



Computing at Coldfall

. . . . personal computers have become the most empowering tool we've ever created. They're tools of **communication**, they're tools of creativity, and they can be shaped by their user.

.... **Bill Gates**

Intent

We recognise that as a school we have a responsibility to prepare the pupils for their future by improving their knowledge and understanding of how imperative technology is as an aid to learning and the real world beyond school.

Computing skills are a major factor in enabling children to be confident, creative and independent learners. The use of ICT will enhance and extend children's learning across the whole curriculum whilst developing motivation and social skills. Computing is incorporated throughout all areas of the curriculum ensuring that our pupils become digitally literate and able to express themselves and develop their ideas in a way that will equip them for the future workplace and as participants in a digital world.

Through the teaching of Computing, we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. Computing enables rapid access to ideas and experiences from a wide range of communities and cultures. Using Computing tools: pupils can find, explore, analyse, exchange and present information. We enable them to find, explore, analyse, exchange and present information. We aim to expose children to the educational developments in computing and provide them with the opportunities to access to the most effective and emerging technologies.

Increased Computing capability promotes initiative and independent learners. It must be our intent to enable all children in the school to develop the knowledge, skills and understanding that will enable them to function in this digital age.

Implementation

The computing curriculum at Coldfall Primary School has been tailored to focus and build upon the three core aspects of Computing; *Digital Literacy, Computer Science, and Information Technology*. We do so with a progression framework of skills and knowledge that allows the pupil to make the necessary connections within their learning as they progress through the Computing Curriculum. We use this framework to create a scheme of work for each year group building upon the skills learned in previous years.

Our scheme of work for 2022-2023 uses DFE funded Teach Computing (<https://teachcomputing.org>) which has been customised for schools to include relevant digital and learning resources. Below is the curriculum journey that we will follow from Year 1 to Year 6. The framework uses an innovative progression to allow to children to build on their prior learning year on year. Each year group will have a unit of work linked to each of the following areas:

- Computing systems and networks
- Data and information
- Creating media
- Programming (A and B).

Impact

How is progress shown?

Computer Science: Children are able to understand the principles of information and computation, how digital systems work and how to put this knowledge to use through coding, programming and problem solving.

Digital Literacy: Children are able to express themselves and develop ideas through evaluating, investigating and predicting. Children are confident in understanding how to use a variety of technology safely, including online.

Information Communication Technology: Children are able to use technologies effectively, select, use and combine a variety of software on a range of devices and present, evaluate and analyse their results and findings.

The implementation of our curriculum results in a fun, engaging, and high-quality computing education and ensures when children leave Coldfall, they are digitally literate, well- equipped for secondary school and able to join the rest of the world on its digital platform, in a safe and responsible way, especially when using the internet. *Children will show a true understanding of the three different strands within the computing curriculum and show resilience when solving problems. They are respectful towards others and show they can use a variety of software and hardware appropriately. They are able to apply their creative skills in computing and can choose and evaluate the best devices to use. They show a positive attitude towards others, working well in both pairs, teams and independently. They will have been provided the building blocks needed to pursue a wide range of interests and vocations in the next stages of their lives and apply their skills in different challenges ahead of them.*