



## BIG IDEAS in Computing

Creating Media

Computer Systems and Networks

Programming

Data Information

**INTENT: Our computing provision aims to equip children with the digital literacy skills necessary to enable them to communicate, create and be an agent of change in the digital world.**

|             | Creating Media   | Computer Systems and Networks   | Programming  | Data Information  |
|-------------|--|---|--|---|
| <b>KS 1</b> | Create a picture using freehand tools using shape, line and colour tools<br><br>Use the undo button<br><br>Letter, number and space keys to enter text, to select text, change the appearance of text<br><br>Capture a digital image<br><br>View photographs on a device | Identify the main parts of a computer<br><br>Use a mouse and keyboard<br><br>Choose a piece of technology to do a job<br><br>Recognise that technology can be used in different ways<br><br>Identify Information technology in school and beyond school | Run a command on a floor robot<br><br>Choose a command for a given purpose<br><br>Build a sequence of commands in steps<br><br>Run a programme on a device<br><br>Choose series of commands that can be run as a programme | Use a computer to view data in different formats and answer questions<br><br>Enter data onto a computer<br><br>Collect simple data<br><br>Identify some attributes<br><br>Explain that objects can be grouped |

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|   | <p>Use filters to edit a photograph</p> <p>Improve a photograph by retaking it</p> <p>experiment with musical patterns on a computer</p> <p>Use a computer to compose music</p>  | <p>Show how to use information technology safely</p>   | <p>Debug a programme</p> <p>Test a prediction by running a sequence</p>   |   |
| <p><b>KS</b><br/><b>2-</b><br/><b>3/</b><br/><b>4</b></p> | <p>To plan an animation , capture an image, review a captured sequence, remove frames to improve an animation</p> <p>To review a project</p> <p>To organise text and image placeholders in a page layout</p> <p>To choose fonts and apply effects to text</p> <p>Record, play and import sound using a computer</p> <p>Recognise digital images can be manipulated</p> <p>Recognise that not all images are real</p> | <p>Explain how computer networks can be used to share information</p> <p>Explain the role of a switch server and wireless access point</p> | <p>Build a sequence of commands to produce a given outcome</p> <p>List an everyday task as set of instructions including repetition</p> <p>Use indefinite loops and count-control loops to produce given outcomes</p> <p>Create two or more sequences that run at the same time</p> | <p>Create questions with yes/no answers</p> <p>Identify an object using a branching database</p> <p>Retrieving information from different levels of a branching database</p> <p>Use a digital device to collect data</p> <p>Use a set of logged data to find information</p> <p>Use a computer programme to sort data</p> |

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| <b>KS<br/>2<br/>5/<br/>6</b> | <p>Add, select, delete, move, duplicate, modify objects</p> <p>Create a vector drawing for a given purpose</p> <p>Identify features of a video recording device</p> <p>Use pan, tilt, zoom and different camera angles</p> <p>Use split, trim and crop when editing a video</p> <p>Position, modify, combine 3D objects</p> <p>Create a webpage</p> <p>Add and edit text to a webpage</p> <p>Insert hyperlinks</p> | <p>Describe input and output of a search engine</p> <p>Demonstrate different search terms produce different results</p> <p>Evaluate the results of search terms</p> <p>Choose an appropriate method of internet communication</p> <p>Decide what should or should not be shared</p> | <p>Create a condition controlled loop</p> <p>Use selection to switch the programme flow</p> <p>Choose a condition to use in a programme</p> <p>Identify a variable in an existing programme</p> <p>Experiment with the value of an existing variable</p> <p>Decide where in a programme to set a variable</p> <p>Update a variable with a user input</p> <p>Use the same variable in more than one location in a programme</p> | <p>choose different ways to view data</p> <p>Choose which attribute and value to search by to answer a question</p> <p>Choose multiple criteria to search data to answer a given question</p> <p>Choose suitable ways to present information</p> <p>Calculate data using a formula</p> <p>Use functions to create new data</p> |