










<p><b>Expectations</b></p> <ul style="list-style-type: none"> <li>I can talk about audience, atmosphere and structure when planning a particular outcome.</li> <li>I can confidently identify the potential of unfamiliar technology to increase my creativity.</li> <li>I can combine a range of media, recognising the contribution of each to achieve a particular outcome.</li> <li>I can tell you why I select a particular online tool for a specific purpose.</li> <li>I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.</li> </ul>	<p><b>Vocabulary to use</b></p> <table border="1"> <tr> <td data-bbox="712 284 1025 909"> <p><b>Animate Animation App Audience Bullet points Clipart Comic strip Document Edit Folder Font Greenscreen Insert Heading / sub-heading Hyperlink Layout</b></p> </td> <td data-bbox="1025 284 1359 909"> <p><b>Narration Persuasive Production Right click Select Screen shot Shift Slides Software Sound effect Sound recording Storyboard Style Tab Template Theme</b></p> </td> </tr> </table>		<p><b>Animate Animation App Audience Bullet points Clipart Comic strip Document Edit Folder Font Greenscreen Insert Heading / sub-heading Hyperlink Layout</b></p>	<p><b>Narration Persuasive Production Right click Select Screen shot Shift Slides Software Sound effect Sound recording Storyboard Style Tab Template Theme</b></p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Effectively use right click menu within documents and presentations</li> <li>Recognise file types for text, image, and video files</li> <li>Save as a particular file type</li> <li>Select menu options within a variety of apps</li> <li>Create tables</li> <li>Use find and replace when editing documents</li> <li>Store documents and videos online where they can be accessed by themselves and shared with others</li> <li>Use knowledge of software and apps to combine technologies to support my learning</li> </ul>	
<p><b>Animate Animation App Audience Bullet points Clipart Comic strip Document Edit Folder Font Greenscreen Insert Heading / sub-heading Hyperlink Layout</b></p>	<p><b>Narration Persuasive Production Right click Select Screen shot Shift Slides Software Sound effect Sound recording Storyboard Style Tab Template Theme</b></p>					
<p><b>Expected prior learning</b></p> <ul style="list-style-type: none"> <li>Use editing tools to refine work</li> <li>Use bullet points and text boxes</li> <li>Select and combine use of appropriate tools to create effect on audience</li> <li>Work collaboratively on documents and presentations</li> </ul>	<p><b>Cross curriculum context</b></p> <ul style="list-style-type: none"> <li>English</li> <li>Capture learning in a topic</li> <li>Choose to use technology to present historical, geographical, religious, cultural, mathematical, or other learning</li> </ul>		<p><b>Experiences</b></p> <ul style="list-style-type: none"> <li>Create promotional video</li> <li>Use hyperlinks within a non-linear presentation</li> <li><i>Build a location within Minecraft and capture to use within own creative writing</i></li> </ul>			
<p><b>Concepts and understanding</b></p> <ul style="list-style-type: none"> <li>Plan for atmosphere and outcomes</li> <li>Identify technology to increase potential for creativity</li> <li>Select online tools for different purposes</li> <li>Different media have different file types</li> </ul>	<p><b>Develop Computational thinking</b></p> <p>Expectations: Computational thinker model <a href="http://bit.ly/comptinkingSomerset">http://bit.ly/comptinkingSomerset</a></p> <table border="1"> <tr> <td data-bbox="712 1257 1288 1450"> <p><b>Attitudes</b> Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1288 1257 1534 1450">  </td> <td data-bbox="1534 1257 2168 1450"> <p><b>Skills</b> Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table>			<p><b>Attitudes</b> Comfortable making mistakes Perseverance Imagination Collaboration</p>		<p><b>Skills</b> Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p>
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# Year 6 Programming Knowledge Map

