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Overview

Year 3: Computers and codes

Western Australian Curriculum

Year 3 Digital Technologies

Content strands

Knowledges and understanding

Processes and production skills

Content Descriptions

Knowledge and understanding

Digital systems

Digital systems and peripheral devices are used for different purposes (ACTDIK007)

Representation of data

Different types of data can be represented in different ways (ACTDIK008)

Processes and production skills

Collecting, managing and analysing data

Collect and present different types of data using simple software to create useful information (ACTDIP009)

Digital implementation

Use visually represented sequenced steps (algorithms) including steps with decisions made by the user (branching) (ACTDIP011)

Create and communicate ideas and information safely (ACTDIP013)

Processes and production skills

Creating solutions by:

Investigating and defining

Create a sequence of steps to solve a given task (WATPPS16)

Designing

Develop and communicate ideas using labelled drawings and appropriate technical terms (WATPPS17)

Producing and implementing

Select and safely use, appropriate components with given equipment to make a solution (WATPPS18)

Evaluating

Use criteria to evaluate design processes and solutions developed (WATPPS19)

Collaborating and managing

Work independently, or collaboratively when required, to plan, create and communicate sequenced steps (WATPPS20)

General Capabilities and Cross Curriculum Priorities

General capabilities	
Literacy	
Numeracy	
Information and communication technology (ICT) capability	
Critical and creative thinking	
Personal and social capability	
Ethical understanding	
Intercultural understanding	

Cross-curriculum priorities

Aboriginal and Torres Strait Islander histories and cultures

Asia and Australia's engagement with Asia

Sustainability

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Home tutor information

This guide is designed to help you support the student. Please use the teaching and discussion points to ensure the student fully understands the concepts and skills presented in the Set.

Please use the answers as a guide to marking the student work.

Mark each task as the student completes it, showing ticks, comments and prompts where appropriate. Encourage your student to expand on answers, use vocabulary relevant to the topic.

Storage folders

Please provide a folder, sheet protector or envelope to store the student's printed activity sheets.

Please help the student create a Set folder on the computer to digitally store electronic documents, photographs, video clips and scanned activity sheets.



Discussion icon used on Activity sheets This icon is used when the student and Home tutor work together to discuss concepts, share ideas or complete tasks. Instructions are included with the icon on the activity sheet and in the relevant activity Lesson notes.

A **Set return checklist** is provided at the end of the activity book. This list details all the tasks that are to be returned at the end of the set. Ensure all items are clearly labelled, eg Computers and Codes Day 4 Insects.

Photographs and videos

Some tasks require the student to record his/her work using either photographs or videos. The student can use a mobile phone to do this.

Please help the student if he/she is required to transfer photographs and videos from s mobile phone or camera to a computer.

Please help the student **reduce the size** of videos and photographs before storing them in the Set folder or incorporating them into documents, slide shows etc.

Ensure all items are clearly labelled, eg Computers and Codes Day 4 Insects

Electronic items can be returned to the teacher via Moodle, email, IFEX or USB.

Days 7, 8, 9 and 10 require the student to complete tasks using visual programming software on a tablet, laptop or desktop computer. The options are *Lightbot or Scratch Junior*. These are free programs. See the activity pages for more details.

Computers and codes

NOTE: The student may not know much about the topic at this stage. The initial activities are designed to reveal the knowledge the student already possesses, can predict or guess. Further activities will add to this knowledge.

Day 1: What is a digital system?

page 5

Materials:

• activity sheet – What is a digital system?

The student reads the title and speech bubble.

Discuss possible meanings of digital system.

The student writes his/her definition. Answers will vary.

Discuss the questions with the student.

The student reads the second speech bubble and identifies the images. **rocket, ipod music player, aeroplane**

Discuss the digital systems in each object, ie:

rocket – digital systems are used so the astronauts can speak with the flight controllers, to make sure the engines fire at the right time, to control the direction and speed of the rocket

iPod music player – digital systems are used to record and store music on the iPod

aeroplane – digital systems are used so the pilots can speak with the flight controllers, to check for possible problems, to control the direction and speed of the plane

Discuss other objects that use digital systems.

The student draws three objects. Answers will vary, eg mobile phone, oven, fridge, microwave oven, car, washing machine.

Ask the student to explain how the digital system helps each object to work, eg the navigation system in a car helps us get to new places.



Store or scan and save the activity sheet.

Parts of a digital system

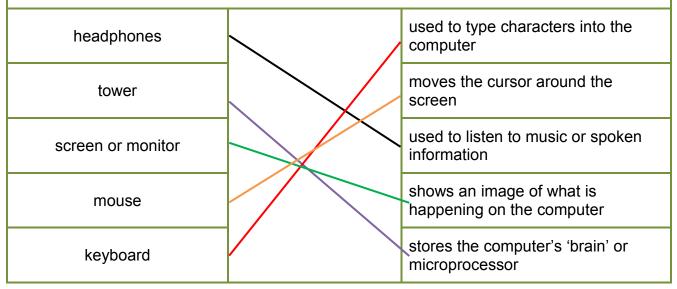
Materials:

• activity sheet – Parts of a digital system.

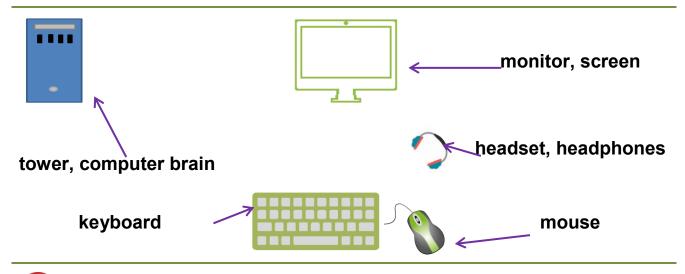
Ask the student to read the title and speech bubble.

Read the *Discussion box* (indicated by the two heads with speech bubbles) with the student and follow the instructions. Discuss any unknown terminology, eg characters, cursor, microprocessor.

The student completes the matching task.



The student reads the instruction and completes the labelling task.



Store or scan and save the activity sheet.

