Beech Hill Primary School Knowledge Organiser

Topic: Computing – Digital literacy	Year group	Term
Computer Systems and Networks	Year 2	Summer 1 5 sessions

Background knowledge

Computer Systems and Networks 2 aims to provide children with the knowledge and understanding to access and use the Internet safely.

The five steps in this unit develop the children's understanding of: the parts of a computer; how to connect to the Internet; how we can be safe online; utilising search engines and how to navigate to a trusted web page on the Internet.

Alongside these computing concepts, the five steps also include online safety starters that support the children's ability to keep themselves safe and cover the topics of: guidance for using technology; rules for using technology safely; asking trusted adults for help; differentiating between true and false information and using search engines safely.

The steps in this unit can be completed in any order, allowing teachers to choose the steps that best suit the needs and knowledge of their class. This is a 'Big Question' unit and the children will be working towards answering the following question: How Can We Search the Internet Safely?

Each step includes a CPD in 3 Video and a CPD Quick Guide that aim to build confident subject knowledge before teaching the step. The required subject knowledge is an understanding of:

Ø the parts of a digital device, such as a laptop or desktop computer, including peripherals;
Ø the rules that help children stay safe while using the Internet;
Ø how to navigate a search engine;
Ø how to use keywords when searching;
Ø how to enter a web address into an address bar.

What should I already know?
It would be beneficial if the children have been given the opportunity to explore different digital devices and their parts in their classroom environment. The children's learning would be supported if they can navigate digital devices, for example turning them on and off or using peripheral devices.

National Curriculum Objectives / Key Skills	The Journey
NC Pupils 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** * practising their safe searching skills when using digital devices; * using keywords when looking for information on the Internet in other curriculum areas; * going on a digital device hunt in their classroom or at home and naming the key parts.	Throughout the unit, children will: 1. To understand what a digital device is. To recognise the key parts of some digital devices. (Activity 1: Parts of a digital device) (Activity 2: Build your own laptop) 2. To understand what the Internet is and name some of its uses. (Activity: What can we do on the Internet?) 3. To know what might go wrong when using the Internet and who can help us. (Activity: Safe or not safe) 4. To understand how to search for images on the Internet using keywords. (Activity: Keyboard detective) 5. To navigate to a web page by entering a simple web address. (Activity 1: Match the web address) (Activity 2: Make your own web address searches (from a list of possible addresses planned in advance by the teacher).

Outcomes

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

* Children will know some of the key parts of a digital device and will be able to explain that digital devices use information technology to help them work.
* Children will briefly explore how the Internet works and how it enables us to communicate with others.
* Children will explore how to stay safe online, applying these strategies while using search engines and navigating to web pages.

Throughout the unit, children will:

I know that digital devices use information technology to help them work.
I know the key parts of a desktop computer and a laptop.
I know some common icons used on digital devices.

I know what the Internet is.
I know some ways we can use the Internet.
I know some icons that help us access the Internet on digital devices.

I know some things that might go wrong while using the Internet.
I know some ways to use the Internet safely.
I know who can help me if I'm upset or worried by something I see on the Internet.

I know what a search engine is.
I can use a child-friendly search engine to find images on the Internet.
I can use keywords to narrow down search results.

I can locate the address bar in a familiar web browser.
I can use a keyboard to type a web address into an address bar.

Key Vocabulary

digital device, desktop computer, laptop, peripherals, system unit, monitor, mouse, keyboard, headphones, information technology, icon, Internet, Google Chrome, Microsoft Edge, Safari, connect, Wi-Fi, web browser, online, pop-up, online bullying, personal information, web page, window, search engine, keywords, search, search bar, search results, web address, address bar, website, World Wide Web

Question of the week.
1. What pieces of equipment are shared by a laptop and a PC? 2. Tell your partner three things you can do on the internet. 3. Give me an example of something that is safe online and something that is not safe. 4. Tell me the steps to finding an image online. 5. What is a web address and how do we use it?