet. The unplugged activities in this resource can be completed by students at home, if they are working remotely, or by students working in the classroom.

This resource has been developed to assist teachers by providing examples of activities in which students can demonstrate their understanding of the curriculum. Activities are grouped by band: F-2, 3-4, 5-6, 7-8 and 9-10. The resource provides the relevant extracts of the achievement standard for the content descriptions provided. Not all the content descriptions have been included, because some are better suited to being delivered as plugged activities. The chosen content descriptions cover the strands Digital Systems, Data and Information and Creating Digital Solutions.

Each of the content descriptions has two corresponding unplugged activities for students. These unplugged activities involve students identifying digital systems, collecting data, sorting data, listing items, drawing diagrams, writing descriptions and instructions, developing tables and algorithms, testing algorithms and annotating mood-ops.

Teachers would need to prepare students for these activities with a range of teaching and learning activities. They may also wish to prepare student worksheets to go with these activities. Teachers should monitor students' completion of the unplugged activities and assess these against the relevant achievement standards. Students could submit evidence of these activities for teachers to assess by taking photographs of their work and emailing them to the teacher, emailing completed documents to the teacher, or uploading their images and documents to the school learning management system.

### Digital Technologies, Foundation to Level 2 – Unplugged activities

#### Achievement standard extracts

By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions.

Strand and content descriptions	Unplugged activities
<b>Digital Systems</b>	
Identify and explore digital systems (hardware and software components) for a purpose <a href="#">(ACDTOS01.9)</a>	<ul style="list-style-type: none"> <li>Identify common digital systems and describe their purpose, for example smart phones, desktop computers, tablets and smart TVs. Draw a diagram of these digital systems, label them and give a brief description of their purpose.</li> <li>Identify and describe a range of hardware and software components for a desktop or laptop computer. Hardware components could include hard disk drives and printers. Software components could include operating systems and word processing software.</li> </ul>
<b>Data and Information</b>	
Recognise and explore patterns in data and represent data as pictures, symbols and diagrams <a href="#">(ACDTOS01.4)</a>	<ul style="list-style-type: none"> <li>Collect data about family members' and relatives' or friends' birthday months. Draw a table with columns for each month and represent the birthdays as symbols for the relevant season.</li> <li>Keep a list of the classes you study each day. Assign a symbol or a letter for each class, for example M for mathematics and S for science. After two weeks, list each of the classes for each day in a table. Compare the data for each day over the two weeks. Make some observations in relation to the data.</li> </ul>
Collect, explore and sort data, and use digital systems to present the data creatively <a href="#">(ACDTOS01.5)</a>	<ul style="list-style-type: none"> <li>Collect and sort some items at home or at school, such as books or toys, using different categories, such as alphabetical order, numerical order and size order. Write a short description of how you have sorted each collection of items.</li> <li>Collect data about family members' and relatives' or friends' birthday months and display the information as a pictograph.</li> </ul>

# Example of unplugged activities (F–2)

Recognise and explore patterns in data and represent data as pictures, symbols and diagrams ([VCDTDI014](#))

- Collect data about family members' and relatives' or friends' birthday months. Draw a table with columns for each month and represent the birthdays as symbols for the relevant season.
- Keep a list of the classes you study each day. Assign a symbol or a letter for each class, for example M for mathematics and S for science. After two weeks, list each of the classes for each day in a table. Compare the data for each day over the two weeks. Make some observations in relation to the data.

# Example of plugged activities (3–4)

<p>Develop simple solutions as visual programs <a href="#">(VCDTCD024)</a></p>	<ul style="list-style-type: none"><li>• Create a simple program using a visual programming language, such as Scratch, to accept user input and display it as output to the user.</li><li>• Create a simple program using a visual programming language, such as Scratch, to create a response of true or false to a question.</li></ul>
<p>Explain how student-developed solutions and existing information systems meet common personal, school or community needs <a href="#">(VCDTCD025)</a></p>	<ul style="list-style-type: none"><li>• Test one of the programs developed above to determine if it achieved what you set out to achieve. Document the process of testing in a table using software such as Word, Pages or Google Docs.</li><li>• Have a classmate review the programs developed above and ask them to provide you with written feedback using software such as Word, Pages or Google Docs to evaluate how it worked.</li></ul>

# Unit plan ideas



## Digital Technologies, Foundation to Level 10 – Unit plan ideas

The VCAA has developed the following resource for Digital Technologies. The resource includes unit plans that cover one strand and its associated content descriptions from Foundation to Level 10. The unit plans include ideas for learning activities and assessment activities that could be completed by students at home, if they are working remotely, or by students working in the classroom.