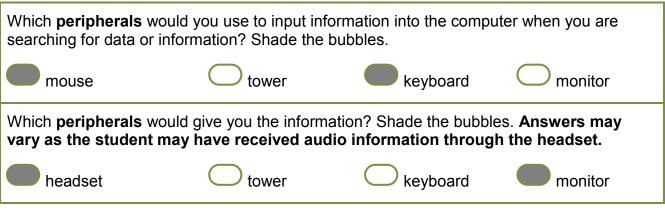
Input and output

Materials:

• activity sheet - Input and output.

The student reads the activity title and speech bubble conversation.

The student reads the questions and completes the bubble tasks.



Read the Discussion box with the student and complete the discussion.

The student completes the labelling and ticking tasks.

O °		
(digital) camera	game control	microphone
drawing/graphics tablet	printer	mobile phone

Tick the **peripherals** that output information so you can see or hear it. **Answers will vary, eg printer, mobile phone and possibly digital camera (as the photos can be viewed on the screen).**

Store or scan and save the activity sheet.

Peripherals with storage

Materials:

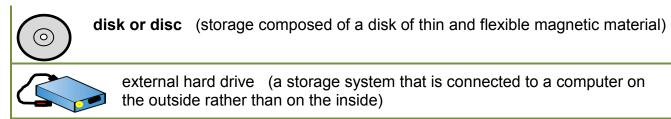
• activity sheet – Peripherals with storage.

The student reads the activity title and speech bubble conversation.

Read the *Discussion box* with the student and complete the discussion.

The student labels the storage devices.

USB (storage object named after **U**niversal **S**erial **B**us, a type of computer port)



The student reads and answers the questions. Answers will vary.



Store or scan and save the activity sheet.

What is data?

Materials:

• activity sheet - What is data?

The student reads the title and speech bubble.

Discuss possible meanings of data.

The student writes his/her definition. Answers will vary.

The student reads the definition in the second speech bubble. Discuss if required.

The student reads the question and lists four ideas. **Answers will vary, eg library, my bookshelf, internet, book, zoo, museum, teacher, tv documentary**.

The student reads each question and writes responses.

Where would you find a book about insects? **Answers will vary, eg my bookshelf, library, school library, classroom, museum, shop.**

How would you find the insect information in the book? Answers will vary, eg I would use the Contents page, table of contents, index, use the chapter headings, look through the book.



Store or scan and save the activity sheet.

Data presentation

Materials:

• activity sheet – Data presentation.

The student reads the title and speech bubble.

The student reads the question and completes the answer.

Discuss if required.

How might the insect information be presented in a book? **Answers will vary, eg The information could be presented as words, pictures, diagrams, tables or graphs.**

The student reads the instructions and completes the brainstorm activity. **Answers will vary.**

The student reads the question and completes the answer.

How else could you present your insect data? Answers will vary, eg report, article, mind map, poster, video talk.



Store or scan and save the activity sheet.

How is data stored?

Materials:

• activity sheet - How is data stored?

The student reads the activity title and speech bubble.

Read and discuss the information about icons, files, folders and storage.

Discuss the flow chart eg:

What do the pictures represent? file (or word document), folder and external storage units

What does the flow chart show? Answers will vary, eg how files are saved/stored so they can be found/used again.

What sort of files do you have stored in your set folder? **Answers will vary, eg word documents, video clips.**

Where is your Set folder stored? Answers will vary, eg on my computer desktop, on a USB, on the internal hard drive of our laptop.



Store or scan and save the activity sheet.

My word wall

Materials:

- activity sheet My word wall
- computer or other device with document making program, eg Word.

The student reads the activity title and speech bubble conversation.

Supervise the student has he/she follows the steps to set up the word wall document on the computer.

Help the student to highlight the table and set the font style and size, eg Arial 16.

Supervise the student as he/she reads the instructions and adds words to the wall. **Answers will vary, eg digital system, data, peripheral.**

When the student has thought of all the words, ask him/her to look back through the completed activity pages to see if there are any more words to add.

If the table becomes full, ask the student to add rows or make a new table.

See example below.

digital	input	peripheral	code				
output	device	data	tower				
digital	system	monitor	microprocessor				

Help the student save the document to a location where he/she can access it each day, eg the Set folder.

Day 2: A safe place

page 13

Materials:

• activity sheet – A safe place.

The student reads the activity title and speech bubble.

The student completes the listing task. Remind the student to separate the items using commas. Answers will vary, eg telephone call, texting, email, web search, make a poster, listen to music, find pictures, find out how to do something, school activities.

The student reads the next speech bubble and the Discussion box.

Discuss the topic together, guiding the student towards ideas about body health, eg resting eyes, sitting properly, using the device for short periods of time.

The student lists some ideas, eg have the mouse and keyboard positioned within easy reach, take frequent breaks to get fresh air, stretch, do not text while walking or driving.

The student reads and completes the drawing activity. Answers will vary, eg



All items from the list should be included. The student can add other items if he/she wishes.



Store or scan and save the activity sheet.

Devices and technologies

Materials:

• activity sheet - Devices and technologies.

The student reads the activity title and speech bubble.

The student lists his/her ideas. Remind the student to separate the items using commas. Answers will vary, eg mobile phone, laptop computer, desk top computer, iPad, headset, drawing tablet, game console and controller.

The student reads the second speech bubble and completes the tally. Answers will vary.

The student reads and completes the final sentence. Answers will vary.



Store or scan and save the activity sheet.

Data display

Materials:

• activity sheet - Data display.

The student reads the activity title and speech bubble conversation.

The student writes some ideas on the line, separated by commas. **Answers will vary, eg a tally table, a graph, pictures, poster.**

The student reads the instruction and presents the data in his/her preferred way. **Answers will vary.**



Store or scan and save the activity sheet.

Digital safety

Materials:

• activity sheet - Digital safety.

The student reads the activity title and speech bubble conversation.

Read the *Discussion box* with the student and discuss staying safe ideas.

Ask the student to record some ideas in the mind map. Help with spelling if required. **Answers will vary.**



Store or scan and save the activity sheet.

Sharing with family and friends

Materials:

• activity sheet – Sharing with family and friends.

The student reads the activity title and speech bubble.

