Computing
Learning Objectives Overview
Years 1 to 6

Year 1

Technology around us

To recognise technology in school and use it responsibly

Digital painting

To choose appropriate tools in a program to create art, and make comparisons with working non-digitally.

Digital writing

To use a computer to create and format text, before comparing to writing non-digitally.

Moving a robot

To write short algorithms and programs for floor robots, and predict program outcomes.

Introduction to animations

To design and programme the movement of a character on screen to tell stories.

Year 2

Information technology around us

To identify IT and how its responsible use improves our world in school and beyond.

Digital photography

To capture and change digital photographs for different purposes.

Making music

To use a computer as a tool to explore rhythms and melodies, before creating a musical composition.

Pictograms

To collect data in tally charts and use attributes to organise and present data on a computer.

Robot algorithms

To create and debug programs, and use logical reasoning to make predictions.

Programming quizzes

To design algorithms and programs that use events to trigger sequences of code to make an interactive quiz.

Year 3

Connecting computers

To identify that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.

Desktop publishing

To create documents by modifying text, images, and page layouts for a specified purpose.

Animation

To capture and edit digital still images to produce a stop-frame animation that tells a story.

Branching databases

To build and use branching databases to group objects using yes/no questions

Sequencing sounds

To create sequences in a block-based programming language to make music.

Events and actions in programs

To write algorithms and programs that use a range of events to trigger sequences of actions.

Year 4

The internet

To recognise the internet as a network of networks including the WWW, and why we should evaluate online content.

Audio editing

To capture and edit audio to produce a podcast, ensuring that copyright is considered.

Photo editing

To manipulate digital images, and reflect on the impact of changes and whether the required purpose is fulfilled.

Data logging

To recognise how and why data is collected over time, before using data loggers to carry out an investigation.

Repetition in shapes

To use a text-based programming language to explore count-controlled loops when drawing shapes.

Repetition in games

To use a block-based programming language to explore count-controlled and infinite loops when creating a game.

Year 5

Sharing information

To identifying and explore how information is shared between digital systems.

Vector drawing

To create images in a drawing program by using layers and groups of objects.

Video editing

To plan, capture and edit video to produce a short film.

Flat-file databases

To use a database to order data and create charts to answer questions.

Selection in physical computing

To explore conditions and selection using a programmable microcontroller.

Selection in quizzes

To explore selection in programming to design and code an interactive quiz.

Year 6

Internet communication

To recognise how the WWW can be used to communicate and be searched to find information.

3D modelling

To plan, develop and evaluate 3D computer models of physical objects.

Webpage creation

To design and create webpages, giving consideration to copyright, aesthetics, and navigation.

Spreadsheets

To answer questions by using spreadsheets to organise and calculate data.

Variables in games

To explore variables when designing and coding a game.

Sensing

To design and code a project that captures inputs from a physical device