

NC Knowledge and Computational Skills	Pupils not securing learning	Pupils achieving depth
<p>Autumn 1 – Document Editing/E-safety</p> <p>How do you get an image onto a document? Where do you save your file to?</p> <p>How can you make a powerpoint move?</p> <p>How do you insert a file from a folder?</p> <p>NC objectives covered: <i>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.</i></p> <p><i>E-Safety - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>All children are able to: Copy and paste text and images Experiment with keyboard shortcuts Edit images inside documents Create word and powerpoint documents.</p> <p>Some will be able to: Extend their formatting on word Extend their features on powerpoint (animations etc).</p>		
<p>Autumn 2 – Internet Research/ E-safety</p> <p>What is a search engine?</p> <p>How do I use the internet safely?</p> <p>How do I know a site can be trusted?</p>		

<p>What is a reliable source?</p> <p>NC objectives covered: <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. E-Safety - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>All children are able to: Use an internet search engine Speak confidently about staying safe online Know what to look for in a safe, trusted, reliable website Can discuss what a source is.</p> <p>Some children will: Seek out more trusted reliable sources to back up their information choices</p>		
<p>Spring 1 – Data Handling/E-safety</p> <p>What is data handling?</p> <p>What is a spreadsheet?</p> <p>Why would you use a spreadsheet?</p> <p>NC objectives covered: <i>Collecting, analysing, evaluating and presenting data and information.</i></p> <p><i>E-Safety - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p>		

<p>All children are able to: Change appearance of cells in a spreadsheet (fill colour and border) add and align text Find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title. To create a spreadsheet for a purpose, adding text, numbers and suitable cell sizes.</p> <p>Create and label suitable charts that present your data.</p> <p>Some children will: Develop their ideas to make them more complex.</p>		
<p>Spring 2 – Scratch/E-safety</p> <p>What is a program?</p> <p>What are loops?</p> <p>How can I insert several sprites onto one background?</p> <p>NC objectives covered: <i>Design, write and debug programs that accomplish specific goals.</i> <i>Use sequence, selection, and repetition in programs; work with various forms of input and output.</i> <i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p> <p><i>E-Safety - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p>		

<p>All children are able to:</p> <p>Program a multiplayer racing game in Scratch:</p> <ul style="list-style-type: none"> – Add a racing track (stages) and cars (sprites) – Program inputs, loops, selection and sensing to control the sprites around the track and have them interact with objects. <p>Program an interactive rock band in Scratch by:</p> <ul style="list-style-type: none"> – Adding instrument sprites and programming keyboard/touch inputs to play the sounds. – Program costume changes to add animations. – Adjust the sound of your instruments using the Scratch sound editor. – Program guitar chord strumming. <p>Some children will:</p> <p>Extend this by making their program more complex.</p> <p>Vary the number of sprites and inputs needed on their background.</p>		
<p>Summer 1 – Scratch (continued)/E-safety</p> <p>What does debug mean?</p> <p>How do I fix an error?</p> <p>How can I use programming to make a quiz?</p> <p>How can I make programming interactive to others.</p> <p>NC objectives covered:</p> <p><i>Design, write and debug programs that accomplish specific goals.</i></p> <p><i>Use sequence, selection, and repetition in programs; work with various forms of input and output.</i></p> <p><i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p>		

<p><i>E-Safety - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>All children are able to: – Debug a program by correcting the error(s) and save it as your own. Program a quiz using inputs, outputs, selection, operators and variables. Use scratch in a more complex way than previously.</p> <p>Some children will: Extend this by making their program more complex. Vary the number of sprites and inputs needed on their background.</p>		
<p>Summer 2 – Music Creation (Garageband)/E-safety What is Garageband?</p> <p>How can I create music on an iPad?</p> <p>What is a synthesizer?</p> <p>Key content – building up layers of music to show progression from Y3 topics covered.</p> <p>NC objectives covered: <i>Create content that accomplish given goals.</i></p> <p><i>E-Safety - Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>All children are able to: Record simple drum beats Add layers to their tracks and build up a song</p>		

<p>Vary the length of their tracks to develop them to suit their needs Add different instruments Trim their sound to suit them</p> <p>Some children will: Make longer songs with multiple layers Include more instruments</p>		
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