The student completes the table.

Help with spelling if required. Answers will vary, eg

Name	How you share information				
mum	text				
my friend Sally	email, text, game chat				

The student reads and answers the question about information. Remind the student to separate ideas using commas. Answers will vary, eg family news, invitations, changes to plans, photos, music, thank you for presents.

Read the Discussion box and discuss together.

The student responds to the next question. Answers will vary, eg passwords, personal information, private family news, personal photos, anything I don't want others to know or see.

The student reads the final information.

Store or scan and save the activity sheet.

Stranger danger

Materials:

- activity sheet *Stranger danger*
- computer, laptop or tablet to access My word wall document.

The student reads the activity title and speech bubble conversation.

Read the Discussion box and discuss together.

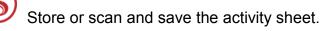
The student reads and answers the password question. **Answers will vary, eg online banking, to login in to a computer or game, to use a credit card.**

The student reads the next speech bubble and instructions. The student completes the task.

Shade the bubbles to show the personal information that you should **not** share. **Answers will vary.**

hair colour	favourite colour	birthdate					
telephone number	home address	O height					
age	school	full name					
Discuss the choices the student makes							

Discuss the choices the student makes.



Adding to the word wall

Materials:

- activity sheet Adding to the word wall
- computer or other device to access the My word wall document.

The student reads the speech bubble conversation.

The student rereads the conversation, following the instructions.

Discuss if required. Answers may vary, eg online, device, agreements.

Help the student save the document for use on Day 3.

Day 3: World Wide Web

page 20

Materials:

• activity sheet – World Wide Web.

The student reads the title and the speech bubble conversation. Discuss if required.

Discuss the student's ideas about the Web question.

The student writes his/her definition. Answers will vary.

Read and discuss the web and website information and completes the compound word activity.

web + site = website

Read the speech bubbles and discuss the task in the Discussion box.

The student lists his/her ideas. Answers will vary, eg words, pictures, diagrams, videos, audio clips, music clips, slide shows.



Store or scan and save the activity sheet.

Using a digital system

Materials:

- activity sheet Using a digital system
- computer or other device with internet access.

The student reads the activity title and speech bubble.

Read and guide the student to follow the instructions in the Discussion box.

The student reads the insect speech bubble.

Read the *Discussion box*.

Ask the student to look at each icon then look for it on the screen.

The student ticks any found icons on the activity sheet. (not all will be found)

Discuss each icon image and its meaning. The student can click on each icon on the screen to see what happens or scroll over the icons and read the pop up box information.

The student writes some words to explain each icon. Answers will vary, eg





refresh/reload the page

images, searching images, looking at images

print

Draw your own icon and say how it is used. Answers will vary.



Store or scan and save the activity sheet.

Please leave the computer screen open as the student will continue to work on this screen in the *Insect data* activity.

To click or not to click

Materials:

Say∢

• activity sheet – To click or not to click.

The student reads the activity title and robot speech bubble.

Use the conversation in the Say box (below) to discuss the topic with the student.

Have you ever seen anything online that has nothing to do with your game or the information you are looking for? **Answers will vary, eg video advertisement, something for sale.**

These are all forms of advertising. Sometimes they are safe advertising however sometimes they are dangerous. How could they be dangerous? **Answers will vary, eg they might take money and not send you what you bought, the thing you buy could be different from the advert, they might ask for personal details.**

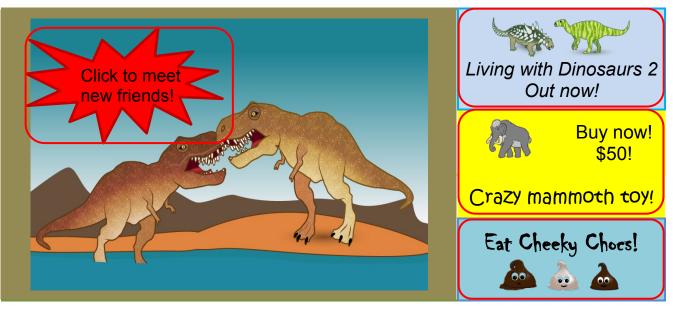
These advertisements can be dangerous because they might try to trap you into giving out personal details, ask you for money or try to sell you something fake. You should never click on these advertisements, no matter how real they seem.

The student reads the mantis speech bubble and follows the instruction.

Ask the student to explain why he/she selected those items. Answers will vary.

Ask the student to read the question and write a response. Help with spelling.

See solution on next page

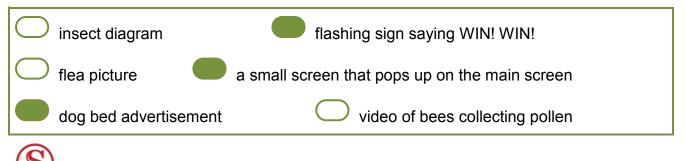


What did you find? Answers will vary, eg I found an advert about meeting new friends online, two adverts that want me to buy something and an advert for the next game in the Dinosaurs Alive series.

The student reads the robot speech bubble.

Ask the student to read the task instruction and complete the shading bubbles task.

Which bubbles match information that you should NOT click to open?



Store or scan and save the activity sheet.

Insect data

Materials:

- activity sheet Insect data
- computer or other device with internet access.

The student reads the activity title and speech bubble.

Supervise the student as he/she follows the *Discussion box* instruction to find and select the *Images* tab on the search screen.

The student reads the image search instruction and completes the task. **Answers will vary.**

The student reads the mantis speech bubble and Discussion box.

Supervise the student as he/she reads and completes the video task. Answers will vary.

The student reads the robot speech bubble and Discussion box.

Supervise the student as he/she reads and completes the *All* tab task. **Answers will vary.**

The student reads questions and writes answers. Answers will vary.



Store or scan and save the activity sheet.

Insect task

Materials:

- activity sheet Insect task
- computer or other device with internet access
- device with access to the Word wall document.

The student reads the title and speech bubble conversation.

Read and discuss the task points with the student.

Ask the student to read the text below the box. Here is an example of the Insect task.

Ask the student to check the *Insect task* example to ensure all the task points have been included.

