



Winmarleigh Church of England Primary School

Computing

At Winmarleigh School we value Computing. A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. 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.

End Points in Learning in the Computing Curriculum

EYFS	Key Stage 1	Key Stage 2
<ul style="list-style-type: none"> • Pupils will remember rules without needing an adult to remind them. • Match their developing physical skills to tasks and activities in the setting. • Pupils will explore how things work. • Pupils will Show resilience and perseverance in the face of a challenge. • Pupils will know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of ‘screen time’. • Pupils will develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Pupils will explore, use and refine a variety of artistic effects to express their ideas and feelings. • Pupils will be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Pupils will explain the reasons for rules, know right from wrong and try to behave accordingly. • Pupils will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. 	<ul style="list-style-type: none"> • Pupils will understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Pupils will create and debug simple programs • Pupils will use logical reasoning to predict the behaviour of simple programs • Pupils will use technology purposefully to create, organise, store, manipulate and retrieve digital content • Pupils will recognise common uses of information technology beyond school • Pupils will 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. 	<ul style="list-style-type: none"> • Pupils will be taught to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • Pupils will use sequence, selection, and repetition in programs; work with variables and various forms of input and output • Pupils will use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • Pupils will understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • They will use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • Children will select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • Pupils will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.