This resource has been developed to assist teachers with ideas for planning and delivering a series of lessons that meet the content descriptions and then assessing student work against the relevant achievement standard. The unit plans are grouped by band: F–2, 3–4, 5–8, 7–8 and 9–10. Each unit plan covers one strand: Digital Systems, Data and Information, or Creating Digital Solutions. Relevant extracts from the achievement standard have been provided.

Each of the unit plans includes a sample timeline and ideas for lesson activities and assessment activities. Each unit plan also contains a link to the relevant VCAA curriculum area plan resource, for teachers who want to develop units of work based on these resources.

The ideas in these unit plans involve students identifying and exploring hardware, software and network components, transmission media and network security; drawing diagrams; listing items and writing descriptions; recording their voice; conducting surveys; using spreadsheets; collaborating online; using computational and design thinking involving problem solving to determine requirements; interviewing stakeholders; generating designs and evaluation criteria; designing algorithms; developing programs; and evaluating solutions.

Teachers would need to prepare students before delivering a unit of work based on these unit plans. They could use a range of teaching and learning activities (see the Plugged activities and Unplugged activities on the Digital Technologies [Curriculum advice for remote and flexible learning page](#)). They may also wish to prepare student worksheets to go with the ideas in the unit plans.

Teachers should monitor students' completion of a unit of work and assess against the relevant achievement standard. Students could submit evidence for teachers to assess by taking photographs of their work and emailing them to the teacher; emailing completed documents or solutions to the teacher; or uploading images and documents to the school learning management system.

## Digital Technologies, Foundation to Level 2 – Unit plan ideas

Achievement standard extract	
By the end of Level 2, students identify how common digital systems are used to meet specific purposes.	
Strand and content description	
<b>Digital Systems</b> Identify and explore digital systems (hardware and software components) for a purpose <a href="#">[VCDTDS013]</a>	
Ideas for delivery of unit	
The unit may have a 1 x 60-minute lesson each week over four weeks.	
<b>Week 1:</b> <b>What is a computer?</b>	<ul style="list-style-type: none"> <li>Introduce students to the components that make up a computer or digital system.</li> <li>Students draw a diagram of a known digital system from memory and label as many parts as they can.</li> </ul>
<b>Week 2:</b> <b>Hardware and software components</b>	<ul style="list-style-type: none"> <li>Introduce students to the difference between hardware and software components.</li> <li>Identify and explore the different hardware and software components of a digital system.</li> <li>Develop a list of hardware components, software applications (apps) and operating systems.</li> </ul>
<b>Week 3:</b> <b>Digital system detective</b>	<ul style="list-style-type: none"> <li>Students look around their home or school and record the different types of digital systems they can find, for example laptops, tablet devices, desktop computers, smartphones, printers, robotic devices.</li> <li>Students choose two different digital devices and complete a Venn diagram listing the similarities and differences between their chosen digital devices. Two different devices could be a laptop and a tablet device.</li> </ul>
<b>Week 4:</b> <b>Assessment activity</b>	<ul style="list-style-type: none"> <li>Refer to the assessment activities below.</li> </ul>
Ideas for assessment activities	
<b>Pre-test</b>	A simple written test on some basic terminology (including hardware and software components)
<b>Written test</b>	A written test on terminology and identifying hardware and software components
<b>Worksheet</b>	A worksheet that enables students to identify and describe a range of hardware and software components for a <u>number</u> of digital devices
<b>Create an e-book</b>	An e-book in which students draw and label the hardware and software components of a digital system
Link to curriculum area plan	
DigiTech P–2 Curriculum Area Plan Sample Program 1 <a href="http://www.vcaa.vic.edu.au/curriculum/foundation-10/resources/digital-technologies/Pages/Help-me-find-a-teaching-resource.aspx">www.vcaa.vic.edu.au/curriculum/foundation-10/resources/digital-technologies/Pages/Help-me-find-a-teaching-resource.aspx</a>	

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# Questions?