Ask the stduent to read the note and speech bubble beside the blank space in the poster.

Read the *Discussion box* with the student.

Supervise the student as he/she completes each aspect of the task. If possible, the student should use one website to find all the required pictures.

Ask the student to check the task points to ensure he/she has included all items.

NOTE: One rectangle will be blank.

Use the conversation in the *Say* box (below) to discuss property ownership with the student.

 (Point to the student's pencils.) Who owns these pencils? I do
Tell me some of the other things that belong to you. Answers will vary, eg shirt, drawing, book.
How would you feel if someone took your things and used them without asking? Answers will vary, eg annoyed, upset.
What would you do? Answers will vary, eg ask for them back, cry, shout, grab them back, tell dad.
Look at the pictures you have put on your poster.
Where did you get them? a website Say

Do you own the website? no

Did you make the website? no

Did you ask the owner for permission to use the pictures? no

How do you think the owner will feel about you using things he owns? **Answers will vary.**

We have rules in our home about using each other's belongings. There are also rules that say how and when we can use other people's property from a website. Some rules are for children and some are for adults.

You are a child and you are using the pictures for your schoolwork. You can do this as long as you add some special information to your poster. This information must include a copyright symbol, the name and home page address of the website.

Help the student click into the empty rectangle in his/her poster.

Help the student locate and insert the copyright symbol ©.

Ask the student to type the website name beside the symbol. **Answers will vary, eg** © **Australian Museum.**

Help the student locate the home page for the website.

Help the student locate the home page address in the search bar.

Help the student copy the address and paste it into the rectangle. Answers will vary, eg

© Australian Museum

https://australianmuseum.net.au/

Help the student save the *Insect task* document into the Set folder.

Ask the student to read the *Word wall* instruction and complete the task as per Day 2. Discuss the student's choices.

Help the student save the Word wall document for use on Day 4.

Day 4: My digital footprint

page 25

Materials:

• activity sheet – *My digital footprint*.

The student reads the activity title and speech bubble.

Discuss the student's ideas.

The student writes his/her idea/s on the lines. Answers will vary, eg something to do with digital devices or digital systems.

The student reads the speech bubble conversation.

The student lists four ideas as dot points. Answers will vary, eg emails, text messages, chat messages, school work, websites I have visited, photographs of me.

The student reads the final information.

 (\mathbb{S})

Store or scan and save the activity sheet.

Digital rules

Materials:

• activity sheet - Digital rules.

The student reads the activity title and speech bubble conversation.

Read and discuss the Discussion box topic with the student.

The student writes some family rules as dot points. Answers will vary, eg I can choose one show each evening to watch, we can watch tv after dinner, after my chores are finished, we don't watch tv during the day, we watch a movie each week as a family.

Read and discuss the second *Discussion box* topic with the student.

The student writes some family rules as dot points. Answers will vary, eg I can use my iPad for one hour each day to play a game, ask my parent's permission to play an online game, show my parents the games I want to play, ask my parents if I want to download something.

The student reads the final information.



Store or scan and save the activity sheet.

Tablets and mobile phones

Materials:

• activity sheet – *Tablets and mobile phones*.

The student reads the activity title and speech bubble.

The student reads and answers the question. Answers will vary.

The student reads the speech bubble and completes the shading task. Answers will vary.

Discuss the topic in the Discussion box with the student.

The student records his/her ideas in the table. Answers will vary, eg

Yes because	No because
I can look up information about something we are talking about	I should join in with the family conversation
I might not want to join the conversation	It's not polite
l can take a photograph of my meal and send it to my friend	I can't concentrate on my game or texting when I'm eating
I can keep talking to my friends	I might get food on my device or drop it
I don't have to stop playing my game	I might miss out on some important family news



The activity sheet will be used in the next activity.

My decision

Materials:

- activity sheet *Tablets and mobile phones* (from previous activity)
- activity sheet *My decision*
- lined paper.

Ask the student to read the title and speech bubble conversation.

Ask the student to make his/her choice and write the sentence. **Answers will vary, eg l think I should be allowed to use my tablet during mealtimes.**

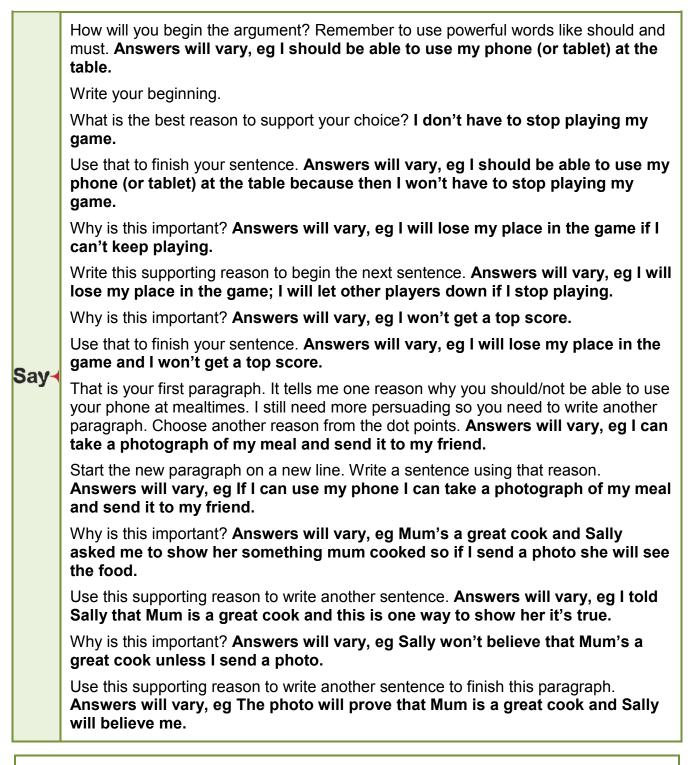
Ask the student to read the mantis speech bubble and read the appropriate reasons from the *Tablets and mobile phones* activity sheet.

Ask the student to read the next speech bubble conversation.

Ask the student to read the instruction and organise the lined paper and activity sheet as requested.

Ask the student to read the *Discussion box* information.

Use the conversation in the *Say* box (below) to support the student as he/she writes three paragraphs to create a persuasive argument.



