



Computing Implementation

Computing is taught at Asmall across the whole year in each year group to ensure that all areas of computing are covered and revisited regularly.

As a school we use the Purple Mash scheme of work from Reception through to Year 6. This spiral curriculum ensures that all areas of computing are revisited every year or two years at an age appropriate level. This gives children the opportunity to revisit topics to consolidate key knowledge and skills and makes sure that work is at a suitable level of challenge. The curriculum is aimed to give an equal share to the three areas of computing which are Digital Literacy, Computer Science and Information Technology.

Computing skills are reinforced through cross-curricular links where children are taught to research, word process, and save and retrieve work. There are further cross-curricular links in Design and technology through our LEGO Week where children use the LEGO Spike App where children work on their design and building skills alongside programming skills.

Online safety has a special focus within the Computing curriculum as children increasing use technology in a wider range of areas in and out of school. For this reason, it is covered yearly with additional time being dedicated in PSCH.

Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, solve problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs, work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet, how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- Select, use and combine a variety of software [including internet services] on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

- Use technology safely, respectfully and responsibly, recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns about content and contact.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Online Safety and Exploring Purple Mash Unit 1.1 Digital Literacy	Enrichment Unit Link to Maths Grouping and Sorting Unit 1.2	Animated Story Books Unit 1.6 Information Technology	Enrichment Unit Link to DT Structures Lego Builders Unit 1.4	Coding Unit 1.7 Computer Science	Enrichment Unit Link to English Animates Stories Unit 1.6
Year 2	Coding Unit 2.1 Computer Science	Enrichment Unit Link to Art Creating Pictures Unit 2.6	Spreadsheets Unit 2.3 Information technology	Enrichment Unit Link to Science Questioning Unit 2.4	Online Safety Unit 2.2 and Effective Searching Unit 2.5 Digital Literacy	Enrichment Unit Link to History Presenting Ideas Unit 2.8
Year 3	Enrichment Unit Link to PSHE Online Safety Unit 3.2	Email (inc. email safety) Unit 3.5 Digital literacy	Enrichment Unit Link to Maths Spreadsheets Unit 3.3	Presenting Unit 3.9 Information technology	Enrichment Unit Link to English Touch Typing Unit 3.4	Micro-bit Unit 3.10 Computer Science
Year 4	Online Safety Unit 4.2 Digital Literacy	Enrichment Unit Link to Theme Artificial Intelligence Unit 4.10	Logo & Hardware Investigators 4.5 & 4.8 Computer Science	Enrichment Unit Link to English Writing for Different Audiences 4.4	Animation & Making Music 4.6 & 4.9 Information Technology	Enrichment Unit Coding 4.1
Year 5	Online Safety & 3D modelling 5.2 & 5.6 Digital Literacy	Enrichment Unit Link to English Word Processing Unit 5.8	Game Creator 5.5 Computer Science	Enrichment Unit Link to Maths Spreadsheets Unit 5.3	Concept Maps 5.7 Information Technology	Enrichment Unit Link to Maths Databases Unit 5.4
Year 6	Online Safety & Blogging 6.2 & 6.4 Digital Literacy	Enrichment Unit Link to Maths Quizzing Unit 6.7	Coding & Networks 6.1 & 6.6 Computer Science	Enrichment Unit Link to Maths Binary Unit 6.8	Spreadsheets 6.9 Information technology	Enrichment Unit Link to English Text Adventures Unit 6.5