

Characteristics: We are Technologists!

Computing



At Orchard Primary School, we are technologists!

We want our children to love computing and technology. We want them to have no limits to what their ambitions are and grow up wanting to be software programmers, coders, website creators or innovators!

The computing curriculum has been carefully crafted so that our children develop their computing knowledge and capital. We want our children to remember their computing lessons in our school, to cherish these memories and embrace the opportunities they are presented with! Bringing technology and computing alive is important at Orchard Primary School.

We have the ability to...

- link, mathematics, science and design and technology to computing
- know how digital systems work and know how to put this knowledge into use through programming
- use information technology to create programs, systems and a range of content
- become digitally literate, able to use and express themselves and develop their ideas through information and communication technology
- understand and apply computer science including logic, algorithms and data representation
- analyse problems in computational terms and have practical experience of writing computer programs
- evaluate and apply information technology to analyse and solve problems
- be safe, responsible, confident and creative users of information and communication technology

Learning Opportunities in Key Stage 1	Learning Opportunities in Key Stage 2
<ul style="list-style-type: none">• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions• create and debug simple programs• use logical reasoning to predict the behaviour of simple programs• use technology purposefully to create, organise, store, manipulate and retrieve digital content• recognise common uses of information technology beyond school• 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">• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts• use sequence, selection, and repetition in programs; work with variables and various forms of input and output• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs• 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• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content• 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• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.