

Whole School

Computing Curriculum

Whole-school definition of computing

Computing prepares you to become an active participant in a digital world: to use creative thinking and technology to understand and change the world around you.

Big Ideas of Computing

Curriculum Themes

'Big Ideas' of Computing

The Big Ideas of Computing are based on a spiral curriculum (so each of the themes is revisited at least once in each year group).

Pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme.

Each unit that is taught will link to a Big Idea.

The 'Big Ideas' focus on the 4 Primary Themes:

Computer Systems and Networks, Programming, Data and Information and Creating Media

EYFS

EYFS Overview

Block 1	Computing systems and networks: Technology around us
Block 2	Creating media: Digital painting
Block 3	Programming: Moving a Beebot (introduction)
Block 4	Data and information: Grouping data
Block 5	Creating media: Photography and digital writing
Block 6	Programming: Programming Beebots

Year 1

Year 1 Overview

Block 1	Computing systems and networks: Technology around us
Block 2	Creating media: Digital painting
Block 3	Programming: Moving a robot
Block 4	Data and information: Grouping data
Block 5	Creating media: Digital writing
Block 6	Programming: Programming animations

Year 2

Year 2 Overview

Block 1	Computing systems and networks: Information technology around us
Block 2	Creating media: Digital photography
Block 3	Programming: Robot algorithms
Block 4	Data and information: Pictograms
Block 5	Creating media: Digital music
Block 6	Programming: Programming quizzes

Year 3

Year 3 Overview

Block 1	Computing systems and networks: Connecting computers
Block 2	Creating media: Stop-frame animation
Block 3	Programming: Sequencing sounds
Block 4	Data and information: Branching databases
Block 5	Creating media: Desktop publishing
Block 6	Programming: Events and actions in programs

Year 4

Year 4 Overview

Block 1	Computing systems and networks: The internet
Block 2	Creating media: Audio production
Block 3	Programming: Repetition in shapes
Block 4	Data and information: Data logging
Block 5	Creating media: Photo editing
Block 6	Programming: Repetition and games

Year 5

Year 5 Overview

Block 1	Computing systems and networks: Systems and searching
Block 2	Creating media: Video production
Block 3	Programming: Selection in physical computing
Block 4	Data and information: Flat-file databases
Block 5	Creating media: Introduction to vector graphics
Block 6	Programming: Selection in quizzes

Year 6

Year 6 Overview

Block 1	Computing systems and networks: Communication and collaboration
Block 2	Creating media: Webpage creation
Block 3	Programming: Variables in games
Block 4	Data and information: Introduction to spreadsheets
Block 5	Creating media: 3D modelling
Block 6	Programming: Sensing movement