Seamer and Irton CP School – Computing (H.Griffiths)

Topic - Information technology around us	Year 2 Autumn 1	Strand - Computing systems and networks

Prior Learning	Key Knowledge I need to understand
In **Year 1 – Technology Around Us – Autumn 1**, learners developed their understanding of technology and how it can help them in their everyday lives. They started to become familiar with the different components of a computer by developing their keyboard and mouse skills. They also considered how to use technology responsibly.	**I need to understand that:** **Technology is something that has been made by people to help us.** **Technology is 'man-made' and not 'natural.'** **Information technology (I.T.) includes computers and things that work with computers.** **Information technology is in lots of important items in our homes and around the world.** **It is important that we understand how to use information technology safely.** Learners will develop their understanding of what information technology (IT) is and will begin to identify examples. They will discuss where they have seen IT in school and beyond, in settings such as shops, hospitals, and libraries. Learners will then investigate how IT improves our world, and they will learn about the importance of using IT responsibly.

How I will show what I have learned

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 (IT)
To identify the uses of information technology in the school	- I can identify examples of IT - I can sort school IT by what it's used for - I can identify that some IT can be used in more than one way
To identify information technology beyond school	- I can find examples of information technology - I can sort IT by where it is found - I can talk about uses of information technology
To explain how information technology helps us	- I can recognise common types of technology - I can demonstrate how IT devices work together - I can say why we use IT
To explain how to use information technology safely	- I can list different uses of information technology - I can talk about different rules for using IT - I can say how rules can keep me safe
To recognise that choices are made when using information technology	- I can identify the choices that I make using IT - I can use IT for different types of activities I can explain the need to use IT in different ways

What vocabulary I need to know	What's next
Information technology (IT), computer, barcode, scanner/scan	In **Year 3 –Autumn 1 - Connecting Computers**, Learners will develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They will also compare digital and non-digital devices. Next, learners will be introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches. Finally, learners will discover the benefits of connecting devices in a network.

Please access resources at Teach Computing Curriculum - https://teachcomputing.org/curriculum

Assessment

National Curriculum Computing 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

Assessment

Formative assessment opportunities will be provided throughout each lesson. The learning objective and success criteria will be introduced at the beginning of each lesson and then reviewed at the end. Learners should assess how well they feel they have met the learning objective using the teachers chosen method.

Summative assessment completed on ScholarPack on teacher judgement alongside evidence from each session.

Online Safety

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

Teacher Subject Knowledge
Have a clear understanding of devices that can be described as information technology (IT). For year 2, IT can be explained as being a computer or something that has been made to work with computers.
Examples could include
- Computers: PCs, laptops, tablets
- Devices made to work with computers: scanners, barcode scanners, printers., smart speakers

You will need to be aware that technology continues to develop rapidly, some devices may fit in multiple categories. For example, a multifunction printer has a computer (processor) inside. It can work with a computer or independently.

You will need to know 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 scanner, till
- Bank card, chip and PIN card reader, till
- Traffic light, crossing button, crossing signal

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

This unit ties in to key concepts from Education for a Connected World and you should be familiar with this document https://www.gov.uk/government/publications/education-for-a-connected-world . You should also be familiar with the schools' online safety policy.

You will need to be familiar with the Digital 5 a Day concept. More information on Digital 5 a Day can be found here: www.childrenscommissioner.gov.uk/our-work/digital/5-a-day.