Ask the student to choose a third reason and write a third paragraph of three sentences. The student should write the paragraph as independently as possible. Ask prompting questions if required.



Store and scan and save the *Tablets and mobile phones* activity sheet.

The persuasive writing will be used in the next activity.

Let's edit

Materials:

- activity sheet Let's edit
- persuasive writing (from previous activity)
- dictionary.

Say

Ask the student to read the title and speech bubble.

Read and discuss the checklist with the student.

Use the conversation in the Say box (below) to discuss the topic with the student.

Listen to this phrase; Tomorrow I am. Is that a complete thought or idea? **no** Why not? It is not finished. It does not tell me anything.

Tomorrow I am going to nana's. Is this a complete thought? **yes**

Why? It tells me that you are going to Nana's. It tells me something.

Read the box below the checklist with the student.

Ask the student to read each sentences aloud and decide whether each one is a complete thought.

If any sentences are not complete thoughts, guide the student to change them.

The student can tick the box when all the sentences express a complete thought.

	The next point is about punctuation. Read your sentences silently and check you have used full stops and capital letters correctly. Add any that are missing.
	Tick the box when you have done this.
	The third point is a spell check for words you know. Read your writing silently and underline any known words you think may not be spelt correctly.
	Are all the easy spelling words correct? Answers will vary.
	Tick the box if they are. If not, correct them and then you can tick the box.
Say	Now let's look at the difficult words. I can see you have had a go at spelling them. Read your writing silently and underline any other words you think may not be spelled correctly.
	Do you need to check the spelling of any underlined words? Answers will vary.
	Use a dictionary to do this and when everything is correct, you can tick the box.
	Tick the box.
	Have you used strong persuasive words? Answers will vary.
	If you have used words like good or nice, change them to stronger adjectives like excellent or fabulous.
	Tick the box.
	The final point is about paragraphs. How many paragraphs have you written? three

Say

Read the last speech bubbles and tell me about the information they give you. Answers will vary, eg they explain how to use the spelling and grammar checks on a computer.

Store or scan and save the persuasive writing and editing checklist.

Online behaviour

Materials:

- activity sheet Online behaviour
- device with access to the Word wall document.

The student reads the activity title and speech bubble.

The student reads and completes the task. Answers will vary.

Discuss the topic in the Discussion box with the student. The student should not change his/her choices.

Discuss: If you were playing an online game and someone typed a message you did not like, what would you do? **Answers will vary, eg tell/show an adult, leave the game.**



Store or scan and save the activity sheet.

Ask the student to read the *Word wall* instruction and complete the task. Discuss the student's choices.



Help the student save the Word wall document for use on Day 5.

Day 5: Insect fun page 31

Materials:

- activity sheet Insect fun
- Cusenaire rods (from Maths kit) or other building blocks of different shapes and sizes.

The student reads the activity title and speech bubble.

The student lists the insect features on the lines. Answers will vary, eg three body parts, head, thorax, abdomen, exoskeleton, two antennae, six legs, wings.

The student reads the second speech bubble and follows the instructions. Ask the student to make the drawing fill the space.



Store or scan and save the activity sheet.

Follow me

Materials:

- activity sheet Follow me
- Cusenaire rods (from Maths kit) or other building blocks of different shapes and sizes
- large book or similar to use as a barrier
- camera.

The student reads the activity title and Discussion box.

Help the student set up the table as shown in the illustration.

Sit at the table as shown in the illustration.

The student reads the mantis speech bubble and follows the instruction to make the model.

The student reads the robot speech bubble and follows the instruction.

Please follow the student's instructions exactly and as if you do not know that the model will be an insect, eg the instruction "Put a red rod above the blue rod" does not tell you if the rods should touch each other so do not place them so they touch.

The student reads the mantis speech bubble and removes the barrier.

The student reads and follows the photograph and save instruction. Help if required.

Read the *Discussion box* together and discuss the similarities and differences between the two models. Discuss why they do or do not match exactly.

Play the game again, with the student making a new model.



Save the photograph/s into the Set folder (as described on the activity sheet).

Clear directions

Materials:

• activity sheet – *Clear directions*.

The student reads the activity title and speech bubbles.

The student reads each question and writes an answer. Discuss if required. **Answers will vary.**



Store or scan and save the activity sheet.

Step by step sequence

Materials:

- activity sheet Step by step sequence
- computer or other device with internet access.

The student reads the activity title and speech bubble.

Complete the Discussion box activity together.

The student follows the instruction for the writing activity. **Answers will vary, eg getting** ready for breakfast, getting ready to go to a soccer game, making a cake.

Complete the Discussion box activity together.

Supervise the student as he/she follows the steps to locate the video.

Watch and discuss the video together.

The student reads and answers the questions.

What happened to the robot? Answers will vary, eg It could not continue serving the food; it stayed in the dining room.

Why? The program/code/instructions did not tell it how to get back to the kitchen.



Store or scan and save the activity sheet.

Ordering steps

Materials:

- activity sheet Ordering steps
- scissors
- camera.

The student reads the activity title and speech bubble.

The student reads the instruction and the sequence of steps at the bottom of the page.

The student reads and answers the questions.

What is the sequence telling you? How to make a sandwich.

If you follow the sequence as it is, will you complete the task successfully? No

Why? The steps are not in the right order.

The student reads and follows the instructions to cut out, sequence and take a photograph.

Save the photograph into the Set folder.

Please leave the sequenced strips on the table. They will be used in the next activity.

Testing the sequence

Materials:

- activity sheet Testing the sequence
- sequence strips (from previous activity)
- materials to make a sandwich (listed on the activity sheet)
- camera
- device with access to the Word wall document.

The student reads the activity title and gathers the materials needed to make the sandwich. The student reads the speech bubbles.

Supervise the student as he/she follows the sequence to make the sandwich.

The student reads and answers the question *Did your sequence work?* Answers will vary.

The student respondes to the *Why*? Question. Answers will vary, eg I had two steps in the wrong order; The steps were all in the right order.

The student reads and follows the remaining instructions, answers the questions and takes another photograph if required. **Answers will vary.**

Store or scan and save the activity sheet. Save any photographs into the Set folder.

