Computing

Computing is an essential part of the curriculum; a subject that should be an integral part of all learning. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology. Computing within school can therefore provide a wealth of learning opportunities and transferrable skills explicitly within Computing lessons and across other curriculum subjects.

Through Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will equip them for life. Children must be taught in the art form of 'Computational Thinking' in order to provide them essential knowledge that will enable them to participate effectively and safely in the digital world.

In Key Stage One children earn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. They are taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Each of these skills are taught through termly units.

In Key Stage Two children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children are taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Children in Early Years provision are exposed to the understanding of internet safety as they explore the world around them and how technology is an everyday part of their learning and understanding of the world.