Overview

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.

Key Vocabulary and Definitions:

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| Connection | A link between two or more pieces of information or data. |
| Digital device | Electronic technology that generates, stores, and processes data |
| Index | A list of data, such as group of files or database entries. |
| Input | Aata that is entered into or received by a computer. |
| Network | A group of many pieces of data or information. |
| Network switch | Moves data between devices |
| Output | How the computer presents the results of the process |
| Process | A program that is running on your computer |
| Program | A set of instructions for a computer to follow. |
| Server | A computer program that provides a service to a user |
| System | A device that can store data, and accept inputs and outputs. |
| Wireless access point | Sends and receives information over a network |

National Curriculum:

**Computing**

* use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
* 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.

**Internet safety**

Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour

Teaching Sequence

Systems and Searches

1. To explain how digital devices function
2. To identify input and output devices
3. To recognise how digital devices can change the way we work
4. To explain how a computer network can be used to share information
5. To explore how digital devices can be connected
6. To recognise the physical components of a network.

Online Safety – Online reputation

1. To explain what a strong password is and demonstrate how to create one.
2. To explain how many free apps or services may read and share private information with others.
3. To explain what app permissions are and can give examples.

Blooms Taxonomy – Specific Verbs to Use in Lesson Aims

Knowledge: Describe, find, identify, list, locate, name, recognise, retrieve Comprehension: Classify, compare, explain, infer, interpret, paraphrase, summarise Application: Carry out, implement, use Analysis: Deconstruct, Organise, outline, structure Synthesis: Construct, design, devise, invent, make, plan, produce, Evaluation: Appraise, assess, choose,