



### Computing Progression - Effective Use of Tools: Use software tools to support computing work

| Key Stage 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Lower Key Stage 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Upper Key Stage 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| Across KS1 pupils will:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | In lower KS2 pupils will:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | In upper KS2 pupils will:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Click and drag to make objects on a screen.</p> <p>Type their name on a computer.</p> <p>Use the arrow keys to move the cursor.</p> <p>Use the paint tools to draw a picture.</p> <p>Make marks with the square and line tools.</p> <p>Change the colour and brush sizes.</p> <p>Open a word processor and enter text into a computer.</p> <p>Use backspace to remove text.</p> <p>Identify the toolbar and use bold, italic, and underline.</p> <p>Type capital letters.</p> <p>Use 'undo' to remove changes.</p> <p>Take photos in both landscape and portrait format.</p> <p>Recognise that images can be changed.</p> | <p>Create an effective stop-frame animation.</p> <p>Use onion skinning to help make small changes between frames.</p> <p>Add other media to their animation.</p> <p>Explain that objects in Scratch have attributes.</p> <p>Identify the objects in a Scratch project (e.g. sprites, backdrops).</p> <p>Recognise that commands in Scratch are represented as blocks.</p> <p>Select objects to arrange in a branching database.</p> <p>Independently create questions to use in a branching database.</p> <p>Change font style, size, and colours for a given purpose.</p> <p>Edit text.</p> <p>Paste text and images.</p> | <p>Create and save video content.</p> <p>Select the correct tools to make edits to video.</p> <p>Store, retrieve, and export recording to a computer.</p> <p>Make edits to video and improve the final outcome.</p> <p>Create a database using cards.</p> <p>Choose which field and value are required to answer a given question.</p> <p>Refine a chart by selecting a particular filter.</p> <p>Select an appropriate chart to visually compare data.</p> <p>Move, resize, and rotate objects they have duplicated.</p> <p>Use the zoom tool to help them add detail to their drawings.</p> <p>Change the order of layers in a vector drawing.</p> |

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| <p>Use a tool to achieve a desired effect.</p> <p>Create a pictogram to arrange objects by an attribute.</p> <p>Share what they have found out using a computer.</p> <p>Use a computer program to present information in different ways.</p> | <p>Choose a suitable layout for a given purpose.</p> <p>Choose which keys to use for actions and explain their choices.</p> <p>Explain the relationship between an event and an action.</p> <p>Choose a suitable size for a character.</p> <p>Program movement.</p> <p>Inspect the soundwave view to know where to trim their recording.</p> <p>Save their project so the different parts remain editable.</p> <p>Arrange multiple sounds to create the effect they want.</p> <p>Use data from a sensor to answer a given question.</p> <p>Identify the intervals used to collect data.</p> <p>Sort data to find information.</p> <p>View data at different levels of detail.</p> <p>Use a data logger to collect data.</p> <p>Improve an image by rotating it.</p> | <p>Use layering to create an image.</p> <p>Copy part of a drawing by duplicating several objects.</p> <p>Send information over the internet in different ways.</p> <p>Choose methods of communication to suit particular purposes.</p> <p>Add content to their own web page.</p> <p>Make multiple web pages and link them using hyperlinks.</p> <p>Create hyperlinks to link to other people's work.</p> <p>Construct a formula in a spreadsheet.</p> <p>Apply a formula to multiple cells by duplicating it.</p> <p>Calculate data using different operations.</p> <p>Create a formula which includes a range of cells.</p> <p>Use a spreadsheet to answer questions.</p> <p>Produce a chart.</p> <p>Add 3D shapes to a project.</p> |
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|  | <p>Use photo editing software to crop an image.</p> <p>Experiment with different colour effects.</p> <p>Add to the composition of an image by cloning.</p> <p>Remove parts of an image using cloning.</p> <p>Experiment with tools to select and copy part of an image.</p> <p>Use a range of tools to copy between images.</p> <p>Combine text and my image to complete the project.</p> | <p>Move 3D shapes relative to one another.</p> <p>View 3D shapes from different perspectives.</p> <p>Lift, lower, recolour and resize a 3D object.</p> <p>Duplicate, group, rotate and accurately size a 3D object.</p> <p>Combine a number of 3D objects.</p> <p>Combine objects in a design.</p> |
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