Ask the student to read the *Word wall* instruction and complete the task. Discuss the choices the student makes.



Help the student save the Word wall document for use on Day 6.

page 38

Day 6: Think about codes

Materials:

- activity sheet *Think about codes*
- computer or other device with internet access.

The student reads the activity title and speech bubbles.

Ask the student to read the table titles and information.

Help the student search for information so he/she can complete the table. **Answers will vary, eg**

Code	Information	Examples			
Braille alphabet and numbers	Used by people with sight problems to read. Our monetary notes have Braille dots imprinted on them to help sight disabled people recognise them.	• • • • • • • • • • • • • • • • • • •			
Auslan	Hand or sign language for people who cannot hear.				
Phone text	Phone text Send messages using words, numbers and pictures/emojiis				

The student reads the robot speech bubble and solves the puzzles. **blackboard**, **rainbow**, **bluebottle**, **ladybird**



Store or scan and save the activity sheet.

Follow a code

Materials:

- activity sheet Follow a code
- ruler
- coloured pencils.

The student reads the activity title and speech bubble conversation.

Read the code key together.

Ask the student to place the ruler below the first line of code and row of squares in the grid.

Ask the student to read the first line of code. five white, two purple, five white

Tell the student that the white squares do not need to be coloured at all.

Ask the student to explain the code. Answers will vary, eg I leave the first five squares white then colour two purple, then leave the last five squares white.

Supervise the student as he/she colours the top row.

Ask the student to move the ruler down and place it below the second row of code and squares in the grid.

Ask the student to read the second line of code. five white, one purple, six white

Ask the student to explain the code. Answers will vary, eg I leave the first five squares white then colour one purple, then leave the last six squares white.

Supervise the student as he/she colours the second row.

Supervise the student as he/she continues to follow the code and complete the picture.

The student reads and answers the question What is the hidden picture? boat, yacht

5W, 2P, 5W						
5W, 1P, 6W						
4W, 1G, 1P, 1Y, 5W						
3W, 2G, 1P, 2Y, 4W						
2W, 3G, 1P, 3Y, 3W						
1W, 4G, 1P, 5Y, 1W						
5W, 1P, 6W						
12R						
1W, 10R, 1W						
2B, 1R, 2B, 1R, 2B, 1R, 3B						
12B						

The student will use the activity sheet as a reference during the next activity.

My coded picture

Materials:

- activity sheet Follow a code (from previous activity)
- activity sheet My coded picture
- ruler
- coloured pencils.

The student reads the activity title and speech bubble.

Ask the student to read the headings above the grid. number/letter code, picture/pattern

Ask the student to draw a pattern or picture into the grid, using two, three or four colours. TIPS:

 make a draft picture on grid/graph paper then draw the final picture into the activity sheet grid

OR

 draw the draft on the activity sheet but shade very lightly so corrections to the picture can be made.

Ask the student to code each line of the picture using the number/letter code (as per the previous *Follow a code* activity).

TIPS:

The student:

- can refer to the code on the *Follow a code* activity sheet to see the format.
- writes the code for each line of the picture, on the matching lines to the left of the picture grid.

The student prints his/her colour code in the box below the title *Colour code key*. Answers will vary, eg B = blue Y = yellow G = green

Ask the student to read the final instructions to check and modify the code (if required).

Store or scan and save the Follow a code activity sheet.

The student will use the My coded picture activity sheet during the next activity.

Testing the code

Materials:

- activity sheet My coded picture
- activity sheet Testing the code
- coloured pencils.

Ask the student to read the title and speech bubble.

The student follows the instruction and copies his/her *Colour code key* from the previous activity into the box.

The student reads the insect speech bubble and follows the direction.

The student reads the next two speech bubbles and follows the directions.

Ask the student to read the first (top) line of his/her picture code from the *My coded picture* activity sheet aloud, one section at a time. **Answers will vary, eg two bee (2 B); four oh (40); two bee (2B).**

You shade the grid to match the code as each section is read.

Ask the student to read the second line of the code in sections.

You shade the grid to match the code as each section is read.

Continue until the picture is completed.

Read the *Discussion box* with the student and discuss both pictures as described.

If the pictures are not identical, ask the student to identify the picture and code lines that are incorrect.

Ask the student to read the final instruction and write any new code (on the matching line of your picture) if required. **Answers will vary. Example below.**

	1	1	1		
2 W 2 B 2W 2B					
		-			

 (\mathbb{S})

Store or scan and save both activity sheets.

Making choices

Materials:

- activity sheet Making choices
- Attribute blocks from Maths kit large blue and yellow shapes
- 5 small containers, eg plastic cups.

The student reads the activity title and speech bubble.

Read the dot point instructions with the student.

Ask the student to follow the steps and complete the shape sorting.

If required, use the following steps to guide the student through the first sorting task.

Ask the student to select the blue hexagon.

Ask the student to read the first question. Is it round?

Ask the student to answer the question as yes or no. no

Ask the student to read the action related to the *no* answer.

The student reads and answers the second question. Does it have four sides? no

The student to reads and follows the action related to the no answer.

The student reads and answers the third question. Does it have three sides? no

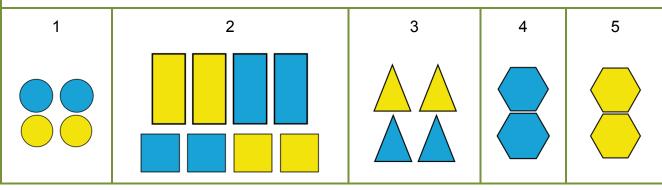
The student to reads and follows the action related to the *no* answer.

The student reads and answers the fourth question. Is it blue? yes

The student to reads and follows the action related to the yes answer.

Supervise as the student reads and completes the sorting tasks for the other shapes. Discuss if required.

The student reads and completes the drawing task.



Store or scan and save the activity sheet.

Branching

Materials:

• activity sheet - Branching.

The student reads the activity title and speech bubble conversation.

The student reads the instruction. Discuss if required.

Read and discuss the flow chart with the student.

