

St Paul and St Timothy's Catholic Infant School

Our Vision for Computing

At **St Paul and St Timothy's**, our vision is for every child to become a confident, safe, and creative user of technology. We believe that **Computing** is an essential subject that equips children with the skills to understand and participate in an increasingly digital world. Our curriculum develops computational thinking, problem-solving, and creativity, enabling children to not only use technology but also to understand how it works. Through engaging, hands-on learning, our pupils become responsible, respectful digital citizens, prepared for the future.

Intent

Our computing curriculum, shaped by the **Cornerstones Curriculum** and the **Barefoot Computing framework**, is designed to provide a rich, balanced, and progressive experience that empowers children with the digital skills they need today and in the future.

Our intent is for children to:

- Develop the foundations of **Computer Science**, understanding how computers work, what algorithms are, and how simple programs are created and executed.
- Build skills in **Information Technology**, learning how to use technology purposefully to create, store, organise, and retrieve digital content.
- Become confident in **Digital Literacy**, understanding how to use technology safely, respectfully, and responsibly, including how to protect personal information and seek help when needed.
- Apply computational thinking to problem-solving tasks, including **logical reasoning, pattern recognition, and decomposition** of problems.
- Understand the role technology plays both within and beyond school, and how it impacts daily life and the wider world.

Implementation

Computing at St Paul and St Timothy's is taught through the **Cornerstones Curriculum**, which integrates the **Barefoot Computing** approach to ensure a structured, progressive learning journey. Computing is taught in discreet, engaging projects each term, with clear links to other subjects where appropriate.

Key features of our implementation include:

- The curriculum is organised into three strands: **Computer Science, Information Technology, and Digital Literacy**.
- Pupils are introduced to key concepts such as **algorithms, sequences, debugging, logical reasoning, and control** through age-appropriate, practical activities.

- Lessons are designed around the **Cornerstones Barefoot framework**, incorporating key computational thinking concepts like **abstraction, decomposition, pattern recognition, and algorithms**.
- A range of technology is used, including **iPads, Interactive Whiteboards, Bee-Bots, and programmable devices**, providing varied, hands-on experiences.
- Digital Literacy is woven throughout all lessons, with an emphasis on **online safety, privacy, and respectful communication**, reinforced during key events like **Safer Internet Day**.
- Pupils use technology to create digital content, such as presentations, simple animations, and data handling, that links meaningfully to learning in other areas like science, maths, and geography.
- Teachers follow clear progression maps to ensure skills build year on year, while pupils develop both practical competence and conceptual understanding.

Impact

By the end of Key Stage 1, children at St Paul and St Timothy's will:

- Understand what algorithms are and how they are implemented as programs on digital devices.
- Be able to create, debug, and predict the outcomes of simple programs.
- Use logical reasoning to solve problems and apply computational thinking to everyday tasks.
- Demonstrate the ability to use technology purposefully for creating, organising, storing, manipulating, and retrieving digital content.
- Understand common uses of technology beyond school and talk confidently about how digital systems are used in the wider world.
- Be safe, respectful, and responsible online users, with a clear understanding of how to protect personal information and where to seek help if needed.

Our computing curriculum empowers pupils to develop the confidence, resilience, and responsibility needed to navigate the digital world safely and successfully, both now and in the future.