



Reflecting the Kingdom of God by Enriching and Transforming Lives

Learning Map *Computing*

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Physical Development
Remote controlled toys
How can a robot move?

Personal and social
Keeping safe:
What rules help to keep us safe and healthy when using technology?

Expressive Arts and Design
Digital painting:
What and how can different tools be used?
What differences are there in drawings?

Understanding the world
How do simple toys and equipment work?
What can different computer programmes do and how do they work?

Programming and simulations
Beetbots and J2code.
What instructions do you need to control the simulation?
What is the impact of sequences of commands?

Technology around us
What are the main parts of a computer?
What rules help to keep us safe when using technology?

1

Digital writing:
How can a computer produce text?
What are the different ways text can be changed?

Collecting information
How can data be grouped? What are the different descriptions for groups of objects?

Information technology around us.
How does the responsible use of IT improve our world in school and beyond?
How can I create, organise, store, manipulate, and retrieve digital content?

2

Digital music
How can I use a computer as a tool to explore rhythms and melodies, before creating a musical composition?

Programming quizzes
How can I design algorithms and programs that use events to trigger sequences of code to make an interactive quiz.

Collecting data
How can I create Pictograms and tally charts using programs to organise and present data on a computer to answer a question?

Robot algorithms
How can I create and debug programs, and use logical reasoning to make predictions.

Digital photography
How can I capturing and change digital photographs for different purposes?

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Sequencing sounds
How can I create sequences in a block-based programming language to make music?

Stop-frame animation
How can I capture and edit digital still images to produce a stop frame animation that tells a story?

Events and actions in programs
How do I write algorithms and programs that use a range of events to trigger sequences of actions.

Desktop publishing
How can I create documents and modify text, images and page layouts for a specific purpose.

Branching databases
How can I build and use branching databases to group objects using yes/no questions.

Connecting computers
How can I identify that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks?

Repetition in games
How can I use block-based programming language to explore count-controlled and infinite loops when creating a game?

Repetition in shapes
How can I use text-based programming language to explore count-controlled loops when drawing shapes.

Photo editing
How do I manipulate digital images? How do I reflect on the impact of the changes and have I achieved the purpose?

Audio production
How do I capture and edit audio to produce a podcast, ensuring that copyright is considered.

The internet
Why is the internet a network of networks including the WWW, and why we should evaluate online content.

Data logging
How do I recognise how and why data is collected over time, before using data loggers to carry out an investigation?

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Introduction to vector graphics
How do I create images in a drawing program by using layers and groups of objects?

Systems and searching
How can I recognise systems in the world and how some can enable searching on the internet?

Flat-file databases
How do I use a database to order data and create charts to answer questions?

Programming
How do I explore conditions and make the right selections of code using a programmable microcontroller? (MicroBit)

Video production
How do I plan, capture and edit my own video to produce a short film?

Selection in quizzes
How can I design and code an interactive quiz by using else and if statements?

Sensing movement
How can I design a coding project that captures inputs from physical devices?

Variables in games
How can I use variables when designing and coding a game?
How do I add scoring to my game / quiz?

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3D modelling
How do I plan, develop and evaluate 3D computer models of physical objects?

Introduction to spreadsheets
How do I answer questions by using spreadsheets to organise and calculate data?

Webpage creation
How do I design and create webpages, giving consideration to copyright, aesthetics and navigation?

Communication and collaboration
How is data transferred by working collaboratively online?

Love Wisdom Joy Peace