Computing at Spring Lane Primary School

Respect Resilience Integrity

Curriculum Intent	British Values
At Spring Lane Primary, our computing curriculum empowers children to become confident, creative, and responsible users of technology in a fast-changing digital world. Rooted in our five curriculum drivers, we nurture Effective Communicators who confidently use technical vocabulary and support others by sharing their digital knowledge. Our expert learners build progressive skills in coding, data handling, and digital literacy, learning how to interpret, apply, and adapt their understanding across a range of technologies and platforms. We develop caring citizens who understand how to stay safe online, respect others in digital spaces, and take responsibility for their digital footprint. Through practical exploration of software, apps, and programming tools, children grow as healthy Individuals and leaders, developing problem-solving skills, resilience, and the confidence to support their peers. Above all, our curriculum inspires Aspirational thinkers who enjoy investigating new technologies, think critically about the digital world, and see themselves as capable digital citizens ready to thrive in an ever-evolving future.	Our computing curriculum actively promotes British Values by fostering mutual respect and tolerance in digital interactions and online communities. Children learn about individual liberty through safe and responsible choices when navigating the internet and using technology. As they explore topics such as cyberbullying, data privacy, and digital identity, they develop respect for others' viewpoints and understand their rights and responsibilities in the digital world. Through collaborative projects, online safety discussions, and problem-solving tasks, children engage with the rule of law—understanding why rules exist in digital spaces and the consequences of breaking them. Opportunities for democracy are embedded through group decisions on digital content and classroom protocols for safe and ethical use of technology. Overall, computing at Spring Lane helps children become respectful, informed digital citizens who contribute positively and responsibly to our ever-evolving technological society.

At the end of EYFS	At the end of Key stage 1	At the end of Key Stage 2
By the end of EYFS at Spring Lane, children will begin to understand how technology is part of their everyday lives. They will explore and use simple digital tools and devices with increasing confidence and curiosity. Pupils will start to talk about how to stay safe online, showing awareness of trusted adults. Through play and guided exploration, they will develop early problem-solving skills and begin using technology to create, communicate, and make choices, laying strong foundations for future learning.	By the end of Key Stage 1, pupils at Spring Lane will use technology purposefully to create, organise, store, manipulate, and retrieve digital content. They will develop confidence using a variety of applications and understand the importance of using technology safely and respectfully. Pupils will begin to understand what algorithms are and how they can be used for simple programming tasks. They will show resilience when solving problems and begin to support their peers, becoming confident early digital citizens.	By the end of Key Stage 2, pupils at Spring Lane will be digitally fluent and able to confidently select and use a range of technology for different purposes. They will understand how to design, write and debug programs, applying logical thinking and creativity to solve problems. Pupils will demonstrate a secure understanding of online safety, privacy, and digital responsibility. They will use technology collaboratively to communicate, evaluate digital content critically, and apply their knowledge to real-world contexts, preparing them for the digital demands of secondary school and beyond.

Curriculum Implementation – How is computing taught?

At Spring Lane, computing is embedded across the curriculum to prepare pupils to be digitally literate, confident, and responsible users of technology—both in school and in their future lives. We provide purposeful opportunities for pupils to develop computing knowledge and skills through cross-curricular links with mathematics, science, and design and technology. These connections ensure pupils understand how technology underpins modern life and empower them to be active participants in an increasingly digital world. Children have access to iPads and laptops, which are used not only in discrete computing lessons but also to enhance learning across subjects. Our inclusive approach recognises that while some pupils may rely on technology to access learning, its thoughtful use benefits all. In the Early Years and KS1, digital literacy and online safety are introduced through stories and role play, helping children to articulate their understanding in familiar, meaningful contexts. In KS2, digital literacy is taught explicitly at the start of the year to equip children with the knowledge and awareness they need to use technology safely and effectively across the curriculum. These themes are revisited throughout the year within computer science and information technology lessons, ensuring that children apply their understanding in real contexts as they encounter new tools, platforms, and challenges. By embedding technology across our curriculum and supporting staff development in this area, we ensure that all children experience computing through a broad, relevant and ambitious lens—one that removes barriers, opens doors, and builds the curiosity, competence and confidence to thrive in a digital future.

Substantive Concepts	**Declarative knowledge - What**	**Procedural knowledge - How**	**Conditional knowledge - when**

Computer Science
- Coding/Programming
- Computational thinking
- Problem solving
Information Technology
- Using technology to demonstrate understanding
- Use of multimedia to create digital artefacts
Digital Literacy
- Education for a Connected World (DfE 2020)
  o Self-Image and Identity
  o Online Relationships
  o Online reputation
  o Online Bullying
  o Managing Online Information
  o Health, Well-being and lifestyle
  o Privacy and Security
  o Copyright and Ownership
	Computer Science
	What is an algorithm?
	Information Technology
	What are applications?
	Digital Literacy
	Where can I get support if I need it?
		Computer Science
		How to write an algorithm
		Information Technology
		Create my own app prototype.
		Digital Literacy
		How to safely use a new application.
			Computer Science
			I can evaluate and change my algorithm
			Information Technology
			I can decide when I need to change the font on a presentation
			Digital Literacy
			I know when to speak to an adult

Impact
The impact of our computing curriculum is seen in pupils who are confident, creative, and responsible digital citizens. Children develop computational thinking, problem-solving abilities, and the resilience to debug and improve their work independently and collaboratively. Because learning is purposeful and rooted in real-world digital contexts, pupils understand how technology shapes their lives and the wider world, both now and in the future. Our curriculum empowers pupils to design, create, and evaluate digital content with precision and intent. Through hands-on, project-based learning, they develop fluency in using a range of tools, from coding platforms to digital media applications. Pupils become critical users of technology, understanding how to stay safe, respectful, and informed online, and are prepared to contribute thoughtfully and ethically in a digitally connected world. • Pupils' computing knowledge and skills are assessed using the following: • Retrieval practice and vocabulary review to reinforce prior learning. • Ongoing assessment for learning through observation, questioning, and live feedback. • Pupil voice and digital portfolios to reflect progress, creativity, and understanding. • Tasks linked to computing strands (e.g., programming, data handling, digital literacy).
Equity and inclusion – removing barriers
Spring Lane's computing curriculum aligns with our core curriculum principles of relevance, experiences, and collaboration to remove barriers and promote equity. By embedding computing in meaningful, real-world contexts—such as creating digital content linked to pupils' interests or solving problems relevant to their community—learning becomes purposeful and inclusive (Relevance). Practical, hands-on experiences with accessible technology, including unplugged activities and scaffolded coding tasks, ensure all children can participate and progress regardless of starting point (Experiences). Pupils work collaboratively to debug, design, and evaluate digital outcomes, promoting peer support, shared learning, and digital teamwork (Collaboration). These principles ensure that all learners, including those with SEND or limited prior access to technology, can engage confidently with computing, build essential digital skills, and flourish as capable, responsible users and creators in a digital world.