



Computing at Yarm Primary

At Yarm Primary, our intent is to provide children with a broad and balanced curriculum, which inspires and enables children to find, explore, analyse, exchange and present information. The curriculum looks at the progression needed for all pupils to develop and embed skills in order to use technology safely and effectively in the modern world. Where possible, learning is cross-curricular which provides a purposeful context for learning and further cements the necessary building blocks for lifelong learning.

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

In order to meet the demands of the National Curriculum throughout school, our computing curriculum is divided into three clear strands: digital literacy, information technology and computer science. Learning in each of these strands is progressive and builds upon children's understanding of previously-taught content.

Digital Literacy encompasses themes such as e-Safety, searching/selecting information and mechanics. For example, in Year 1, children develop their understanding of how to respond to personal questions online. This learning is consolidated and developed throughout school, leading to Year 6 where children explore two-factor authentication and e-mail scams. Children in KS1 learn how to create, edit and save images as part of the Information Technology strand, whereas in UKS2, children use Computer Aided Design (CAD) software to create 3-D images and video creation tools to create layers for a video project. In Computer Science, children in KS1 are introduced to algorithms by creating simple instructions and, by Year 6, are using their understanding of algorithms to develop their own apps.

We have a trolley of laptops, which are timetabled across the school, allowing classes to deliver their main Computing session. In addition, to this, there are iPads which may be used by any class, for example, to practise times tables, create and edit videos, film drama work, and deliver interventions. Other opportunities across the curriculum are exploited, such as researching information, making interactive presentations and creating story

scenes, all linked to topic work. Year 6, for example, use the Internet to research information for a World War II A-Z.

Early Years access a differentiated Computing curriculum through a continuous provision. For example, children have access to iPads in the classroom. These are used for a multitude of purposes, including, but not limited to daily maths tasks and music-playing apps. Children also use the interactive whiteboards where they will complete phonics and maths activities.

During the year, children also take part in national initiatives, such as 'Safer Internet Day', which encourage the children to engage with the annual theme. Parents are also invited to e-Safety sessions in order to promote safe and effective Internet use at home.

Our ambitious curriculum will ensure that:

- Children will be confident users of technology, able to use it to accomplish a wide variety of goals, both in school and at home.
- Children will have a secure and comprehensive knowledge of the implications of technology and digital systems, which is important in our ever-evolving society.
- Children will be able to apply the British Values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.
- Children can solve 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.

