

Computing End Points

End of EYFS	End of KS1	End of LKS2	End of UKS2
<p>In EYFS, children will:</p> <ul style="list-style-type: none"> • focus on eight different aspects of online education. • focus on Self-image and identity, online relationships, online reputation, online bullying and health, wellbeing and lifestyle. • focus on managing online information, privacy and security and copyright and ownership. • begin their computing learning by understanding how to switch equipment on and off. • make marks, click, drag and swipe on a screen. • understand that information can be retrieved from computers and talk about how technology helps to communicate with other people. • focus on the use of remote control toys, Beebots and use the internet for simple searches. • learn about online safety, information sharing, how to be keep safe and who to speak to if someone is unkind online. • Gain a secure understanding of the characteristics of effective learning and how these are applied in computing. 	<p>In EYFS, children will have been exposed to a range of computing experiences and this will support their transition into KS1.</p> <p>In KS1 children will:</p> <ul style="list-style-type: none"> • be taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. • be secure with the terms: algorithm, events, program and debugging. • write a program to complete an algorithm and predict how a change in sequence may impact on the outcome of a program. • be equipped to use information technology to create programs, systems and a range of content. • gain a better understanding of the range of character traits that they will employ to express their ideas. • create, organise, store, manipulate and retrieve digital content. • use technology safely and respectfully, keeping personal information private and identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. • become active participants in a digital world. 	<p>Children will build on their knowledge and understanding of computational thinking and creativity from KS1. They will be secure with the terms: algorithm, events, program, sequence, decomposition, repeat and loops.</p> <p>In LKS2 children will:</p> <ul style="list-style-type: none"> • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems and solving problems by decomposing them into smaller parts. • use sequence, selection, repetition and logical reasoning to explain how some algorithms work and to detect and correct errors in programs. • select, use and combine a variety of software 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. • understand computer networks including the internet; how they can provide multiple services and the opportunities they offer for communication and collaboration. • develop a repertoire of character traits that they will adopt through using technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. • demonstrate traits of competency, confidence and creativity and this will provide a solid transition as they move into UKS2. 	<p>In UKS2 children will:</p> <ul style="list-style-type: none"> • have developed deep links with mathematics, science, and design technology • use the terms: algorithm, events, program, sequence, decomposition, repeat, loops, selection, conditional and variables. • plan and write an algorithm using commands, sequence, repetition and selection; confidently detect and debug errors in more complex algorithms and programs; use selection to create games in which the user must make a choice and use their skills and understanding of selection in more than two programs and evaluate the effectiveness of their programming and suggest improvements. • apply the skills they have learnt across multiple application programs, including database. • be confident in how to assess and action different strategies to limit the impact of technology on their health and explain the importance of self-regulating their use of technology. • understand how to build a positive online reputation. • know how to capture online bullying content to share with others who can help them and identify a range of ways to report concerns both in school and at home. • be equipped to understand and change the world through computing as they become responsible and digitally literate, resulting in active participants in a digital world and becoming lifelong learners.