

## Year 6 - Skills & Knowledge Progression By Strand

Year	Multimedia	Programming	Online	E-Safety	Data
6	<p><b>Unit 1: Animation (Monkey Jam)</b> Plan a multi-scene animation including characters, scenes, camera angles and special effects.</p> <p>Use stop-go animation software with an external camera to shoot the animation frames.</p> <p>Adjust the number of photographs taken and the playback rate to improve the quality of the animation.</p> <p>Publish their animation and use a movie editing package to edit/refine and add titles.</p> <p><b>Unit 2: Video (MovieMaker)</b> Storyboard and capture videos for a purpose.</p> <p>Plan for the use of special effects/transitions to enhance their video.</p>	<p><b>Unit 1: Introduction to Python</b> Navigate Python programming environment Idle</p> <p>Declare variables</p> <p>Use a range of statements</p> <p>Use selection algorithms</p> <p>Use comparison and numerical operators</p> <p><b>Unit 2: Scratch Temple Run</b> Design their own game including sprites, backgrounds, scoring and/or timers.</p> <p>Their game uses conditional statements, loops, variables and broadcast messages.</p> <p>Their game finishes if the player wins or loses and the player knows if they</p>	<p><b>Blogging (Ask UVHS about blog space)</b> Register for a blog: selecting a url and navigate to their blog once it is created.</p> <p>Alter the theme and appearance of their blog, adding background images etc.</p> <p>Create a new post, save it as a draft and publish it.</p> <p>Embed photos, hyperlinks and videos into posts.</p> <p>Re-organise posts and remove posts they no longer want.</p> <p>Like/follow other blogs and build up their blog content over the year.</p>	<p>Find <i>report</i> and <i>flag</i> buttons in commonly used sites and name sources of help (Childline, Cybermentors, etc)</p> <p>‘click-CEOP’ button and explain to parents what it is for.</p> <p>Discuss scenarios involving online risk.</p> <p>State the source of information found on the internet.</p> <p>Act as a role model for younger pupils, including promoting <i>Sid’s Top Tips</i>.</p>	<p>Create data collection forms and enter data from these accurately.</p> <p>Know how to check for and spot inaccurate data.</p> <p>Know which formulas to use when I want to change my spreadsheet model.</p> <p>Make graphs from the calculations on my spreadsheet.</p> <p>Sort and filter information.</p> <p>Understand that changing the numerical data effects a calculation.</p>

	<p>Transfer footage to iMacs for more advanced editing.</p> <p>Trim, arrange and edit audio levels of video to improve the quality of their outcome.</p> <p>Add titles, credits, transitions, special effects.</p> <p>Export their video in different formats for different purposes</p>	<p>have won or lost.</p> <p>Evaluate the effectiveness of their game and debug if required.</p>			
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## Year 6 - Key Knowledge Objectives – Programming

- Algorithms can be represented symbolically [flowcharts] or using instructions in a clearly defined language [turtle graphics]
- Algorithms are developed according to a plan and then tested. Algorithms are corrected if they fail these tests.
- Algorithms can include selection (if) and repetition (loops).
- A well-written program tells a reader the story of how it works, both in the code and in human-readable comments
- Computers can be programmed so they appear to respond 'intelligently' to certain inputs.