



## Computing Subject knowledge, discipline and vocabulary

### Year 3 Autumn

Unit	Connecting Computers	Stop Frame Animation
Previous Learning	<ul style="list-style-type: none"><li>I can identify computers used around the home, school and community.</li><li>I can describe how computers can be used responsibly.</li></ul>	<ul style="list-style-type: none"><li>I can use technology to capture photographs</li><li>I can use editing tools to alter images</li><li>I can identify ways to develop good photography composition</li></ul>
Subject Knowledge (what)	<p><b>Understanding the connections made between digital devices.</b></p> <p>NC:</p> <ul style="list-style-type: none"><li><i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></li><li><i>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</i></li><li><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, including collecting, analysing, evaluating and presenting data and information</i></li></ul> <ul style="list-style-type: none"><li>A process acts on the inputs.</li><li>An output is produced by the process.</li><li>Changing the process can affect the output.</li><li>A digital device is made up of several parts.</li><li>Computers can be connected to each other.</li><li>Computer systems can change the way we work.</li><li>Devices in a network are connected to each other.</li><li>A network is made up of a number of components.</li><li>Information is sent through multiple connections.</li></ul>	<p><b>Understanding how stop frame animation is created and edited.</b></p> <p>NC:</p> <ul style="list-style-type: none"><li>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</li><li>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li></ul> <ul style="list-style-type: none"><li>An animation is made up of a sequence of images.</li><li>Animations can be drawn images or captured photographs.</li><li>Consistency is necessary to maintain smooth animation.</li><li>Additional media can be added to animation.</li></ul>
Subject Discipline (how)	<ul style="list-style-type: none"><li>Identify input and output devices.</li><li>Explore how computer systems accept inputs and processes it to produce an output.</li><li>Explore how a computer network can be used to share information.</li><li>Explore the role of a switch, server, and wireless access point in a network.</li><li>Identify network devices.</li><li>Explore how networks can be connected to other networks.</li><li>Compare using digital and non-digital devices for different activities.</li></ul>	<ul style="list-style-type: none"><li>Use technology to create an animation.</li><li>Set up devices to capture stop frame photos.</li><li>Explore using tools to review subject position.</li><li>Remove images to improve animation.</li><li>Add additional media to animation.</li><li>Export media.</li></ul>

<b>Key Vocab</b>	<ul style="list-style-type: none"> <li>• <b>Digital device</b>- a piece of equipment that uses digital data.</li> <li>• <b>Input</b>- something that is put in/take int to a digital device.</li> <li>• <b>Output</b>- the result from a process.</li> <li>• <b>Process</b>- steps to change information.</li> <li>• <b>Digital</b> - storing information in the form of numbers.</li> <li>• <b>Program</b>- a set of processes completed to achieve a task.</li> <li>• <b>Non-digital</b>- not relating to or using computers.</li> <li>• <b>Connection</b>- a link between two devices.</li> <li>• <b>Network</b>- two or more computers that are connected.</li> <li>• <b>Network switch</b>- a device that connects other devices together.</li> <li>• <b>Server</b>- a computer that manages the network and stores files.</li> <li>• <b>Wireless Access Point</b>- a networking device that allows Wi-Fi devices to connect to a network.</li> <li>• <b>Network cable</b>- wires used to connect wired devices to the network.</li> <li>• <b>Network sockets</b>- a socket that allows network cables to be connected to the network.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Animation</b>- the art of creating moving images using computers.</li> <li>• <b>Flip book</b>- a series of images that, when viewed in quick succession, appear to animate.</li> <li>• <b>Stop-frame animation</b>- animation technique using images in which objects are moved slightly between each frame.</li> <li>• <b>Frame</b>- a single photograph.</li> <li>• <b>Sequence</b>- the specific order things are placed in.</li> <li>• <b>Image</b>- a representation of an external form.</li> <li>• <b>Photograph</b>- an image created using a camera.</li> <li>• <b>Digital</b> - storing information in the form of numbers.</li> <li>• <b>Program</b>- a set of processes completed to achieve a task.</li> <li>• <b>Non-digital</b>- not relating to or using computers.</li> <li>• <b>Onion skinning</b>- a technique used in creating animated cartoons and editing movies to see several frames at once.</li> <li>• <b>Consistency</b>- constant behaviour.</li> <li>• <b>Evaluation</b>- assess a project.</li> <li>• <b>Media</b>- electronic devices used to store data.</li> <li>• <b>Import</b>- to convert a file from one application to another.</li> <li>• <b>Transition</b>- a change from one movement to another.</li> </ul>
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