Subject on a Page

Computing

At St Luke's Church of England Primary School, we provide the opportunity to develop transferrable skills and concepts our pupils need within other areas of the curriculum. We aim to ensure that computing supports the development of cultural capital for every child. Computational Thinking is at the core of our computing curriculum developing concepts such as logic, problem solving and collaboration. Digital safety is embedded in our curriculum providing our pupils the essential knowledge and tools that will enable them to participate effectively and safely in the digital world beyond their time in school. We provide opportunities that excite and enthuse our pupils within computing, giving them a curiosity of new technology in the world around them. We want every child in our school to be digitally literate in order to enable them to keep pace with the dynamic world of technology.

Intent - What do we aim to deliver?

We prepare our children for a future in an environment which is shaped by technology.

Offer a range of opportunities for consolidation, challenge and variety.

Children apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology.

Children become responsible, competent, confident and creative users of information technology.

Develop children who are able to safely use digital technology and understand what to do if they ever feel unsafe online.

Implementation - How do we aim to deliver it?

Computing Systems and Networks
Each year group begins the year with a unit looking at how computing systems and networks function. Through the sequence of lessons, we intend to inspire pupils to develop a love of the digital world and see its place in their future.

Online Safety
Online safety is covered in both Computing and PSHE lessons, in addition to awareness weeks such as Anti-Bullying Week and Safer Internet Day. We follow Scarf for our PSHE lessons and Online Safety is supplemented by Project Evolve to support teachers in delivering the Education for a Connected World Framework. By the time our children leave St Luke's, we aim to have equipped them with the digital knowledge and skills to succeed in today's modern world safely.

Creating Media
Each year group completes a Creating Media unit. This allows children to explore a range of digital media, such as photos, video and audio. Pupils have the opportunity to compare digital and physical media, looking at the pros and cons of each. They will use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Data and Information
In KS1, children are introduced to data and information collection, linking to their Maths learning. Moving into KS2, children select, use and combine a variety of software 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.

Programming
In KS1, pupils will understand what algorithms are, how they are implemented and how to create and debug them. Moving up into KS2, children will design, write and debug programs that accomplish specific goals, using sequence, selection and repetition in programs. Pupils will also use logical reasoning to explain how simple algorithms work.

Impact - How will we know we have delivered it?

Children will technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Pupils will explain how computer networks can be used to share information and how we communicate using technology.

Pupils will recognise how images and text convey information. They will consider the impact of the choices and editing they have made and evaluate these choices.

Children will design and evaluate programming projects using variables, loops and repetition.

John 13: 34-35 says: 'Love one another. As I have loved you... By this everyone will know that you are my disciples.'

Key Vocabulary

Computing Systems and Networks

Browser
Computer
Devices
Evaluate
Graphics
Internet
Keyboard
Mouse
Software
Technology
Website
World Wide Web (WWW)
Email
Network
Wireless

Programming

Algorithm
Command
Debug
Instruction
Outcome
Predict
Pattern
Program
Sequence
Code
Repetition
Loop
Selection
Variables

Creating Media

Print
Text
Audio
Video
Resize
Search
Retrieve
Animation
Format

Data and Information

Data
Information
Database
Data handling
Data collection
File

Online Safety

Online
Safety
Personal
Sharing
Copyright
Reporting
Search engine

John 13: 34-35 says: 'Love one another. As I have loved you… By this everyone will know that you are my disciples.'