Beech Hill Primary School Knowledge Organiser

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

Background knowledge

Digital Foundations 6 aims to provide children with the foundational knowledge and skills necessary to support their computing learning over the coming year. The six steps in this unit are intended to allow children to develop an understanding of changes in technology; computer networks; file organisation and advanced search terms; keyboard shortcuts, including the function keys; hyperlinks; and common icons. The steps in this unit can be completed in any order, allowing teachers to choose the steps that support children's learning and progression in their setting. The digital literacy starters aim to encourage children to think about their digital footprint; deepfake technology; how to keep their information secure; personal information; fake news; and their online reputation.

Included in each step is a CPD in 3 Video and a CPD Quick Guide that aim to support your subject knowledge in each area. The subject knowledge required is:

* An understanding of changes in technology and an awareness of what changes might occur in the future.
* An understanding of how to create, name, move and change the access permissions of folders.
* A knowledge of keyboard shortcuts, including the purpose of individual function keys.
* The ability to use formatting tools in the program that your setting uses.
* A knowledge of computer networks and their uses, including LAN, MAN and WAN.

What should I already know?

It would be beneficial if children have previous experience of computer operating systems.
Children's learning will be supported if they can already create and name folders appropriately.
A knowledge of simple document formatting would also be beneficial, along with an ability to recognise some common icons already.

National Curriculum Objectives / Key Skills	The Journey
NC **Children should be taught to:** understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration; select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information; use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. **Key Skills** Children could apply their newfound knowledge by: * Creating and organising their folders in an efficient way. * Creating, formatting and organising documents in other curriculum areas. * Using keyboard shortcuts, including the function keys, for a range of functions. * Using their knowledge of computer networks to troubleshoot and resolve technical difficulties with increasing independence. * Using both hands while typing at an accelerating pace.	1. To recognise the evolving nature of technology. (Design a future technology) 2. To understand the role of networks in connecting computers. (create your own network) 3. To use folders to organise files. To navigate the operating system using the search function. (use the device's search tools) 4. To know and understand the role of combining certain keys on a keyboard. To use more advanced formatting tools within a document. (function keys investigation) 5. To use hyperlinks within a document. To use two hands on a keyboard to type letters, numbers and symbols with increasing speed. (Inserting internal hyperlinks to move around the pages of a powerpoint presentation). 6. To recognise a wide range of common icons used in computing and their functions. (Common icons page 2 – give the children the wordlist – can they type them into a search engine and copy / paste the icons that represent the words on the list).

Outcomes

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

* Children will recognise the ever-changing landscape of technology and its impact on society.
* Children will understand the function and importance of computer networks in connecting computers and facilitating communication and collaboration.
* Children will develop proficiency in using folders to organise files efficiently.
* Children will navigate an operating system adeptly using the search function to locate files and applications swiftly.
* Children will recognise specific key combinations on a keyboard while also using both hands to type letters, numbers and symbols at an accelerating pace.
* Children will be proficient in identifying and understanding a broader array of common icons, particularly those encountered in online services, discerning their respective functions effectively.
* Children will utilise advanced formatting tools within documents and effectively incorporate hyperlinks to enhance document interactivity and ease of navigation.

Throughout the unit, children will:

I know why technology changes.
I can make predictions about future changes in technology.
I can recognise the padlock, bookmark and attachment icons.

I know what a computer network is.
I know the components involved in a computer network.
I know the types of connections used in a computer network.

I know the different levels of permissions within folders.
I can use logical folder structures to organise my digital workspace.
I can use advanced search functions to improve my search results.

I know about page margins, page layout and page orientation in a document or presentation.
I know about headers and footers in a document or presentation.
I can use paste special to paste unformatted text.
I can successfully use the function keys on a keyboard.

I can create internal hyperlinks in a document or presentation.
I can use both hands when typing.

I can recognise common icons such as the settings, Wi-Fi, search and toggle icons.

