Withnell Fold Primary School



Computing Progression
End of Year Expectations

Year 6	▶ Be competent users of technology using it safely, respectfully and responsibly and know about digital footprints and 'strong' passwords. ▶ Demonstrate that they can identify the risks involved with content and contact and they know a wide range of ways of reporting any concerns they have. ▶ Understand what acceptable and unacceptable online behaviour is. ▶ Use strategies to verify and evaluate the reliability and accuracy of information on the internet and understand what copyright and plagiarism is and how it relates to their work.	▶ Independently select, use and combine a wide range of software on a variety of devices. ▶ Design and create a range of digital assets such as programs, systems and multimedia content for a defined purpose and audience. ▶ Use advanced searches including the use of operators. ▶ Create spreadsheet models to investigate real life problems, using their knowledge to make predictions.	▶ Know how search engines work and what 'ranking' is when related to search engines. ▶ Design and create more complex programs using sequence, repetition, selection and variables appropriately. ▶ Develop their computational thinking can demonstrate that they can decompose and evaluate their tasks and correct errors in their algorithms and programs. ▶ Be confident in their knowledge of inputs and outputs and plan and write programs to solve tasks to control external devices such as sensors and motors. ▶ Know how different computer networks work, including the roles of the components and the opportunities and benefits that they offer for communication and collaboration. ▶ Understand the difference between the internet and internet services.
Year 5	▶ Use technology safely, respectfully and responsibly and continue to develop skills to identify risks involved with contact and content including developing an understanding of digital footprints. ▶ Know a range of ways of reporting concerns about content and contact involving the internet and other communication technologies. ▶ Understand what acceptable and unacceptable online behaviour is. ▶ Use strategies to verify the reliability and accuracy of information on the internet and understand copyright.	▶ Select, use and combine a range of software and use a wider range of devices to create a variety of digital assets such as programs, systems, databases, spreadsheets and multimedia content for a defined purpose. ▶ Understand about the use of operators in searching and continue developing their effective search techniques by using Boolean operators in their searches. ▶ Create simple spreadsheet models to investigate real life problems.	▶ Design and write programs using sequence, repetition, selection and variables. ▶ Develop greater understanding of how to use selection and repetition in more complex programs. ▶ Understand how search engines work. ▶ Further develop their computational thinking showing they can plan and decompose tasks; explain how the algorithms they write work and correct errors in their programs. ▶ Plan and write programs to control external devices such as sensors and motors and explain about the inputs and outputs used. ▶ Have an understanding of how a computer network works and the opportunities that it offers for communication and collaboration.
Year 4	▶ Use technology respectfully, responsibly and safely, knowing how to keep their information and passwords secure. ▶ Know different ways of reporting concerns about content and contact involving the internet and other communication technologies. ▶ Have a greater understanding of what is acceptable and unacceptable online behaviour. ▶ Start to develop strategies to verify the reliability and accuracy of information on the internet and develop an awareness of copyright.	▶ Use and combine a variety of software and devices with increasing independence, to create a range of digital assets such as programs, databases, systems and multimedia content. ▶ Understand how Boolean operators can change searches and select appropriate information for their tasks. ▶ Use models and simulations to produce graphs and explore patterns and relationships.	▶ Design and write more complex algorithms and programs using sequence, repetition and selection. ▶ Further develop their computational thinking to help debug their programs and design and solve problems and tasks. ▶ Have a simple understanding of how search engines work. ▶ Develop their understanding of inputs and outputs further, demonstrating how they can use programs to control external devices such as sensors, motors and robots. ▶ Understand the difference between the internet and World Wide Web.

Computing
End of Year Expectations

	Digital Literacy	Information Technology	Computer Science
Year 3	▶ Use technology safely and respectfully and have an understanding of how to keep information secure. ▶ Realise the importance of reporting any concerns they have using the internet and other communication technologies, and know some ways in which they can do it. ▶ Develop an understanding of what is acceptable and unacceptable online behaviour. ▶ Realise that not all information on the internet is trustworthy and there is a need to verify its reliability.	▶ Use a variety of software and devices to create digital assets such as programs, graphs and multimedia content for a defined purpose. ▶ Develop their search strategies further by refining their use of keywords and starting to use appropriate key phrases and questions. ▶ Use more complex simulations and understand the effects of changing variables.	▶ Plan and write algorithms and programs using sequence and repetition and further develop their computational thinking strategies to solve problems and errors in their algorithms and programs. ▶ Have knowledge and experience of using a range of different inputs and outputs. ▶ Describe some of components of a computer network and some of the ways in which computer networks can be used.
Year 2	▶ Know their responsibilities from their school's acceptable use policy and how to report any concerns they have. ▶ Recognise situations using technology and the internet involving content and contact that are not safe and know where to go for help. ▶ Begin to develop an understanding of the importance of computers and the internet to communicate. ▶ Develop their knowledge of the technology used in everyday life in a range of situations and be able to discuss their ideas.	▶ Use technology with purpose to create, store, organise, retrieve and manipulate digital content. ▶ Learn to make a range of simple digital assets such as presentations, movies, audio files and graphs. ▶ Navigate the web and carry out simple searches using suitable search engines and begin to understand that not everything on the internet is true. ▶ Use simple simulations and understand how they work.	▶ Use algorithms and know that they can be implemented as programs on devices. ▶ Know what debugging is and find errors in their programs. ▶ Understand that programs execute by following a precise set of instructions. ▶ Create simple programs and further develop their strategies and logical thinking to find bugs and predict outcomes in their algorithms and programs.
Year 1	▶ Recognise common uses of information technology beyond school. ▶ Understand the rules and responsibilities outlined by the school's acceptable use policy and begin to understand where to go for help when they have concerns. ▶ Develop an understanding of how to keep their personal information private and understand they need to use technology safely and respectfully.	▶ Use technology with support, to create, store and retrieve digital content such as text and images. ▶ Use a simple search to find information or files. ▶ Develop understanding of how simulations work through exploring simple examples.	▶ Understand what algorithms are and develop strategies to help find bugs in them. ▶ Make very simple programs.

EYFS Links	*To recognise and explore a range of technology and understand it's uses in places such as homes and schools. To select and use technology for particular purposes.*