

Our **Computing curriculum** is designed to equip pupils with the essential skills, knowledge, and understanding to become confident, creative, and responsible digital citizens. We aim to **prepare children for a technology-driven world** by developing their computational thinking, problem-solving abilities, and digital literacy.

Our curriculum ensures that pupils:

- ✓ **Develop computational thinking** – Learning how to solve problems, break tasks into logical steps (algorithms), and think critically.
- ✓ **Learn coding and programming** – Gaining practical experience with coding languages, debugging, and creating interactive projects.
- ✓ **Use technology creatively and effectively** – Engaging in digital content creation, multimedia projects, and data handling.
- ✓ **Understand e-safety and digital responsibility** – Learning to navigate the online world safely, ethically, and responsibly.
- ✓ **Explore real-world applications of technology** – Understanding how computing impacts careers, industries, and daily life.

Each topic has been carefully chosen and planned to ensure that our curriculum principles can be achieved. Opportunities to apply English and Maths learning are embedded throughout each topic to provide pupils with the opportunity to apply this knowledge within meaningful contexts. Pupils build a substantive knowledge of computing through the framework of eight big ideas or vertical concepts. These vertical concepts provide both a lens through which to study and contextualise computing, as well as support pupils to gain a deep understanding of complex, abstract ideas:

Community	How can information technology support the healthy development of our communities?
Human Rights	How does information technology both strengthen and threaten our human rights?
Stewardship	How can the use of information technology help to save our natural world?
Resilience	How does information technology enhance our response to events that threaten life?

Equality

Does everyone have fair access to information technology?

Health

How can we use information technology in a healthy way?

Wonder

What amazing things can information technology do?

Technology

What are the positives and negatives of using information technology?

