



SUBJECT MEDIUM TERM PLANNING - SUBJECT

Year Group: 1	TERM: Autumn Term 1	Theme: Technology Around Us
<p>National Curriculum:</p> <ul style="list-style-type: none"> • Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Recognise common uses of information technology beyond school • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. 		
<p>Context: - Children will develop their understanding of technology and how it can help them. They will become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly.</p>	<p>Concepts: Information technology & Computer Skills</p>	<p>Vocabulary: technology, man-made, digital, computer, mouse, keyboard, screen, trackpad, double click, typing, online information, trusted adult</p>
<p>Prior Knowledge:</p> <ul style="list-style-type: none"> • No prior knowledge is assumed at this stage. 		<p>Future Knowledge:</p> <ul style="list-style-type: none"> • Identifying IT and how its responsible use improves our world in school and beyond (Year 2) • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (KS2)

End points /by the end of this unit pupils will...

- Be able to explain that technology is something that can help us.
- Be able to identify examples of technology.
- Be able to choose a piece of technology for a job.
- Be able to identify the main parts of a computer.
- Be able to use a mouse in different ways.
- Be able to use a keyboard to type.
- Be able to use technology safely.
- Be able to explain why rules are needed when using technology.
- Be able to manage online information safely and respectfully.

Lesson Number - 1

Key learning: to identify technology.

Concepts:
Information technology

Lesson structure: Introduction, direct teaching, activities, key questions

Success Criteria:

- I can explain technology as something that helps us
- I can locate examples of technology in the classroom
- I can explain how these technology examples help us

Suggested resources:

Flip chart
Pictures and real life examples of types of technology.

Engage:

Ask children the question “What is technology?”

Introduce:

Share some examples of technology in the classroom (or use physical objects), for example: Desktop computer, Laptop computer, Pencil, Mobile phone, Pencil sharpener (manual, electric, or both), Scissors
Q – What is the purpose of each type of technology? Use the sentence stem “It helps us to...”

Introduce definition of technology - ***technology is something which has been made by people to help us.***

The distinction between ‘natural’ and ‘made by people (= manufactured)’ is important. For example, a guide dog helps people, but it has not been made by people, so it is not technology. Technology can be electronic or not. Use a variety of examples during the lesson.

P&C – Task 1

Decide if pictures are technology or not technology.

Scaffolding opportunity: Use the prompts “Does it help us?” and “Has it been made by people?” to aid learners in their classification.

Challenge: Ask learners to consider which of the technology examples contain a computer.

P&C – Task 2

Use sticky notes to label examples of technology in the classroom or school. (Could use an Ipad to take photos of what they find instead and upload to Seesaw.)

Challenge: Ask learners to consider which of the technology examples contain a computer.

Independent

Match pictures of technology to sentence stems. (E.g. a pencil helps us to...)

Deepen

Explain that the learners need to write or draw an example of technology which would help them to do the stated sentence. For example, learners may draw a car which helps them get to school.

Reflection

Show different types of technology (electronic and not). Ask what some of them have in common. Ask whether any items are computers.

Vocabulary: technology, computer, natural, man-made, digital

Lesson Number - 2

Key learning: To identify a computer and its main parts.

Concepts:
Information technology
Computer Skills

Lesson structure: Introduction, direct teaching, activities, key questions

Engage:

Recap what technology is.

Q - What does the word technology mean?

Introduce:

Introduce different parts of a computer / laptop – screen, keyboard, mouse, base unit (computer only – not laptop).

P&C

Show pictures of both computers and laptops (or use real life examples) with a part circled. Give children opportunity to think, pair, share before giving answers on what the part is and what it does.

Q – What is the name of this part?

Q – What does this part do?

Independent**Success Criteria:**

- I can name the main parts of a computer
- I can switch on and log into a computer
- I can use a mouse to click and drag

Suggested resources:

Flipchart
Chromebooks
Access to nccce.io/drag
Kahoot quiz (for reflection)

		<p>Children to turn on and log into Chromebooks.</p> <p>Open up web browser and search for nccce.io/drag</p> <p>Explain that each task gets progressively harder.</p> <p>Support the learners with opening a web browser and accessing the URL. Learners may not complete this activity in its entirety. If the learners are working in pairs, ensure each partner gets to practise their clicking and dragging skills.</p> <p><i>Scaffolding opportunity: Break down the steps of switching on and logging into the computer. Encourage learners using trackpads to use both hands (one hand to hold down the button and the other to drag).</i></p> <p>Reflection Ask children if they can remember the different parts of a computer (use a Kahoot quiz?)</p>
<p>Vocabulary: computer, mouse, trackpad, keyboard, screen, technology</p>		

