



## **Kildwick Computing Curriculum**

### **Intent**

Kildwick Primary School's Computing scheme aims to instill a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise, and collaborate.

Tinkering with software and programs forms a part of the ethos of our scheme as we want to develop pupils' confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. Through our curriculum, we intend for pupils not only to be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens.

The scheme of work enables pupils to meet the end of Key Stage Attainment targets outlined in the National curriculum and the aims align with those in the National curriculum. When used in conjunction with our PSHE scheme, the computing scheme of work also satisfies all the objectives of the DfE's [Education for a Connected World framework](#). This guidance was created to help equip children for life in the digital world, including developing their understanding of appropriate online behaviour, copyright issues, being discerning consumers of online information and healthy use of technology

### **Implementation**

The National curriculum purpose of study states:

*'The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world'.*

Therefore, the Kildwick's computing scheme of work is designed with three strands which run throughout:

- Computer science
- Information technology
- Digital literacy

Our [Curriculum overview](#) shows which of our units cover each of the National curriculum attainment targets as well as each of these three strands.

Our [Progression of skills](#) shows the skills that are taught within each year group and how these skills develop year on year to ensure attainment targets are securely met by the end of each key stage.

The computing scheme is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

The implementation of computing scheme ensures a broad and balanced coverage of the National curriculum requirements, and our 'Skills showcase' units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful, units have been created to link to other subjects such as science, art, and music to enable the development of further transferable skills and genuine cross- curricular learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging and appeal to those with a variety of learning styles.

Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust computing curriculum. Each of the units of lessons include teacher videos to develop subject knowledge and support ongoing CPD. Further CPD opportunities can also be found via webinars with KAPOW computing subject specialists. Kapow has been created with the understanding that many teachers do not feel confident delivering the computing curriculum and every effort has been made to ensure that they feel supported to deliver lessons of a high standard that ensure pupil progression.

### **Impact**

The impact of Kildwick's computing scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives and each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

After the implementation of our computing scheme, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be active participants in the ever-increasing digital world.

The expected impact of following the computing scheme of work is that children will:

- ✓ Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
- ✓ Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- ✓ Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- ✓ Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- ✓ Show a clear progression of technical skills across all areas of the National curriculum - computer science, information technology and digital literacy.
- ✓ Be able to use technology both individually and as part of a collaborative team.
- ✓ Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.
- ✓ Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
- ✓ Meet the end of key stage expectations outlined in the National curriculum for Computing.