

## Woodfall Primary School and Nursery Computing Curriculum Statement

At Woodfall Primary School and Nursery we believe that Computing and the use of ICT is essential to the education of all children. Computing is an integral part of modern day life and therefore provides a wealth of learning opportunities. Pupils are encouraged to develop a confident and safe approach to Computing and the use of ICT, with the understanding of the capabilities and flexibility of their resources. Through the study of Computing, children are able to develop a wide range of fundamental skills, knowledge and understanding that they will need for the rest of their lives.

The National Curriculum makes clear the three aspects of the computing curriculum: computer science (CS), information technology (IT) and digital literacy (DL). Children are given the opportunity to develop their knowledge and understanding in each area from the Foundation Stage to Year 6. They learn how computers and computer systems work, they design and build programs and develop their ideas using technology. 'Computational thinking' is a skill children must be taught if they are to be ready for the workplace and able to participate effectively in this digital world.

In Key Stage 1, children learn what algorithms are, which do not always involve computers. When explained as "a set of instructions", teachers illustrate the idea using recipes, or by breaking down the steps of children's morning routines. Children then learn how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They are taught to create and debug simple programs, developing logical reasoning skills. They are shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content.

In Key Stage 2, children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. They use sequence, selection, and repetition in programs and continue to develop their logical reasoning skills by explaining how some simple algorithms work and correcting errors in algorithms and programs. Children are taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. Devices are used for collecting, analysing and presenting data and information.

At Woodfall, the computing programme of work reflects both the content of the National Curriculum and Rising Stars computing programme. Computing is planned into the school's weekly timetable. It is taught as a discrete lesson and links are made to other areas of the curriculum. It is planned for and used in all lessons where appropriate. All classrooms are equipped with interactive whiteboards and each Key Stage has access to pupil laptops (a trolley of 15 per Key Stage) and pupil iPads (a trolley of 30 for Key Stage 1 and 2 trolleys of 30 for Key Stage 2). Pupils have access to a wide range of hardware and software, most of which is stored on the school's secure network. This helps to meet the needs of all children, including those with special educational needs. Children's learning is carefully planned,

ensuring that skills are taught at an appropriate age and are being built on each term and year.

E-Safety has been a priority of the school for the school in the past few years. It is taught continually throughout the curriculum and each year group also delivers specific sessions using the Eaware programme. Children are taught to use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour and identify a range of ways to report concerns about content and contact. Children have also enjoyed theatre groups performing plays over the last few years, with areas including cyber bullying and passwords. E-safety posters are displayed in all classrooms across the school. All children have supervised, safe, filtered access to the Internet. The school also has an Online Safety Group that meets up once a term to discuss e-safety issues in school. This group consists of teachers, governors, parents, children and a local PC.

The school has its own website which is updated regularly. Parents, children and other users are encouraged to use the website to find relevant information. Each year group has their own page where key dates, examples of work and information on learning can be found. Links can also be found to relevant websites and resources for users. This includes links to resources about e-safety for both children and parents. The school has its own Twitter feed where information can be sent immediately to parents who follow the school.

November 2021