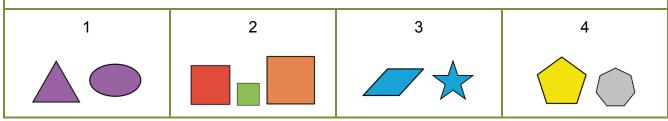
NOTE: the student may complete the shape sorting in a variety of ways, eg

• read the first question, find all the shapes that match a 'yes' answer (purple triangle and purple oval) and draw them into bucket one, then read the second question, find all the shapes that match a 'yes' answer (red square, green square and orange square)and draw them into bucket two, and so on

 choose a shape (eg blue star) and read all the questions until it can be sorted into a bucket (bucket 3), choose a second shape (eg yellow hexagon) and read all the questions until it can be sorted into a bucket (bucket 4)

Any method is acceptable.

Check the completed flowchart.



Store or scan and save both activity sheets.

Your flowchart

Materials:

- activity sheet Your flowchart
- device with access to the Word wall document.

The student reads the activity title and speech bubble conversation.

Ask the student to describe the shapes in the first bucket and what they have in common. **all circles**

Ask the student to look at the other buckets to see if there are any other circles. no

Ask the student to think of a question that would mean all the circles have to go into the first bucket. **Is it a circle?**

Ask the student to print the question into the blue question box.

Ask the student to describe the shapes in the second bucket and what they have in common. Answers will vary, eg different shapes, a pentagon, triangle, semi-circle, octagon, all green.

Ask the student to look at the other buckets to see if there are any other green shapes. no

Ask the student to think of a question that would mean all the circles have to go into the first bucket. **Is it green?**

Ask the student to print the question into the blue question box.

Ask the student to check the third bucket and print a question. **Answers will vary, eg does it have four straight sides? four corners? Is it a quadrilateral?**

Ask the student to create a question that fits the shapes in bucket 4.

Ask the student to print the question in the space beside the *Put into bucket 4* shape. Answers will vary, eg Is it a triangle? Does it have three sides? Does it have three straight sides? Does it have three corners? Does it have three points or apexes? Ask the student to read the *Word wall* instruction and complete the task. Discuss the choices the student makes.



Help the student save the Word wall document for use on Day 7.

Store or scan and save the Your flowchart activity sheet.

Day 7: Lightbot fun page 45

Materials:

- activity sheet Lightbot fun
- computer, tablet or laptop with internet access.

The student reads the activity title and speech bubble conversation.

The student completes the discussion task.

The student reads and completes the questions and answers. Answers will vary.

The student reads the speech bubble.

Read and discuss the information in the box.



Store or scan and save the activity sheet.

Let's meet Lightbot

Materials:

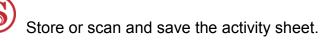
- activity sheet Let's meet Lightbot
- computer, tablet or laptop with internet access.

The student reads the activity title and speech bubble.

Discuss the symbols and their meanings with the student.

The student reads the next speech bubble and attempts to complete the coding task. Help if required. **Answers will vary.**

The student reads the speech bubbles and turns to the next activity.



Opening Lightbot

Materials:

- activity sheet Opening Lightbot
- computer, tablet or laptop with internet access.

The student reads the activity title and speech bubble.

If the student is using a tablet, supervise as he/she follows the downloading instructions.

If the student is using a laptop or desktop computer, read the next speech bubble and supervise as he/she follows the instructions to open the program.

Read the next speech bubble and supervise the student as he/she opens the program and attempts to solve the puzzle.

Allow the student to experiment with the arrows and other icons on the screen to explore how the game works.

Ask the student to read the information in the final box and check his/her code from the previous activity page.

Another puzzle or two

Materials:

- activity sheet Another puzzle or two
- computer, tablet or laptop with internet access.
- device with access to the Word wall document.

The student reads the activity title and speech bubble conversation.

The student follows the instruction to press the double arrow.

The student reads and follows the instructions in the box on the activity page.

The student reads the speech bubble on the activity sheet.

Ask the student to read the information in the boxes and supervise the student as he/she tests the screen icons.

The student attempts to solve puzzles 2 and 3. Help if required.

The student closes the program.

Ask the student to read the *Word wall* instruction and complete the task. Discuss the choices the student makes.



Help the student save the Word wall document for use on Day 8.

Day 8: Lightbot check page 49

Materials:

- activity sheet Lightbot check
- computer, tablet or laptop with internet access.

The student reads the title and speech bubble.

The student selects the appropriate program information and opens the Lightbot program.

The student reads the speech bubbles and then attempts to solve the puzzles as instructed.

Remind the student to carefully read any information that is presented during the game. The student can select the refresh arrow if he/she wants to read the information again.

Ask the student to read the final speech bubble on the activity sheet.

My Lightbot coding

Materials:

- activity sheet *My Lightbot coding*
- computer, tablet or laptop with internet access.

The student reads the speech bubble and follows the instructions to shade and tick to show his/her answers.

The student reads the robot speech bubble.

The student returns to the *Basics* page and selects one of the eight puzzles to solve again. Encourage the student to choose a puzzle he/she previously solved independently, eg puzzle 2 or 3.

The student reads the Lightbot speech bubble and tests the code if required.

Read the robot speech bubble and instruction text with the student.

The student records the active puzzle and code and then saves the video. Help when required.

The student reads the Lightbot speech bubble.

The student returns to the *Basics* page and selects another of the eight puzzles to solve again. Encourage the student to choose a more difficult puzzle eg puzzle 7 or 8.

The student solves and tests the puzzle.

The student records the active puzzle and code and then saves the video. Help when required.

NOTE: There are two more puzzle sets in the program, *Procedures* and *Loops*. The student may wish to attempt to solve these puzzles. If he/she independently solves any of these puzzles, please include a video of the student working on and solving the puzzle.



Save the video recordings into the Set folder.

Lightbot thoughts

Materials:

- activity sheet Lightbot thoughts
- device with access to the Word wall document.

The student reads the activity title and speech bubble.

The student completes the tasks. Answers will vary.

Ask the student to read the *Word wall* instruction and complete the task. Discuss the choices the student makes.



Help the student save the Word wall document for use on Day 9.

