

Curriculum map: Computing

Learning and achievement for all: a curriculum rich in knowledge about our world

Intent: Our computing curriculum equips pupils to use computational thinking and creativity to understand the ever changing world around them. Our lessons ensure that pupils become digitally literate, safe, confident and increasingly independent users of computer technologies and equip them to become active participants in a digital world. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals and as members of a wider global community, but also to develop creativity, resilience and problem-solving skills.

Implementation: Weekly computing lessons are sequenced to ensure that each lesson builds on prior learning and that all pupils are well supported. We have adopted The Teach Computing Curriculum which uses the National Centre for Computing Education's computing taxonomy to ensure comprehensive coverage. Pupils are guided to make links with mathematics, science and design and technology, and to gain insights into both natural and artificial systems. 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. Tasks foster a deeper understanding of a concept, encourage pupils to apply their learning independently in different contexts. The scheme of work is based on the following areas; computing systems and networks, creating media, programming and data information. Repetition in each year group and quizzing are used to support memory and to recap on previous learning.

Impact: Pupils can talk about how computers are connected through networks and explain how these are used to communicate and share information. Pupils are confident to apply their computing knowledge and skills to create a range of media, handle data and information, create and improve basic computer programs in a variety of ways.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Systems and networks Connecting computers	Creating media Stop-frame animation	Programming A Sequencing sounds	Data and information Branching databases	Creating media Desktop publishing	Programming B Events and actions in programs
Year 4	Systems and networks The internet	Creating media Audio editing	Programming A Repetition in shapes	Data and information Data logging	Creating media Photo editing	Programming B Repetition in games
Year 5	Systems and networks Sharing information	Creating media Video editing	Programming A Selection in physical computing	Data and information Flat-file databases	Creating media Vector drawing	Programming B Selection in quizzes
Year 6	Systems and networks Internet communication	Creating media Webpage creation	Programming A Variables in games	Data and information Introduction to spreadsheets	Creating media 3D modelling	Programming B Sensing