<p><b>Expectations</b></p> <ul style="list-style-type: none"> <li>I can deconstruct a problem into smaller steps, recognising similarities to solutions used before.</li> <li>I can explain and program each of the steps in my algorithm.</li> <li>I can evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm.</li> <li>I can recognise when I need to use a variable to achieve a required output.</li> <li>I can use a variable and operators to stop a program.</li> <li>I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen.</li> <li>I can use logical reasoning to detect and correct errors in a algorithms and programs.</li> </ul>	<p><b>Vocabulary to use</b></p> <table border="1"> <tr> <td data-bbox="772 220 1025 799"> <p><b>Algorithm</b> <b>Block</b> <b>Collaboration</b> <b>Command</b> <b>Computational thinking</b> <b>Control</b> <b>Debug</b> <b>Decomposition</b> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b></p> </td> <td data-bbox="1025 220 1359 799"> <p><b>Make mistakes</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <b>Selection (If Then)</b> <b>Sequence</b> <b>Sprite</b> <b>Variable</b> <b>X position / Y position</b></p> <p><i>Vocabulary to develop</i></p> <p><i>Abstraction</i> <i>Broadcast</i></p> </td> </tr> </table>	<p><b>Algorithm</b> <b>Block</b> <b>Collaboration</b> <b>Command</b> <b>Computational thinking</b> <b>Control</b> <b>Debug</b> <b>Decomposition</b> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b></p>	<p><b>Make mistakes</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <b>Selection (If Then)</b> <b>Sequence</b> <b>Sprite</b> <b>Variable</b> <b>X position / Y position</b></p> <p><i>Vocabulary to develop</i></p> <p><i>Abstraction</i> <i>Broadcast</i></p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Securely access a variety of devices and online resources</li> <li>Store projects online where they can be accessed by themselves and shared with others</li> <li>Work collaboratively to learn and create</li> <li>Investigating an individual block to improve understanding</li> <li>Use abstraction to identify ideas to incorporate in design</li> <li>Make a block - define a sequence as a procedure to use within a program</li> <li>Use operator blocks for calculations, including pick random</li> <li>Self and peer review</li> <li>Review, refine and improve projects</li> </ul>	
<p><b>Algorithm</b> <b>Block</b> <b>Collaboration</b> <b>Command</b> <b>Computational thinking</b> <b>Control</b> <b>Debug</b> <b>Decomposition</b> <b>Design</b> <b>Effect</b> <b>Event</b> <b>Forever</b> <b>Imagine</b> <b>Implement</b> <b>Input</b></p>	<p><b>Make mistakes</b> <b>Pattern</b> <b>Output</b> <b>Persevere</b> <b>Repeat</b> <b>Rotation</b> <b>Selection (If Then)</b> <b>Sequence</b> <b>Sprite</b> <b>Variable</b> <b>X position / Y position</b></p> <p><i>Vocabulary to develop</i></p> <p><i>Abstraction</i> <i>Broadcast</i></p>				
<p><b>Expected prior learning</b></p> <ul style="list-style-type: none"> <li>Make and use variables</li> <li>Use selection, forever and operator blocks</li> <li>Design process including thinking through algorithm, identifying sprites and background</li> <li>Create and import sprites and backgrounds</li> <li>Creativity being a combination of imagination and logical thinking</li> <li>Identifying inputs and outputs</li> </ul>	<p><b>Cross curriculum context</b></p> <ul style="list-style-type: none"> <li>English: participation in collaborative conversations, give well-structured descriptions; use pattern recognition and decomposition within spelling, word reading and structure of writing; algorithms when planning writing; abstraction to identify main ideas</li> <li>Maths: understanding of number, properties of shapes, problem solving</li> </ul>	<p><b>Experiences</b></p> <ul style="list-style-type: none"> <li>Use of block challenges to assess knowledge</li> <li>Predict, Run, Investigate, and modify a simple and a more complex Scratch Times Table quiz</li> <li>Use a variable as a score</li> <li><i>Make times table quiz more efficient</i></li> <li>Design process to make own quiz</li> <li>RAG algorithm and implement as a program</li> <li>Apply knowledge using other software / apps</li> <li><i>Apply knowledge to program a physical object</i></li> </ul>			
