Beech Hill Primary School Knowledge Organiser

Topic: Computing – Digital literacy	Year group	Term
Digital Foundations 2	Year 2	Autumn 1 6 sessions

Background knowledge

Digital Foundations 2 aims to provide children with the foundational knowledge and skills required to support their computing journey over the coming year. The six steps in this unit include concepts and activities designed to develop children's competence in using digital devices.

To teach this unit confidently, a good understanding of digital technology is essential for explaining how technology is used in the wider world to make tasks easier, quicker or more efficient. Before teaching this unit, take some time to consider where digital technology is being used in places that children may be familiar with such as, out on the roads, in supermarkets, at the doctor's surgery or when visiting an airport. Being able to identify the common parts of digital devices and demonstrate how they are used is also helpful, particularly when teaching computer mouse or trackpad and computer keyboard skills. Understanding the basic functions of an operating system, including knowledge of common icons and their meanings, is required. Spend some time ensuring that you understand how to create and manage digital files and folders and that the children have a well organised folder management system in which to store their digital work. To support children in their learning about creating digital work, a solid grasp of how digital art programs work is beneficial. Proficiency in this area will ensure children are successfully guided through the creation of digital artwork. As this is a foundational unit, the recommended subject knowledge is not too technical. However, if needed, each step includes a CPD in 3 Video and a CPD Quick Guide aimed to build confident subject knowledge before teaching the step.

What should I already know?

Before beginning this Digital Foundations 2 unit, it would be beneficial for children to explore some of the foundational knowledge and skills covered within Digital Foundations 1. This will introduce them to a range of familiar technology found in the home and school. It will provide them with a sound understanding of the different parts of a digital device, how to hold and move a computer mouse or use their finger on a tablet to control a cursor. They will gain experience of using a simple art program to create and save digital work.

National Curriculum Objectives / Key Skills	The Journey
NC Children should be taught to: 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 Key Skills This unit provides children with knowledge and skills that can be applied in their use of technology throughout the curriculum, for example: using the common parts of digital devices to enhance learning; accessing programs and educational apps; further practise of fine motor skills using a computer mouse or trackpad and a keyboard; creating digital work for other curriculum subjects. recognising safety rules and precautions when using digital devices. Beyond their learning opportunities, children will be able to apply their understanding of key online safety concepts to enable them to engage with appropriate online opportunities safely and responsibly.	1. To recognise how technology is used in our everyday lives. To know how to use technology responsibly. (Discussion; then Delivery Disaster cards sorting activity, the technology has been mixed up, who should each piece of technology be delivered to?) 2. To know what a digital device is. To recognise common features of digital devices. (Discussion) 3. To use a computer mouse. (Give each child their own copy of Mega Mouse Skills Presentation so they can practise dragging and dropping objects with a mouse) 4. To use a computer keyboard to input letters, numbers and symbols. (Children type the sentences from the Super Shifter Activity Card using shift for capital letters, spacebar and full stop). 5. To recognise common icons used in computing. To begin to navigate an operating system on a digital device. (OS activity cards) 6. To use a simple program to create, save and retrieve information on a digital device. (Use the tools of a digital drawing program, eg. Paint, then save their work)

Outcomes

This unit begins your children's journey towards the following key milestone concepts:

* Children will understand the presence of technology in daily life, recognise digital devices and demonstrate responsible usage habits.
* Children will confidently interact with technology by learning to use a mouse or trackpad and a computer keyboard effectively for navigation and input.
* Children will identify the basic components of an operating system and demonstrate an ability to navigate through simple tasks.
* Children will create, save, open and close files.
* Children will recognise and use icons for specific tools within a program.

Throughout the unit, children will:

* identify a range of technology used in the wider world;
* learn about health and safety requirements related to digital devices;
* name and know the function of common parts of digital devices;
* learn how to use a computer mouse or trackpad, including functions of the left and right buttons;
* learn to recognise the main keys on a computer keyboard;

* recognise and use common icons found on digital devices;
* navigate a simple operating system;
* become familiar with common icons used in a digital art program;
* create, save and open digital work;
* explore online safety concepts such as personal information, trusted adults, safe passwords, content ownership and digital citizenship.