Key Vocabulary

- **advanced search**: A function to improve or refine search results.
- **advancements**: The act of making improvements to something to make progress.
- **application**: An application or program that is designed to run on a desktop or mobile device, such as a phone or a tablet.
- **bottom row keys**: Keys found on the bottom row of keyboard.
- **collaboration**: When groups of people work together towards a goal.
- **communication**: The act of sharing ideas and information.
- **connection**: A link between devices that can either be wired or wireless.
- **copy**: Copying a piece of data or information in order to place it somewhere else on a document.
- **cursor**: For a mouse/trackpad, it describes a symbol (e.g. a pointing finger or an arrow) used to drop, click or drag items. OR A visual symbol showing where you'll see text appear when you begin typing.
- **device**: An electronic object or piece of equipment that has been designed to carry out a particular job or function.
- **developments**: The change and growth of something to improve it, make it stronger and more advanced or secure.
- **external hyperlink**: A link that will take you away from the website or document you are on.
- **file**: A way to store information on a computer. Different software programs create different types of files.
- **folder**: A place to store files.
- **footer**: A section at the bottom of a document or web page that includes additional information.
- **formatting**: The appearance or presentation of text, objects or images.
- **function**: Code that helps a computer carry out a task.
- **function keys**: Keys found along the top of the keyboard that act as shortcuts to certain functions.
- **future**: Time that is to come.
- **hamburger icon**: A symbol that represents a menu.
- **header**: A section at the top of a document or web page that includes additional information.
- **home keys**: The F and J keys are used as a starting point for touch typing. They can be found on the middle row of the keyboard.
- **hyperlink**: These can be text, images, buttons or moving images that are used to move from web page to web page or document to document. They can even move from one place to another in the same document. A hyperlink can be underlined.
- **icon**: A small image or symbol representing a file, function or program.
- **image**: A picture or photograph added to a document.

- **internal hyperlink**: A link that will take you to a different place but within the same website or document.
- **Internet**: The Internet is a vast network of computers connected to each other all around the world.
- **keys**: An input button on a keyboard used for typing.
- **LAN**: A small wired or wireless network. Most home networks are LAN.
- **layout**: How a document or presentation is structured and appears to the reader.
- **link**: A connection between web pages or documents.
- **linear**: In an order or sequence.
- **logical**: A reasonable and sensible choice or decision.
- **MAN**: A network that covers a city. It is commonly used across companies with several buildings. A MAN is larger than a LAN but smaller than a WAN.
- **margins**: Part of a page's setup, allows you to set how close to the edge of the page you are able to add text and images.
- **network**: A set of computing devices that are connected to share and send data electronically.
- **non-linear**: Not necessarily in order or doesn't follow a logical sequence.
- **orientation**: A setting for whether you wish to have the page in landscape or portrait.
- **page**: A space where information can be typed on a word processing document.
- **permissions**: Allowing others to access a folder or document you created.
- **resize cursor**: A tool to change the size of a particular cell to make it wider or taller.
- **rotate cursor**: Turning an image or text box with a central fixed point.
- **save**: Storing a file so that it can be accessed again at another time. Files can be saved directly on a device or externally onto something such as a USB (universal serial bus).
- **search**: You can search for information using a search engine. OR You can use the Internet to search for information on a website.
- **search icon**: A symbol that represents access to being able to find something within the operating system, program, or file.
- **section**: A part of something that is separated or cut off.
- **server**: A piece of hardware that has a large memory drive where lots of files and resources are stored. It also responds to requests across a computer network.
- **settings icon**: A symbol that represents access to change something.
- **structure**: A way of organising, labelling and ordering your folders.
- **technology**: Tools that can be used to solve problems or complete tasks.
- **text**: A group of letters, words or other symbols that can be typed, formatted and read.
- **toggle icon**: A function symbol that allows you to switch things on and off.
- **top row keys**: Keys found on the top row of keyboard.
- **touch typing**: Typing on a keyboard using both hands without looking at the keyboard.
- **typing**: To add text or data into a digital device using a keyboard.

- **WAN**: A WAN is a network that covers a large geographical area or even the world. It is the biggest type of network that can even allow people from different countries to connect.
- **Wi-Fi icon**: A symbol that represents the wireless Internet connection and allows you to see information about the signal.

Question of the week.

1. The technology of the future needs to be what? (user friendly / complicated; slow / efficient; improve our lives / make our lives worse; be environmentally friendly / help humans no matter the cost to the environment; exclusive to the rich / available to all).
2. What pieces of equipment do you need in a network?
3. Describe to me what steps I'd take if I lost a file on the computer.
4. Give me an example of a commonly used keyboard shortcut.
5. What kind of hyperlink did we insert into our work? (an internal hyperlink).
6. Tell me three icons that **you** often use when you're working on a computer.