<p><b>Concepts and understanding</b></p> <ul style="list-style-type: none"> <li>Abstraction to increase manageability and effectiveness of design process</li> <li>Errors can occur in algorithm as well as in program</li> <li>Variables can be an input and can be used to control output</li> </ul>	<p><b>Develop Computational thinking</b></p> <p>Expectations: Computational thinker model <a href="http://bit.ly/comphinkingSomerset">http://bit.ly/comphinkingSomerset</a></p> <table border="0"> <tr> <td data-bbox="772 1273 1299 1457"> <p><b>Attitudes</b></p> <p>Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1299 1273 1523 1457" style="text-align: center;">  </td> <td data-bbox="1523 1273 2177 1457"> <p><b>Skills</b></p> <p>Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table>		<p><b>Attitudes</b></p> <p>Comfortable making mistakes Perseverance Imagination Collaboration</p>		<p><b>Skills</b></p> <p>Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p>
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# Year 6 Technology in our Lives Knowledge Map

<p><b>Expectations</b></p> <ul style="list-style-type: none"> <li>I can tell you the Internet services I need to use for different purposes.</li> <li>I can describe how information is transported on the Internet.</li> <li>I can select an appropriate tool to communicate and collaborate online.</li> <li>I can talk about the way search results are selected and ranked.</li> <li>I can check the reliability of a website.</li> <li>I can tell you about copyright and acknowledge the sources of information that I find online.</li> <li>I know that websites can use my data to make money and target their advertising</li> </ul>	<p><b>Vocabulary to use</b></p> <table border="1"> <tr> <td data-bbox="714 233 1025 344"> <p><b>Blog</b> <b>Citation</b> <b>Client</b> <b>Copyright</b> <b>Digital content</b> <b>Digital advertising</b> <b>Hyperlink</b> <b>Internet Service</b> <b>Provider</b> <b>QR Code</b> <b>Reliability</b> <b>Search engine</b> <b>Search result</b> <b>Search query</b></p> </td> <td data-bbox="1025 233 1352 344"> <p><b>Vlog</b> <b>Webpage</b> <b>Website</b></p> </td> </tr> <tr> <td colspan="2" data-bbox="714 344 1352 421"> <p><i>Vocabulary to develop</i></p> </td> </tr> <tr> <td colspan="2" data-bbox="714 421 1352 745"> <p><i>Domain</i> <i>Filter</i> <i>LAN Local Area Network</i> <i>Network</i> <i>Packets</i> <i>Protocol</i> <i>Router</i> <i>WAN Wider Area Network</i></p> </td> </tr> </table>	<p><b>Blog</b> <b>Citation</b> <b>Client</b> <b>Copyright</b> <b>Digital content</b> <b>Digital advertising</b> <b>Hyperlink</b> <b>Internet Service</b> <b>Provider</b> <b>QR Code</b> <b>Reliability</b> <b>Search engine</b> <b>Search result</b> <b>Search query</b></p>	<p><b>Vlog</b> <b>Webpage</b> <b>Website</b></p>	<p><i>Vocabulary to develop</i></p>		<p><i>Domain</i> <i>Filter</i> <i>LAN Local Area Network</i> <i>Network</i> <i>Packets</i> <i>Protocol</i> <i>Router</i> <i>WAN Wider Area Network</i></p>		<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Securely access a variety of devices and online resources</li> <li>Store documents and videos online where they can be accessed by themselves and shared with others</li> <li>Use knowledge of software and apps to combine technologies to support my learning</li> <li>Explanation of learning</li> <li>Create a graphic organiser</li> <li>Use effective search skills – filters, knowledge of appropriate search engines and websites</li> <li>Use a collaborative tool to collect and share information with peers</li> </ul>