Lesson Number - 3		
<p>Key learning: To use a mouse in different ways.</p>	<p>Concepts: Information technology Computer Skills</p>	<p>Lesson structure: Introduction, direct teaching, activities, key questions</p> <p>Engage:</p>
<p>Success Criteria:</p> <ul style="list-style-type: none"> ● I can use a mouse to open a program ● I can click and drag to make objects on a screen ● I can use a mouse to create a picture 	<p>Suggested resources: Flipchart Chromebooks Access to Paintz.app</p>	<p>Recap the names of each part of a computer and what it does.</p> <p>Q - Can you name the parts of a computer?</p> <p>Introduce:</p> <p>Explain that the learners will be using a computer mouse/trackpad to create a picture. Invite learners to explain how images of mouse / trackpad are similar / different. Responses should include:</p> <ul style="list-style-type: none"> ● Some have wires, some don't ● Some have buttons, some don't

- Some are part of the computer, others are connected to it
Even though each device looks different, they perform the same function.

P&C

Opening up a program using a double click action.

Practice tapping / clapping the double click action – check the speed that children are doing this.

Model with a mouse / track pad on chromebooks.

Model opening up browser using double click. Model typing in paintz.app to search for web page. (Or if on chromebooks click on the paintz.app icon at the bottom).

Children to complete those 2 tasks.

Independent

Model in the Paintz.app.

Explain that this program allows the user to draw images and make pictures using the mouse. Highlight the paint brush function, showing marks can be made by clicking and dragging.

Demonstrate how to change the colour and thickness of the line, and create a simple picture.

Allow learners time to draw their own pictures. If learners are working with a partner, ensure both learners have the opportunity to explore the program and demonstrate their mouse skills.

Note: This could be an opportunity to link to other areas of the curriculum.

***Challenge:** Learners can explore other functions available in the Paintz program e.g.:*

- *Change the background colour from white using the fill tool*
- *Create shapes and lines*
- *Correct mistakes by using the eraser function*
- *Insert a shape or line*

Q - What can you do with this tool?

Q - What tool have you used?

		<p>Q - What tool has been used to change the way the image has been drawn?</p> <p>SAVE work to seesaw / in paintz.app / in google docs.</p> <p>Deepening Show different images. Ask which tool has been used to change the image. (use a Kahoot quiz?)</p> <p>Reflection How successful do they think they were? Link to metacognition colours.</p>
<p>Vocabulary: computer, mouse, trackpad, double click</p>		

Lesson Number - 4		
<p>Key learning: To use a keyboard to type on a computer</p>	<p>Concepts: Computer Skills Information Technology</p>	<p>Lesson structure: Introduction, direct teaching, activities, key questions</p> <p>Engage: Recap what we can use a mouse for.</p>
<p>Success Criteria:</p> <ul style="list-style-type: none"> • I can say what a keyboard is for • I can type my name on a computer • I can save my work to a file. 	<p>Suggested resources:</p> <p>Flipchart</p> <p>Chromebooks</p> <p>Access to Paintz.app</p> <p>Seesaw</p>	<p>Introduce:</p> <p>Q – what can we use a keyboard for? Show different examples – explain that sometimes they look different but they all do the same job.</p> <p>P&C Give children opportunity to log on to chromebooks and open up program.</p> <p>Model opening up the paintz program. Highlight the text function on the toolbar (dotted square with a T in the middle). Select this function with a single click. Demonstrate clicking and dragging a text box onto the paint area.</p> <p>Give children the chance to do this.</p>

Scaffolding opportunity: Break down the steps of switching on and logging into the computer. Encourage learners using trackpads to use both hands (one hand to hold down the button and the other to drag).

Independent

Explain that you can now write text in the box. Model this by writing your name or a word.

Note - To finalise a text box, learners will need to click outside of the box or a different tool on the toolbar. It is important to emphasise that once learners click away from their text box, they will not be able to edit the text, including moving the text box.

Ask them to write their name into a textbox at the bottom of the page. If in partners, make sure both get the opportunity to have a go.

Challenge: Ask learners to alter the size, colour and font of the text in a text box. Remind the learners that they will need to do this before they click away from their text box.

Deepening

Draw a simple drawing of themselves above their name using the Paintz.app. Explain that this can be very simple and does not need too much detail.

Save file in the paintz.app or seesaw or google docs. Discuss giving their file a suitable name and why.

Reflection

Share an example of a child's work.

Q- what functions have been used?

Q – has more than one colour been used?

Q – Has text been added?

Q – Have any other tools been used?

