



| Computing Year 4 | Autumn | Spring | Summer |
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| <p>Pupils should be taught to:</p> <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 | <p><u>Spreadsheets</u> Children will add a formula to a cell to automatically make a calculation in that cell. Children will use the timer, random number and spin button tools. Children will use a series of data in a spreadsheet to create a line graph.</p> <p><u>Online Safety</u> Children will know that security symbols such as a padlock protect their identity online. Children will know the meaning of the term ‘phishing’ and are aware of the existence of scam websites. Children will explain what a digital footprint is and how it relates to identity theft. Children will give examples of things that they would not want to be in their digital footprint. Children will identify possible risks of installing free and paid for software. Children will know that malware is software that is specifically designed</p> | <p><u>Logo</u> Children will create 2Logo instructions to draw patterns of increasing complexity. Children will understand the pu and pd commands. Children will write 2Logo instructions for a word of four letters.</p> <p><u>Coding</u> Children will use a background and objects to create a scene. Children will plan an algorithm for their scene and use 2Code to program it. Children will create a program that includes an IF statement. Children will interpret a flowchart that depicts an IF statement. Children will make use of the X and Y properties of objects in their coding Children will create a program that includes an IF/ ELSE statement. Children will interpret a flowchart that depicts an IF/ ELSE statement.</p> | <p><u>Animation</u> Children will know what the Onion Skin tool does in animation. Children will use the Onion Skin tool to create an animated image. Children will use backgrounds and sounds to make more complex and imaginative animations. Children will know what ‘stop motion’ animation is and how it is created. Children will have used ideas from existing ‘stop motion’ films to recreate their own animation. Children will have shared their animations and commented on each other’s work using display boards and blogs in Purple Mash.</p> <p><u>Effective Search</u> Children will structure search queries to locate specific information. Children will analyse the contents of a web page for clues about the credibility of the information.</p> |



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| <p>ranked, and be discerning in evaluating digital content</p> <ul style="list-style-type: none">• 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. | <p>to disrupt, damage, or gain access to a computer. Children will determine whether activities that they undertake online, infringe another's' copyright. They will know the difference between researching and using information and copying it.</p> <p><u>Hardware Investigators</u> Children will name the different parts of a desktop computer. Children will know what the function of the different parts of a computer is.</p> | | <p><u>Making Music</u> Children will identify and recall a simple rhythm. Children will explain what tempo is, and how changing it can change the mood of a piece of music. Children will create their own simple rhythm using Busy Beats. Children will show an understanding of melody. Children will create a simple melodic pattern using 2Sequence and Busy Beats. Children will use a variety of notes, experimenting with pitch</p> |
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