Centre fo

Computing Education



Fellside Community Primary School Computing Curriculum Year 2 – Computing systems and networks - Information Technology around us

Unit introduction

In this unit, learners will look at information technology at school and beyond, in settings such as shops, hospitals, and libraries. Learners will investigate how information technology improves our world, and they will learn about using information technology responsibly.

Overview of lessons

Lesson	Brief overview	Learning objectives
1 What is information technology?	This lesson develops learners' understanding of what information technology (IT) is. They will identify devices which are computers and consider how IT can help us both at school and at home.	 To recognise the uses and features of information technology I can identify examples of computers I can describe some uses of computers I can identify that a computer is a part of information technology



2 Where have we seen information technology in the home?	This lesson encourages learners to consider common uses of information technology in a context that they are familiar with beyond school.	 To identify information technology in the home I can explain the purpose of information technology in the home I can open a file I can move and resize images
3 Where have we seen information technology in the world?	Having considered the use of information technology in the familiar context of the home, learners will explore IT in other environments that they may have experienced.	 To identify information technology beyond school I can find examples of information technology I can talk about uses of information technology I can compare types of information technology
4 How does IT improve our world?	In the previous lesson, learners looked at where IT is likely to be found and considered where it is less likely to be found. This lesson focuses on the specific use of IT in a shop.	 To explain how information technology benefits us I can demonstrate how information technology is used in a shop I can recognise that information technology can be connected I can explain how information technology helps people
5 Demonstrate safe use of information technology	In this lesson, learners will consider how they use different forms of information technology safely, in a range of different environments.	To show how to use information technology safely

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		 I can list different uses of information technology I can recognise how to use information technology responsibly I can say how those rules/guides can help me
6 Using information technology responsibly	In this lesson, learners will think about the choices that are made when using information technology, and the responsibility associated with those choices.	 To recognise that choices are made when using information technology I can identify the choices that I make when using information technology I can explain simple guidance for using information technology in different environments and settings I can enjoy a variety of activities

Progression

Learners should have an understanding of what technology is and where it is used in a school context. They should also be familiar with the technology available in their own school setting.

This unit progresses students' knowledge and understanding of technology and how they interact with it beyond school. Learners will also build on their knowledge of using technology safely and responsibly, and begin to consider the implications of the choices that they make.



Please see the learning graph for this unit for more information about progression.

Curriculum links

National curriculum links

- 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.

Education for a Connected World links

Health, well-being and lifestyle

- I can identify rules that help keep us safe and healthy in and beyond the home when using technology.
- I can give some simple examples.

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.



Subject knowledge

Lesson 1: You should have a clear understanding of devices which can be described as information technology (IT). For younger learners, IT can be seen as computers, devices with computers inside, or things made to work with computers.

Lesson 2: You should have a clear understanding of devices which can be described as IT. For younger learners, IT can be seen as computers, devices with computers inside, or things made to work with computers.

Lesson 3: You will need to understand where technology can be found in shops and how it can be used. You should also know which devices can work together, for example:

- Barcode, barcode scanner, till
- Bank card, chip and PIN card reader, till
- Traffic light, crossing button, crossing signal

Lesson 4: You can find some useful information and a short video about barcodes at www.waspbarcode.com/buzz/barcode

Lesson 5: You should know your school's rules regarding the safe use of technology and be familiar with Education for a Connected World.

Lesson 6: You will need to be familiar with the Digital 5 a Day: www.childrenscommissioner.gov.uk/our-work/digital/5-a-day

Enhance your subject knowledge to teach this unit through the following training opportunities:

Online training courses

• <u>Raspberry Pi Foundation online training courses</u>

Face-to-face courses

<u>National Centre for Computing Education face-to-face training courses</u>



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