



## Computing

### Intent:

All pupils at Hunningley Primary have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill children must be taught if they are to be able to participate effectively and safely in this 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. At Hunningley Primary, we teach a curriculum that 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.
- Understand how AI already plays apart in their daily lives and how AI should be used responsibly with ethical considerations

Staff are highly trained in co-operative learning structures which actively engage pupils in structured talk, helping them articulate their ideas, reason verbally, and build confidence in using vocabulary relating to technology. These collaborative strategies promote dialogic learning, where children learn through speaking and listening, thereby strengthening their oracy skills in a purposeful, curriculum-linked context.

### Internet Safety

Hunningley Primary takes internet safety extremely seriously. We have an E- Safety Policy that provides guidance for teachers and children about how to use the internet safely. Our Computing and PSHE lessons in school enable children to learn the safe use of technology and the internet, allowing them to think about how they can keep themselves and others safe, being mindful of how their behaviour, words and actions can affect others.

### Implementation:

We follow a broad and balanced Computing curriculum (based upon the National Curriculum) that builds on previous learning and provides both support and challenge for learners. We follow a Computing scheme from Kapow that ensures progression of skills and covers all aspects of the Computing curriculum include recent recommendations for introducing children to age appropriate knowledge of AI.

Early Years is the first opportunity to develop our children's digital understanding. We implement our computing curriculum by following the interests of the children through the Early Years Foundation Stage Statutory Framework which aims to guide children to make sense of their physical world and their community. Children are exposed to a variety of technologies throughout continuous provision such as having access to phones, ovens and laptops. Children also start programming in EYFS with Beebot machines. Staff engage in high-quality interactions to develop vocabulary and knowledge, helping children articulate what they know through modelling and extending their knowledge and ideas of technology.



In KS1 and KS2 the computing curriculum is organised around four key areas: Creating Media, Programming, Computer Systems and Networks and Data and information. These disciplinary skills are built on year upon year to prepare children for KS3 and the wider world. In this ever expanding age, we want to ensure children understand how to keep themselves safe online and why it is important to do so. Working alongside the PSHE curriculum, we ensure that e-safety is taught discreetly following credited schemes but also that e-safety is embedded across all units.

Teachers will plan knowledge organisers which outlines key knowledge and substantive vocabulary which all children must master. Low stakes quizzes will be used regularly to support learners' ability to know and remember more and increase space in the working memory.

All classes will have a scheduled Computing lesson each week and there will be an expectation that technology will be utilised throughout other lessons in the curriculum. Links to other areas of the curriculum are planned out in advance so that children have the opportunity to apply their computing knowledge in other subjects.

Children's work will be recorded using a class PowerPoint presentation. These will be used for reference and assessment, to provide a clear picture of the children's learning journey throughout the year. We also believe it's crucial to provide pupils with opportunities for exploratory talk during their learning. This involves thinking aloud, questioning, discussing, and collaboratively building ideas and these oracy skills are built throughout computing lessons.

Where possible, children are given the opportunity to apply their computing skills in the outdoors. This can be seen during our woodland sessions, where children are able to use devices to photograph seasonal changes they have observed and apply this to creating content with the purpose to educate others, using videos, podcasts and more. These experiences foster curiosity, support long-term retention, and reflect up to date research on the value of outdoor learning in embedding curriculum knowledge and promoting engagement.

### Impact:

Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes
- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Children can analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.
- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Children are responsible, competent, confident and creative users of information and communication technology.
- Tracking of gains in each quiz.
- Pupil discussions about their learning.
- Outdoor learning that contributes to pupils' cultural capital by providing enriching experiences, especially for disadvantaged learners, and supports the development of computational thinking and independence.



Our Computing curriculum is planned in a way which promotes the cultural capital of all our children. We enhance our curriculum especially for the most disadvantaged by organising guest speakers (gaming developers, music producers/ICT experts), organising Computing events which focus on the wider world and promote skills needed by children in their future careers. We develop these skills to enable children to choose from a wide range of vocations when they leave education. We also provide additional opportunities for children to apply these skills in their local environments, including digital photography and art.

This carefully structured approach to teaching computing ensures that all pupils including disadvantaged pupils, those with SEND, and children known to social care are fully included, supported, and inspired. By embedding cooperative learning, immersive experiences, and tailored scaffolding, all children are given equitable access to high-quality computing education. The use of working walls, retrieval practice, and career-linked content helps build cultural capital, close attainment gaps, and raise aspirations. Exposure to diverse role models and real-world applications empowers pupils to see themselves as future technicians, fostering ambition and broadening their understanding of the opportunities computing can offer in later life.