

Computing

Mindsets

Exploration
Questioning
Thinking critically
Thinking logically
Creativity

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in an ever evolving digital world.

Computing Skills and Expertise

- design and create content
- develop programming
 - solve problems
 - reason and explain
 - analyse and compare

Computing Proficiency

Computational exploration and creativity

Knowledge of:

- computing systems and networks
- data and information
- computer science (programming)
- creating media
- e-safety

Systems

LTP map
MTPs
Teach Computing Scheme
Support and challenge
Building on prior learning

Curriculum design IT

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	Technology around us	ICT around us	Connecting computers	The internet	Computing systems and networks	Internet comms
Term 2	Digital painting	Digital photography	Animation	Video editing	Creating media A	Webpage creation
Term 3	Digital writing	Making music	Desktop publishing	Repetition in shapes	Programming A	Programming (variable in games)
Term 4	Grouping data	Pictograms	Branching databases	Audio editing	Data and information	Data & info (spreadsheets)
Term 5	Moving a robot	Robot algorithms	Sequence in music	Data logging	Creating media B	3D modelling
Term 6	Introduction to animation	An introduction to quizzes	Events and actions	Repetition in games	Programming B	Programming (sensing)