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

St Peter's Bratton Church of England Academy

St Chad's Academies Trust

Innovation

Subject: Computing

Year group: 2

Term: Autumn Term

Unit name: Computer Systems and Networks: Information Technology Around Us (NCCE unit)

Vocabulary:-.

Information technology (IT), computer, barcode, scanner/scan

Subject knowledge:
You can find some useful information and a short video about barcodes at
www.waspbarcode.com/buzz/barcode

National Curriculum links :
- recognise common uses of information technology beyond school

Big idea: In this unit, learners will look at information technology at school and beyond, in settings such as shops, hospitals, and libraries. Learners will investigate how information technology improves our world, and they will learn about using information technology responsibly.

Progression of skills :

To develop the children's understanding of what information technology (IT) is. They will be able to identify devices which are computers and consider how computers help us at home and at school. They will begin to recognise that various devices are computers, not just laptops and desktops. As a class, they will be able to describe what a computer is and sort and group items according to whether they are a computer or not.

As well as looking at information technology use in school and home, they will be able to identify how technology is used in shops and the outside world. The last session focuses on how information is received in shops through barcodes. These sessions are unplugged, allowing the children to role play scanning and interpreting barcodes. They will be able to discuss their ideas within the class environment and record ideas through the class big book.

Prior learning:
Year 1- Technology Around Us (IT)
In **Year 1,** the children will identify technology at home and at school. Some children will be able to discuss how the technology is used.

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."

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

St Peter's Bratton Church of England Academy

St Chad's Academies Trust

Future learning:

Year 3- Connecting Computers (IT)
In **Year 3,** the children will start to understand how computer networks are structured and be able to recognise connected devices. They will discuss how some technology can be connected with wires and others are wireless.

Year 4- The Internet (IT).
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 will be given opportunities to explore the World Wide Web for themselves in order 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.

What are these?

These **are** all information technology.

Implementation:

Children will take part in discussions about technology in school and at home. They will be able to recognise different types of technology including those unfamiliar to themselves. Through the discussions and activities, the children will be able to determine if an item is a computer or not and can role play how information is gathered from bar codes in shops.

The work will be showcased within the big book.

Key learning assessment statements

To recognise the uses and features of information technology

To identify the uses of information technology in the school

To identify information technology beyond school

To explain how information technology helps us

To explain how to use information technology safely

To recognise that choices are made when using information technology