

COMPUTING SUBJECT OVERVIEW



INTENT: Our computing curriculum promotes curiosity, a love and thirst for learning and alongside other curriculum areas empowers our children to become independent and resilient learners. Computing is a powerful rapidly changing part of society, so we want our children to become confident and safe users of technology. We teach internet safety skills so young learners can become safe and responsible online. Through active learning experiences in computer science, digital literacy and information technology we aim to enrich children's lives in school with computing knowledge and memorable experiences to prepare them for their future opportunities, responsibilities and experiences.

"Computers themselves, and software yet to be developed, will revolutionize the way we learn." (Steve Jobs)

Core Threads

- **Computer Science** – programming – learn coding and create algorithms where they create a sequence of instructions to make 'something happen'.
- **Digital Literacy** - Online Safety leading to Digital citizenship - how to make smart choices online, think critically and practice healthy habits.
- **Information Technology** – To be confident, competent, responsible and creative users of technology. For pupils to interact with age-appropriate computer software for particular purposes. In Key Stage One, to learn basic skills of creating, organising, storing, manipulating and retrieving digital content. In KS2 to work independently, selecting, using and combining a variety of software (including internet services) on digital devices.

Links to Reading

- Computing vocabulary
- Using the internet to research – cross curricular links.
- Instructional texts
- Algorithms

Inclusive Practice

Practical and creative experiences allow all children to participate, explore and investigate within lessons. Some lessons and activities can be adapted or further instructions if necessary. Children can be paired together when relevant to the tasks.

Knowing more, remembering more

To build upon the skills taught from EYFS and KS1 into KS2. E-Safety and coding built on prior learning, deepening understanding. Using and developing skills learnt previously in new contexts.



Our curriculum is underpinned by our RESPECT VALUES, which are covered across all subjects. The following values are exemplified in this subject:

Resilience: Children are encouraged to 'have a go' at using different pieces of equipment and to not worry if they make a mistake or something does not work. Debugging programs and solving coding through trial and error.

Empathy: To encourage other children who are finding it tricky to 'have a go', to demonstrate their skills and ideas to help others.

Self-awareness: Children are encouraged to challenge themselves. How can we be safe, responsible and respectful online?

Positivity: Having a positive attitude towards using a range of devices and software and using their knowledge creatively to help them become skilled computer scientists.

Excellence: Children work to develop their skills and appreciate the achievements of others.

Communication: Children to use new vocabulary relating to technology and being safe online. How technology can be used to safely communicate with individuals and networks. positive thoughts, lead to positive actions and positive feelings

Teamwork: Working with others, support and challenge each other. Sharing their work, locally and globally to showcase their creativity and end products.

Sequence of Learning

We follow a structured approach in computing that ensures progression of skills across the school and allows all learners to have opportunities and enjoyable experiences in all aspects of the computing curriculum. The work in EYFS lays the foundations for computing and there are clear links between the curriculum in Reception where children develop mouse control and how to access programs and KS1 and between KS1 and KS2 where knowledge, skills and independence are developed. Staff model e-safety skills and how to search for information on the internet. Throughout school there are strong links with our internet safety, PHSE and RSE programmes. Our computing curriculum contributes to children's independence, resilience, collaboration and creative skills. The threads of Computer Science, Digital Literacy and Information Technology are progressively built-up year by year.