Computing



Intent:

All pupils at Shirley Warren Primary School have the right to rich, deep learning experiences that balance all the aspects of computing.

With technology playing such a significant role in society today, we want to model and educate our pupils on how to use technology positively, responsibly and safely in order for our children to participate effectively and safely in a digital world.

A high-quality computing education equips pupils to use creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible alongside a computing curriculum which enables children to become effective users of technology who can:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems;
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

Implementation:

- A clear and effective, bespoke cross curricular scheme of work that provides coverage in line with the National Curriculum. Teaching and learning should facilitate progression across all key stages within the strands of digital literacy, information technology and computer science
- Access to resources which aid in the acquisition of skills and knowledge.

- Children will have access to the hardware (computers, tablets, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications
- A clear and effective scheme of work that provides coverage in line with the National Curriculum.
- Teaching and learning should facilitate progression across all key stages within the strands of digital literacy, information technology and computer science. Children will have the opportunity to explore and respond to key issues such as digital communication, cyber-bullying, online safety, security, plagiarism and social media.
- Wider Curriculum links and opportunities for the safe use of digital systems are considered in wider curriculum planning.
- The importance of online safety is shown through displays within the learning environment and alongside the Be Internet Legends programme which empowers younger children to use the web safely and wisely.
- Parents are informed when issues relating to online safety arise and further information/support is provided if required.

Impact:

Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. The impact of our curriculum is measured through the following methods:

- A reflection on standards achieved against the planned outcomes;
- Children's understanding and application of the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- Children's ability to analyse problems in computational terms through repeated practical experience of writing computer programs in order to solve such problems;
- Children's ability to evaluate and apply information technology, including new or unfamiliar technologies, and to analytically to solve problems;
- Children who are responsible, competent, confident and creative users of information and communication technology.
- Pupil voice discussions and surveys about their computing learning;
- Children's work saved onto their individual online accounts;
- Images/video/audio description of practical learning within a class portfolio;
- A scrutiny of online class portfolios with opportunity for dialogue between teachers to understand their class's work.