

## Y5 Computing (Digital Literacy & IT)

National Curriculum	Knowledge	Skills	Y4 Vocab	Y5 Vocab
<ul style="list-style-type: none"> <li>• 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.</li> <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> </ul>	<ul style="list-style-type: none"> <li>• Understand that computers can control the objects we interact with.</li> <li>• Understand that real life systems can be tested before been put to use.</li> <li>• Know that there are theoretical models, such as flowcharts, that can be used as a plan before coding.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw a flowchart using the correct symbols.</li> <li>• Interpret a flowchart.</li> <li>• Connect symbols in sequence.</li> <li>• Insert new symbols to modify a flowchart</li> <li>• Edit symbols to modify the effect.</li> <li>• Control multiple outputs at the same time.</li> <li>• Create a flowchart to control traffic lights.</li> <li>• Create a repeating loop.</li> <li>• Create a subroutine separate to the main flowchart program.</li> <li>• Call a subroutine within a flowchart.</li> </ul>	<ul style="list-style-type: none"> <li>• Animation</li> <li>• Technique</li> <li>• Frame</li> <li>• Linked Frames</li> <li>• Frame Rate</li> <li>• Time Slider</li> <li>• Animate</li> <li>• Movement</li> <li>• Still Image</li> <li>• Interaction</li> <li>• Record</li> <li>• Stop</li> <li>• Play</li> <li>• Backdrop</li> </ul>	<ul style="list-style-type: none"> <li>• Flowchart / Flowol</li> <li>• Sequence</li> <li>• Connect</li> <li>• Symbols</li> <li>• Instructions</li> <li>• Edit</li> <li>• Modify</li> <li>• Input</li> <li>• Output</li> <li>• Control</li> <li>• Conventional Sequence</li> <li>• Loop</li> <li>• Subroutine</li> </ul>
<b>Lessons to Teach</b>		<b>Key Questions</b>		
<ul style="list-style-type: none"> <li>• Lesson 1: What is a flowchart?</li> <li>• Lesson 2: Programming Outputs</li> <li>• Lesson 3: Multiple Outputs</li> </ul>	<ul style="list-style-type: none"> <li>• Lesson 4: Inputs &amp; Decisions</li> <li>• Lesson 5: Subroutines</li> <li>• Lesson 6: Combining Skills</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Why do you think it is called a flowchart?</i></li> <li>• <i>What real life systems are controlled by software?</i></li> <li>• <i>What are the different types of inputs?</i></li> <li>• <i>What are the different types of outputs?</i></li> </ul>		
<b>Previous Learning</b>		<b>Future Learning</b>		
<ul style="list-style-type: none"> <li>• Understand how computers have advanced animation techniques (K)</li> <li>• Understand animation is a series of still images sped up to look like movement (K)</li> <li>• Edit and refine still images to improve animation (S)</li> <li>• Animate the interaction between two characters (S)</li> <li>• Use a time slider to find points within an animation to insert or edit objects (S)</li> <li>• Use a camera to create stop-motion animation (S)</li> </ul>		<ul style="list-style-type: none"> <li>• Understand that a network is a series of connected computers or devices, often controlled through a server (K)</li> <li>• Know a variety of cables and connectors and what their purpose is (K)</li> <li>• Understand that a computer / device connects to the Internet via a router (K)</li> <li>• Draw a detailed representation of a network with all the various components (S)</li> <li>• Match cables and connectors with their descriptions (S)</li> <li>• Explain the journey of a website from first request to appearing on the screen (S)</li> </ul>		