Vocabulary: computer, keyboard, mouse, typing

Lesson Number - 5

<p>Key learning: To use the keyboard to edit text</p>	<p>Concepts:</p>	<p>Lesson structure: Introduction, direct teaching, activities, key questions</p>
<p>Success Criteria:</p> <ul style="list-style-type: none">• I can open my work from a file• I can use the arrow keys to move the cursor• I can delete letters	<p>Suggested resources:</p> <p>Flipchart</p> <p>Chromebooks</p> <p>Access to Paintz.app</p> <p>Seesaw</p> <p>Kahoot</p> <p>Project Evolve Knowledge Map</p>	<p>Engage:</p> <p>Recap the names of the 2 devices they have used so far (keyboard and mouse).</p> <p>Q - How have they been used?</p> <p>Introduce:</p> <p>Model how to open up a saved file.</p> <p>Open a browser and navigate to the Paintz program. Highlight the 'open image' icon. Explain that this button will allow the learners to select the image they saved in the Lesson 4.</p> <p>Model clicking the button and share the box that appears. Explain that learners will need to find the file they saved during the previous lesson.</p> <p>Q - How can we ensure we are selecting the correct file?</p> <p>Remind the learners of the importance of naming a file sensibly when it is saved.</p> <p>If pupils have saved their work in seesaw / google docs, then step by step instructions need to be given to show how to access these.</p> <p>P&C</p> <p>Children given the opportunity to open up their saved work from the previous lesson.</p> <p>Independent</p> <p>Show picture of a keyboard and explain what each key does.</p>



Model drawing a new text box above the self portrait and using each key to write a sentence e.g. “I am in year 1”

Ask children to write short sentence above their self portrait.

Scaffolding opportunity: Provide learners with pre-written sentences they could use to support them. The primary objective is for learners to experience the use of the keyboard.

Children to save their work once again under a sensible name.

Deepening

Kahoot quiz. Select the correct device for the statement.

1. You can move a pointer around the screen with this device (mouse)
2. You can type letters using this device (keyboard)
3. You would use this device to write a sentence (keyboard)
4. You can draw a picture with this device (mouse)
5. You input instructions to the computer by clicking on this device (mouse)

Reflection

Knowledge map assessment from Project Evolve for Year 1 – Managing Online Information.

Vocabulary: keyboard, computer

<p>Teachers to choose one of the following resources to use from Project Evolve “Year 1 – Managing Online Information” topic based on the results of the knowledge map assessment at the end of Lesson 5.</p> <p>Key learning: I can give simple examples of how to find information using digital technologies, e.g. search engines, voice activated searching. (Project Evolve)</p> <p>Or</p> <p>I know / understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke. (Project Evolve)</p> <p>Or</p> <p>I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened. (Project Evolve)</p>	<p>Concepts: Online Safety</p>	<p>Use results of the knowledge map assessment from the previous lesson to identify any gaps in the pupil's knowledge. As a result, decide which lesson outcome / activities will be most beneficial for your class / year group.</p> <p>Lessons 2 & 3 resources are the same as the activities cover both statements as long as key questions are used effectively.</p> <p>Key Questions for Lesson 1</p> <ul style="list-style-type: none"> -What devices can we use to get on the internet? - Have you used your fingers to 'swipe' on a tablet? - Have you ever talked to a device (such as Alexa, Google, Siri or Cortana)? - Which way is easiest? Does it matter what you're trying to do? <p>Key Questions for Lesson 2 & 3</p> <ul style="list-style-type: none"> - Why does the internet have lots of information? - Who puts it there? - Why do people put information on the internet? - Is 'information' always true? - What can we do if we see something online that makes us upset? <p>Reflection – complete knowledge map “assess impact” on the lesson outcome that has been taught to identify impact of learning.</p>
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<p>Success Criteria:</p> <p>Lesson 1:</p> <ul style="list-style-type: none"> • I can give simple examples of how to find information (e.g. search engine, voice activated search engine) • I can use the internet to find things out. <p>Lesson 2 & 3 (Lesson 2 & 3 success criteria are the same as it covers both statements as long as key questions are used effectively.)</p> <ul style="list-style-type: none"> • I know that we can encounter a range of things online that we don't like. • I know that we can encounter things online that real or make believe. • I know I can get help if I see content that makes me feel sad / worried / confused. • I know how to get help from a trusted adult. 	<p>Suggested resources:</p> <p>Project Evolve knowledge map</p> <p>Flipchart</p> <p>Project Evolve resources for “Year 1 – Managing Online Information”</p>	
<p>Vocabulary: information technology, trusted adult, internet, information</p>		