Key Vocabulary

instruction manual	Contains instructions on how to use something safely and correctly.
safety equipment	Tools or clothes that help protect you and keep you safe.
system	A group of things that work together as a whole.
technology	Anything that helps us to do a job.
tool	An action that will help you carry out a task.

digital device	Any piece of equipment that contains a computer or microcontroller, such as a smartphone, smartwatch or laptop.
information technology	Information technology is a type of technology that lets us create, save or share information.
keyboard	An input device with a set of keys that allows you to enter text into a computer.
microcomputer	A small version of a computer designed to be used by one person.
monitor	Displays information so that you can see it. For some digital devices the monitor may be called a **screen**.
mouse	A small, handheld device that controls a cursor on a device's screen or monitor.
peripherals	Help to transfer information in or out of a computer.

ports	A place on a digital device that allows other items to be connected to it.
screen	A flat surface on a digital device that shows you text, images or videos.
system unit	The main part of the computer which contains all the things that a computer needs to work.
trackpad	A built-in mouse that lets the user control a cursor on a device's screen.

click	The act of pressing and releasing the mouse or trackpad buttons.
click and drag	Using the mouse to move an object on screen to a new location.
clipboard	A place copied words, phrases or images are stored before being pasted.
copy	Copying a piece of information to place it somewhere else.
cursor	A moveable symbol controlled by a mouse/trackpad used to drop, click or drag items.
double-click	Clicking the mouse or trackpad twice in a row to open something.
mouse	A small, handheld device that controls a cursor on a device's screen or monitor.
mouse pad	A mat used underneath a mouse to help control the cursor.

paste	Taking a word, phrase or image from one part of a document and placing it somewhere else.
right-click	The button on the right-hand side of the mouse or trackpad.
trackpad	A built-in mouse that lets the user control a cursor on a device's screen.

backspace	A key that moves the cursor back one space and will delete letters or numbers on the screen.
click	A letter written or typed which is larger than lowercase letters.
delete	A keyboard key that when pressed turns letters into capitals.
enter	A keyboard key that removes any letters, numbers or items when pressed.
key	A button that you press on a keyboard to type.
keyboard	An input device with a set of keys that allows you to enter text into a computer.
return	Another name for the **Enter** key.
shift	When pressed, this key allows you to type capital letters and access the upper symbols on your keyboard.
spacebar	A long key at the bottom of the keyboard used to create a space.

close	To exit a program.
digital device	Any piece of equipment that contains a computer or microcontroller, such as a smartphone, smartwatch or laptop.
icon	A small symbol that represents a program, tool or file.
login	This is what you use to gain access to a personal area on a website, app or computer. Usually, you need to enter a username and password.
minimise	An icon that can hide or reduce the size of a program.
open	Being able to view or access a file or program.
operating system	Found on a computer's hard drive, it helps the computer to operate.
power button	A switch or button that turns a digital device on and off.

restore	An icon that will allow your program or file to reappear after being minimised.
switch off	Another word for 'shut down' which will turn off a device.
symbol	A picture, shape or an object that represents something else.

art program	A way of creating pictures and patterns digitally.
file	Somewhere information and data are stored on a computer.
folder	A place to store files.
icons	A small symbol that represents a program, tool or file.
open	Being able to view or access a file or program.
save	Storing a file so that it can be accessed again at another time.
tools	An action that will help you carry out a task.

Question of the week.

1. What pieces of technology do people use at work?
2. Can you match these names to the parts of a computer? (eg. monitor, port, keyboard)
3. If I want to open something on the computer, do I use single-click, double-click, click and drag or right-click?
4. What happens if you press the space bar?
5. Which icons means to minimise, resize and close the program?
6. Why do we use our name when we save our work?