Our Computing Curriculum

A guide for parents

👨‍👩‍👧 Parent's Guide to Our Computing Curriculum

Our Computing curriculum prepares children to become confident, creative and responsible users of technology in an ever-changing digital world. We teach children how technology works, how to use it to create and communicate, and how to stay safe online. Through engaging, practical lessons, pupils learn coding, digital skills, and how to use technology respectfully, safely, and responsibly.

Children learn across three key strands:

💡 Computer Science

Understanding how computers work and learning to code using logical thinking, sequencing, pattern recognition and problem-solving.

💻 Information Technology

Using technology for a purpose — such as creating documents, art, music, digital media, and collecting or presenting information.

🛡️ Digital Literacy

Learning to use technology safely, respectfully and responsibly, including how to stay safe online and protect personal information.

📚 What Your Child Will Learn in Computing – Year by Year

	What Children Learn
Nursery	Exploring simple digital toys and recognising technology in everyday life. Learning to tap, swipe or press buttons and understanding simple rules for using technology safely.
Reception	Learning what technology is and how it helps us. Developing early computer skills — using a mouse or touchscreen, following instructions, exploring cause and effect, and learning basic e-safety.
Year 1	Identifying technology around us and learning basic computer skills. Creating digital art and writing, giving simple instructions to control a robot, grouping data, and understanding how to stay safe online.

	What Children Learn
Year 2	Understanding how information technology is used in everyday life. Taking and editing photos, writing simple algorithms for robots, creating pictograms, composing digital music, and programming simple quizzes.
Year 3	Learning how computers connect to form networks and the basics of the internet. Creating stop-frame animations, programming with sound, using branching databases, designing documents, and coding with events and actions.
Year 4	Understanding how the internet and the World Wide Web work. Editing audio, data logging with sensors, photo editing, and programming using repetition/loops to create shapes and games.
Year 5	Learning about digital systems and how search engines work. Video production, databases, vector graphics, and writing more complex code including selection (If/Then) in physical computing and quizzes.
Year 6	Communicating and collaborating online safely and respectfully. Designing a webpage, using variables in games, spreadsheets, 3D modelling, and coding physical systems using sensors and decision making.

<u>How you can support your child at home –</u>

👶 For Younger Children (Nursery – Year 2)

- Let them practise using a mouse or trackpad and typing their name.
- Encourage them to follow step-by-step instructions (early programming thinking).
- Play simple logic or sequencing games (e.g., *Robot Turtles*, Bee-Bot apps).
- Talk about safe screen use – asking before going online, telling a grown-up if unsure.

👧 For Juniors (Year 3 – Year 6)

- Encourage them to plan before creating (e.g., storyboards for videos or animations).
- Explore child-friendly coding platforms like Scratch, Scratch Jr, or code.org.
- Ask them to explain how something works — this builds computational thinking.

- Discuss online safety, privacy, respectful behaviour and screen time habits.

💬 Quick “Conversation Starters”

- “What is the most interesting thing you learned in Computing this week?”
- “Did you have to debug anything today? How did you fix it?”
- “How did you stay safe online today?”

🌐 Safe, Free Websites & Apps

- Scratch / Scratch Jr – coding for games and animations
- Code.org – fun coding puzzles and challenges
- Typing Club / BBC Dance Mat Typing – building typing skills