Subject: Computing	Year: 1 – Autumn 1 – **Computer Systems & Networks – Technology around us.**
National Curriculum objectives • 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.	
To begin this unit, the children should have already learnt: 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.	**The learning in this unit will prepare the children to learn these things in the future:** Year 2 Information Technology is all around us and its responsible use improves our world in school and beyond. Year 3 Digital devices are devices that are capable of processing and form part of a network, which is made of numerous devices. Information and data can be shared across networks. Year 4 The internet is a network of networks which needs to be kept secure. and content can be created, accessed, added to and deleted. Year 5 Information technology includes computers and other interconnected parts working together. Search engines are used to return information on the World Wide Web: these results are ranked based on the search engine's rules; the results from a search can also be influenced. Year 6 Data is shared over the internet in packets. The internet facilitates online communication and collaboration: different methods are available – it is important to choose the best strategy for a purpose. Communication can be public or private so choices about what to share must be made.
Key Enquiry Question What are examples of technology and how can we use them safely?	**The Big Idea:** Computers are an example of technology, which can help us, but rules should be followed to stay safe when using them.

To achieve ARE, pupils will need to be secure in the following knowledge:	
By the end of this unit, children will know: • That technology is something that can help us; • Examples of technology; • That a computer is an example of technology; • How examples of technology help us; • That choices are made when using technology; • Why rules are needed when using technology.	**Vocabulary:** **Technology; man-made; digital; screen; mouse; keyboard; program; click; drag; e-safety; cursor.**
By the end of this unit, children will be able to do: • To choose a piece of technology to do a job; • To recognise that some technology can be used in different ways; • To identify the main parts of a computer; • To use a mouse in different ways; • To use a keyboard to type; • To use the keyboard to edit text.	**Useful Resources:** **Online training courses** Raspberry Pi online training courses

COMPUTING SYSTEMS AND NETWORKS KNOWLEDGE ORGANISER

Overview

Technology Around Us

-Technology is something that has been made by people to help us.

-Technology is 'man-made' and not 'natural.' Examples include computers, phones, cars, bikes, and even pencils!

-Computers are a type of digital technology.

-Some of the different parts of a computer include the monitor, mouse and keyboard.

-There are a number of important rules to help us use computers safely.

Technology

-Technology is the name for man-made things that help us.

-Technology is all around us, and helps to make out lives easier.

-Digital technology is the name for electronic items that create and store information, e.g. computers, mobile phones, and televisions.

-Non-digital technology is the name for non-electronic items do not create and store information.

Using Technology Safely

When using technology, we should:
-Hold the device carefully and use it gently.
-Not have food and drink around the device.
-Only use the programs that we are supposed to be using.
-Take turns with our partner, and stop using the device when we are being spoken to.

Computers

Screen/ Monitor

Keyboard

Mouse

-Desktop computers need to be placed on a surface, e.g. a table or desk. Laptop computers are portable – they can be moved to different places.

-The screen (or monitor) displays what the computer is doing.

-The mouse lets you select and move objects (some computers have a trackpad instead).

-The keyboard lets you type letters and numbers.

-Computers can run different programs. Programs do different tasks on the computer. E.g. Microsoft Word, Microsoft PowerPoint and Paint.

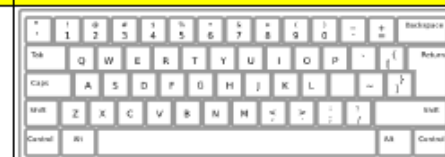-When we are using a program, we can save our work by pressing Ctrl + S or by clicking on this icon.

Using a Mouse

-The mouse can be used to click and drag.

-Clicking the left button lets us select something. Clicking twice quickly lets us open files and programs.

-Clicking the right button gives us options.

-Holding the left button down allows us to drag things.

Using a Keyboard

-Writing on a computer is called typing. We do this on a keyboard.

-Holding the shift key, or pressing caps lock, helps us to type a capital letter.

-Delete and backspace buttons can help us to remove typing.

Important Vocabulary

| Technology | Man-made | Digital | Screen | Mouse | Keyboard | Program | Click/ Drag | Cursor | E-Safety |