Store or scan and save the activity *Lightbot thoughts* sheet.

Day 9: Scratch cat page 52

Materials:

- activity sheet Scratch cat
- Android tablet or iPad with internet access
- headset or speakers.

NOTE: The Scratch Jr application is only available on tablets. It cannot be accessed on desktop computers or laptops.

The student reads the activity title and speech bubble conversation.

Supervise the student as he/she follows the instructions to open the Scratch Jr homepage.

NOTE: The student may need to select the link for the *Scratch Jr* home page if it does not automatically open.

The student explores the *Interface guide*, *Paint editor guide* and *Block descriptions* as instructed on the activity page.

Scratch Jr tutorial time

Materials:

- activity sheet Scratch Jr tutorial time
- Android tablet or iPad with internet access
- headset or speakers.

The student reads the activity title and speech bubble.

Supervise the student as he/she follows the instructions to watch the four videos.

The student can read the other tips if he/she wishes.

The student reads the speech bubble and Discussion box.

Help the student follow the instructions to download the Scratch Jr app.

The student follows the instructions on the activity sheet to open the app and locate and watch the video.

Scratch Jr exploring

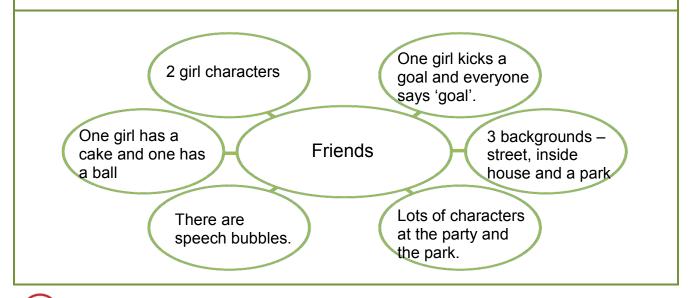
Materials:

- activity sheets Scratch Jr exploring x 2
- Android tablet or iPad with internet access
- headset or speakers.

The student reads the activity title and speech bubble.

Supervise the student as he/she:

- reads the information and follows the instructions to run a project
- experiments with the coding blocks to make changes to the sample project
- follows the instructions to complete the mind map. Answers will vary, eg



Store or scan and save the Mind map activity sheet.

Scratch Jr experimenting

Materials:

- activity sheet Scratch Jr experimenting
- Android tablet or iPad with internet access
- headset or speakers
- device with access to the Word wall document.

The student reads the activity title and speech bubble conversation.

The student follows the instruction to open a new project screen.

The student reads the next instruction and Discussion box information.

Supervise the student, discussing ideas and helping the student experiment with the tools where required.

The student reads the next information box and closes the app.

Ask the student to read the *Word wall* instruction and complete the task. Discuss the choices the student makes.



Help the student save the Word wall document for use on Day 10.

Day 10: Scratch Junior page 57

Materials:

- activity sheet Scratch Junior
- Android tablet or iPad with internet access
- headset or speakers.

The student reads the activity title, materials list and speech bubble.

The student opens the Scratch Jr app.

The student follows the instructions to open a new project screen and name the project.

Scratch Junior plan

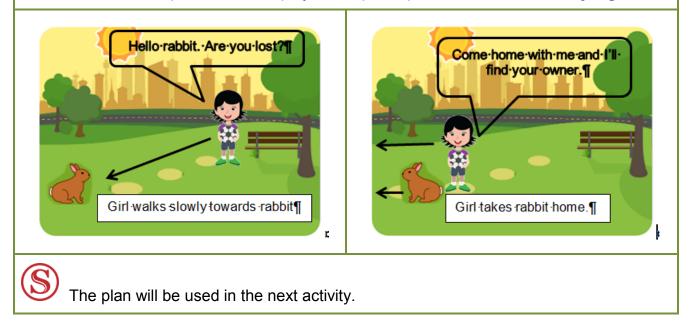
Materials:

- activity sheet Scratch Junior plan
- Android tablet or iPad with internet access
- headset or speakers.

The student reads the title and speech bubble conversation.

Read the dot points with the student.

The student draws a plan for his/her project. Help if required. Answers will vary, eg



Let's code the project

Materials:

- activity sheet Scratch Junior plan
- activity sheet Let's code the project
- Android tablet or iPad with internet access
- headset or speakers.

The student reads the activity title and speech bubble conversation.

Supervise as the student reads and follows the instruction to open the Day 10 project.

Ask the student to read the information in the next two spaces.

The student reads the guidelines to code the project.

The student codes the project.

Test and record my project

Materials:

- activity sheet Test and record my projects
- Android tablet or iPad with internet access
- headset or speakers
- video camera
- camera.

The student reads the activity title and speech bubble conversation.

Supervise as the student reads and follows the instructions to add to the project name. **Answers will vary, eg Day 10 Cat in a hat.**

The student reads the speech bubble conversation.

The student reads the Discussion box information.

Read the instructions on how to record and save the project together.

Help the student follow the instructions.

Ask the student to read and follow the final instruction.



Save the video recording and photographs into the Set folder.

Scratch Junior champion

Materials:

• activity sheet – Scratch Junior champion.

The student reads the activity title and speech bubble.

The student completes the tasks. Answers will vary.



Store or scan and save the activity sheet.

Finishing the word wall

Materials:

- activity sheet Finishing the word wall
- device with access to the Word wall document.

The student reads the title and speech bubble conversation and follows the instructions. Discuss the choices the student makes.



Help the student save the Word wall document into the Set folder.

On my own

Materials:

• activity sheet - On my own.

The student reads the speech bubble and completes the reading and shading task.

If required, discuss the points with the student. Answers will vary.

The student reads the sentence beginning and completes the reading and shading task. If required, discuss the points with the student. **Answers will vary.**



Store or scan and save the activity sheet.

Home tutor reflection

page 64

Please complete the Reflection and return with the Set.

All comments will help in the assessment of the student's progress.



Store or scan and save the *Reflection* sheet.

Return checklist page 65

Please complete the *Return checklist* to ensure the student has collected all the activity sheets, videos and photographs to return to the teacher.



Store or scan and save the checklist. Include the checklist with the returned work.