

Computing Progression

| | KS1 | Year 3/4 | Year 5/6 |
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| E-safety | <p>Identify what things count as personal information</p> <p>Identify what is appropriate and inappropriate behaviour on the internet</p> <p>Agree and follow sensible online safety rules</p> <p>Know to seek help from an adult when they see something that is unexpected or worrying</p> <p>Open and close applications safely and log on and log off from websites;</p> <p>Use agreed search engine to find specific information to answer a question or area of enquiry</p> | <p>Reflect on their roles as digital citizens and reflect on how they are responsible for themselves and others when working online</p> <p>Identify what is appropriate and inappropriate behaviour on the internet, recognize the term cyberbullying</p> <p>Demonstrate understanding of age-appropriate websites and adverts</p> <p>Make good passwords for their accounts, learn about spam and how to deal with it.</p> <p>Begin to understand the implications for the information that they share online and how some websites might use that information without their knowledge</p> | <p>Protect their password and other personal information</p> <p>Recognise how to be a good online citizen and friend understanding how to communicate in a responsible and respectful way</p> <p>Judge what sort of privacy settings might be relevant to reducing different risks, decode website privacy policies, understanding the implications for the info that they share online</p> <p>Discuss scenarios involving online risk</p> <p>Create secure passwords for their accounts, learn about spam and how to deal with it</p> <p>Begin to explore the nature of online audiences and permanency of information online.</p> <p>Begin to understand the significance of published information and personal information</p> <p>Understanding how to prevent and respond to cyberbullying.</p> |

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| Programming | <p>Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn using a basic floor or online robot</p> <p>Develop more complex algorithms by controlling the nature of events: repeat, loops, single events and add and delete features</p> <p>Give a set of instructions to follow and predict what will happen</p> <p>Begin to debug algorithms to improve/change commands</p> <p>Extension: Create a 3D environment, using a graphical language such as Kodu. Link this to a story such as an island adventure</p> | <p>Use logical thinking to solve an open-ended problem by breaking it into smaller parts</p> <p>Write a simple algorithm to achieve a specific outcome</p> <p>keep testing a program, recognising when it needs to be debugged</p> <p>Use variables to create an effect, e.g. repetition, if, when, loop</p> <p>Use graphical programming language, e.g. Scratch or Logo, to draw regular 2D shapes</p> <p>Sequence instructions, for instance to create an animation using Scratch, or by using the timing features in PowerPoint</p> <p>Use flowcharting software (such as Go or Flowgo) to create a simple program to control an onscreen icon</p> <p>Extension : Create a simple game using a graphical language such as Kodu or Scratch</p> | <p>Use external triggers and infinite loops to demonstrate control</p> <p>Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols</p> <p>Use conditional statements and edit variables</p> <p>decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program</p> <p>Explain how their program works</p> <p>Pupils create a computer game, using a graphical language such as Scratch or Kodu</p> <p>Extension: Use and program a raspberry pi to complete a basic task</p> |
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| Multi-media | <p>Use a digital device to take a photo</p> <p>Use software to record sounds</p> <p>Change sounds</p> <p>Save, retrieve and organise work</p> <p>Use basic word processing package to write sentences</p> <p>Create and modify pictures and animations using simple drawing software</p> <p>Explore online simulations e.g. Charlie Chimp</p> | <p>Use software to record, create and edit sounds and capture still images</p> <p>Use software to create an e-book, brochure or poster on a given subject</p> <p>Write and deliver a presentation on a given subject</p> <p>Develop a storyboard to create a simple animation e.g. 'Puppet Pals' or 'Stop Motions' Animation'</p> <p>Record and edit media to create a short film or sound recording</p> <p>Change recorded sounds, volume, duration and pauses</p> | <p>Use software to create an e-book, brochure or poster on a given subject, incorporating a range of media</p> <p>Write and deliver a presentation, incorporating a range of media</p> <p>Adapt or create images to enhance or further develop their work, incorporating it in a wider project</p> <p>Develop a storyboard to create a simple animation; editing the final product in using video editing software</p> <p>Record and edit media to create a short sequence, editing the final product in using video editing software</p> <p>Use a digital device to record sounds and present audio, edit to improve quality</p> |
| Handling Data | <p>Use software package to create pictograms</p> | <p>Talk about the different ways data can be organised</p> <p>Sort and organise information to use in other ways</p> <p>Search a ready-made database to answer questions</p> | <p>Construct data selecting the most appropriate application</p> <p>Interpret data, e.g. noticing inaccurate data, comparing data</p> <p>Use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets</p> <p>Add data to an existing database</p> |

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| Technology in our Lives | <p>Recognise ways that technology is used in the home and community, e.g. use of the internet, taking photos, blogs, shopping</p> <p>Recognise and use age-appropriate websites</p> | <p>Explain ways to communicate with others online e.g. blogging ,mailing and working on shared documents using the pupil sites of the DLG</p> <p>Use search tools to find and use an appropriate website and content</p> <p>Use strategies to improve results when searching online</p> <p>Make choices about told and devices used considering purpose</p> | <p>Learn that connected devices exchange packets of data and this can convey a range of information from a text to a video call</p> <p>Search for information using appropriate websites and advanced search functions as appropriate</p> <p>Use strategies to check the reliability of information e.g. cross check with another source</p> <p>Begin to analyse and evaluate the usefulness and relevancy of online search results</p> <p>Evaluate websites, online information and advertising by rating the trustworthiness and usefulness of websites</p> <p>Understand copyright and acknowledge the sources of information to avoid plagiarism</p> |
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