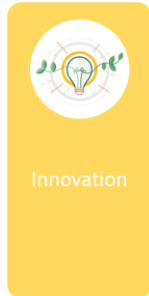




Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'



Subject: Computing

Year group: 3

Term: Autumn Term

Unit name: Connecting Computers

Big idea: Learners develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They also compare digital and non-digital devices. Following this, learners are introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches. The unit concludes with learners discovering the benefits of connecting devices in a network.

Progression of skills : The children will relate connections to their own situations with friends and family. Through "unplugged" activities they will understand the concept of sending messages and connecting various devices.

To explain how digital devices function → To identify input and output devices → To explain how a computer network can be used to share information → To explore how digital devices can be connected .

I can explain the role of a switch, server, and wireless access point in a network

Prior learning:

Year 1- Technology around us

In **Year 1**, the children will be identifying types of technology in the classroom and at home.

Year 2- Information Technology around us

In **Year 2**, the children will learn what information technology is and give examples of IT at home, in school and at home. They will find out what a computer is and start to look at how computers

Vocabulary:-

Digital device, input, output, process, Connection, network, network switch

Network switch: a device that enables multiple devices on a network to be connected with each other

Server: a computer that manages the network and stores files

Wireless access point (WAP): a device, connected to a wired network, that sends and receives wireless signals for/from devices with WiFi connectivity.

Key Learning:

To explain that digital devices accept inputs and produce outputs

To classify input and output devices

To recognise how digital devices can change the way that we work

To explain how a computer network can be used to share information

To explore how digital devices can be connected

To recognise the physical components of a network

Prior learning:

Year 1- Technology around us

In **Year 1**, the children will be identifying types of technology in the classroom and at home.

Year 2- Information Technology around us

In **Year 2**, the children will learn what information technology is and give examples of IT at home, in school and at home. They will find out what a computer is and start to look at how computers can be linked through role playing a shop with tills, scanners and barcodes.

Future learning:

Year 4 The Internet

In **Year 4**, learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They will learn that the World Wide Web is part of the internet and be given opportunities to explore the World Wide Web for themselves to learn about who owns content and what they can access, add, and create. Finally, they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.

Year 5 Sharing Information

In **Year 5**, learners will develop their understanding of computer systems and how information is transferred between systems and devices. Learners will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. Learners will also take part in a collaborative online project with other class members and develop their skills in working together online.

Spiritual Development

Computing allows children to reflect on the awe and wonder of the achievements and possibilities of ICT in a modern world. They think about the limitless opportunities that could be achieved thus promoting their sense of self and motivation. Exodus 15:11: And amazement seized them all, and they glorified God and were filled with awe, saying, "We have seen extraordinary things today."

National Curriculum links :

- 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

Implementation:

The children will have the opportunity to learn how computers connected using a range of practical "unplugged" activities. Learning will be recorded through the big book or within the foundation book. The children should be able to explain their understanding to an adult.

