

# Year 1 – Technology around us

### Unit introduction

Learners will develop their understanding of technology and how it can help them in their everyday lives. They will start to become familiar with the different components of a computer by developing their keyboard and mouse skills. Learners will also consider how to use technology responsibly and who to ask for help if they see any content or comments online that make them feel uncomfortable.

# Software and Hardware requirements

You will need digital devices for learners to interact with during this unit. Pupils will be asked to use a free program called <u>paintz.app</u>. Pupils learn to use the mouse and keyboard as part of this unit, so need access to a device which has both of these. If pupils do not have access to a mouse, a trackpad can be used but may require more practise time.

If you've adapted this unit to better suit your school, please <u>share your adapted resources</u> with fellow teachers in the STEM community. Alternatively, if this unit isn't quite right for your school, why not see if an adapted version which better suits has already been shared?

## Overview of lessons

Lesson	Brief overview	Learning objectives
1 Technology around us	Learners will become familiar with the term 'technology'. They will classify what is and what is not technology in their school and/or classroom. Learners will demonstrate their understanding of how technology helps us in different ways.	I can explain technology     something that helps us

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	They will be able to explain how to keep themselves safe online and where to go for support when they see content that makes them feel uncomfortable.	<ul> <li>I can locate examples of technology in the classroom</li> <li>I can explain how these technology examples help us</li> <li>I can explain where to go for help when I have concerns about content or contact when online</li> </ul>
2 Using technology	Learners will get to know the main parts of a desktop or laptop computer. They will practise turning on and logging in to a computer. The learners will apply their knowledge of the different parts of a computer, to complete a mouse-based task.	To identify a computer and its main parts  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
3 Developing mouse skills	Learners will be building on the mouse skills they were introduced to in Lesson 2. Learners will review images of a computer to explain what each part does. They will develop an understanding that different computers use different mice, but they perform the same function. They will use the mouse to open a program and create a simple picture.	<ul> <li>To use a mouse in different ways</li> <li>I can use a mouse to open a program</li> <li>I can click and drag to make objects on a screen</li> <li>I can use a mouse to create a picture</li> </ul>
4 Using a computer keyboard	Learners will begin to use the computer keyboard for a purpose. They should understand that writing on a keyboard is called typing and will begin to demonstrate their ability to write their name. Learners will then save their work using the save icon and understand that this icon is used in lots of different programs.	To use a keyboard to type on a computer  I can say what a keyboard is for  I can type my name on a computer  I can save my work to a file

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5 Developing keyboard skills	Learners will begin by opening a file they have previously created. They will demonstrate their ability to use a keyboard to edit text, by writing a sentence and then deleting letters. They will also use the keyboard arrow keys to move the text cursor in their textbox.	To use the keyboard to edit text  I can open my work from a file  I can use the arrow keys to move the cursor  I can delete letters
6 Using a computer responsibly	Learners will be introduced to the concept of using computers safely, within the context of a school setting. They will explore why we have rules in school and how those rules help us, and then apply this understanding to rules needed for using computer technology safely.	To create rules for using technology responsibly  I can identify rules to keep us safe and healthy when we are using technology in and beyond the home  I can give examples of some of these rules  I can discuss how we benefit from these rules

# Subject knowledge and CPD opportunities

Teachers need to know that the definition of technology is something that has been made with a specific purpose to help other people. Teachers should familiarise themselves with objects which are and are not examples of technology. Teachers will need to be aware that typing is the process of using a keyboard to write words, letters or numbers on a screen.

# **Continual Professional Development**

Enhance your subject knowledge to teach this unit through the following free CPD:

- Getting started in Year 1 short course
- Teaching computing systems and networks to 5 to 11-year-olds

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Introduction to primary computing <u>remote</u> or <u>face to face</u>

#### **Teach primary computing certificate**

To further enhance your subject knowledge, enrol on the <u>teach primary computing certificate</u>. This will support you to develop your knowledge and skills in primary computing and gain the confidence to teach great lessons, all whilst earning a nationally recognised certificate!

# Progression

As this is a Year 1 unit, no prior knowledge is assumed. This unit progresses students' knowledge and understanding of technology and how they interact with it in school. Learners will build their knowledge of parts of a computer and develop the basic skills needed to effectively use a computer keyboard and mouse. This unit directly precedes the Y2 Computer systems and networks unit, IT around us

# **Common Misconceptions**

A common misconception in this unit is around the term 'technology'. There is a misconception that technology must be digital or electronic. Whilst the word is now often used to refer to digital or electronic devices, the word technology means 'the use of scientific discoveries for practical purposes'. The definition is simplified in this unit to enable key stage 1 pupils to understand this as 'things made by people that help us'. Technology by this definition therefore does not have to be digital or electronic.

### Curriculum links

#### **Computing**

- Recognise common uses of information technology beyond school
- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
- 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.

#### **Education for a Connected World links**

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#### Managing Online Information

• I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened.

#### Self-image and Identity

• If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help.

#### Health, well-being and lifestyle

• I can explain rules to keep myself safe when using technology both in and beyond the home.

#### Copyright and ownership

• I can save my work under a suitable title or name so that others know it belongs to me (e.g. filename, name on content).

#### <u>Art</u>

• to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination

### **Assessment**

#### Formative assessment

Assessment opportunities are detailed in each lesson plan. The learning objective and success criteria are introduced in the slide deck at the beginning of each lesson and then reviewed at the end. Learners are invited to assess how well they feel they have met the learning objective using thumbs up, thumbs sideways, or thumbs down.

#### Summative assessment

Please see the assessment rubric document for this unit. The rubric can be used to assess learning and highlights whether the pupil is approaching (emerging), achieving (expected), or exceeding the expectations in this unit.

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