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<p><b>Expected prior learning</b></p> <ul style="list-style-type: none"> <li>World Wide Web is one part of Internet</li> <li>Evaluate information online for reliability</li> <li>Recognise persuasion in digital adverts</li> <li>Efficient web searching</li> <li>Search results are selected and ranked by private companies</li> <li>Cite sources of images and text</li> <li><i>Participate in Scratch online community</i></li> </ul>	<p><b>Cross curriculum context</b></p> <ul style="list-style-type: none"> <li>English: ask relevant questions, explain understanding of information, use spoken language, identify main ideas, write for different purposes, distinguish between fact and opinion</li> <li>Investigate information for a topic</li> <li>Investigate information for historical, geographical, religious, cultural, mathematical or other learning</li> </ul>	<p><b>Experiences</b></p> <ul style="list-style-type: none"> <li>Make a list of internet services and their use</li> <li>Explanation of how information is stored and moves on the internet</li> <li>Create a graphic organiser to represent a webpage</li> <li>Investigate search engines</li> <li>Plan an effective strategy for research</li> <li>Explanation of citing sources of information</li> <li>Use online collaborative tools such as Padlet</li> </ul>						
<p><b>Concepts and understanding</b></p> <ul style="list-style-type: none"> <li>Internet services are used for different purposes</li> <li>Information is moved in packets on the internet</li> <li>Responsibility is part of using online resources for own purposes</li> </ul>	<p><b>Develop Computational thinking</b></p> <p>Expectations: Computational thinker model <a href="http://bit.ly/comptinkingSomerset">http://bit.ly/comptinkingSomerset</a></p> <table border="0"> <tr> <td data-bbox="714 1211 1288 1393"> <p><b>Attitudes</b> Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1288 1211 1534 1393" style="text-align: center;">  </td> <td data-bbox="1534 1211 2168 1393"> <p><b>Skills</b> Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table>		<p><b>Attitudes</b> Comfortable making mistakes Perseverance Imagination Collaboration</p>		<p><b>Skills</b> Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p>			
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# Year 6 Data Handling Knowledge Map

<p><b>Expectations</b></p> <ul style="list-style-type: none"> <li>I can plan the process needed to investigate the world around me.</li> <li>I can select the most effective tool to collect data for my investigation.</li> <li>I can check the data I collect for accuracy and plausibility.</li> <li>I can interpret the data I collect.</li> <li>I can present the data I collect in an appropriate way.</li> <li>I use the skills I have developed to interrogate a database.</li> </ul>	<p><b>Vocabulary to use</b></p> <table border="1"> <tr> <td data-bbox="712 215 1025 678"> <p>Analyse Average Chart Collect Complex questions Data Database Data logger Decision tree Field Graph Hypothesis Information Interrogate Interpret</p> </td> <td data-bbox="1025 215 1355 678"> <p><b>Investigate Knowledge Model</b> Plausible Predict Process Questions Record Results Tally Sort Venn diagram</p> <p><i>Vocabulary to develop</i></p> <p>Anomaly Formulae</p> </td> </tr> </table>	<p>Analyse Average Chart Collect Complex questions Data Database Data logger Decision tree Field Graph Hypothesis Information Interrogate Interpret</p>	<p><b>Investigate Knowledge Model</b> Plausible Predict Process Questions Record Results Tally Sort Venn diagram</p> <p><i>Vocabulary to develop</i></p> <p>Anomaly Formulae</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Store documents online where they can be accessed by themselves and shared with others</li> <li>Use knowledge of software and apps to combine technologies to support my learning</li> <li>Interrogate an online database</li> <li>Interpret data</li> <li>Plan an investigation of data collected by others</li> <li>Plan an investigation that will require data logging</li> <li>Identify outcomes to share with others</li> <li>Present outcomes responsibly</li> </ul>	
<p>Analyse Average Chart Collect Complex questions Data Database Data logger Decision tree Field Graph Hypothesis Information Interrogate Interpret</p>	<p><b>Investigate Knowledge Model</b> Plausible Predict Process Questions Record Results Tally Sort Venn diagram</p> <p><i>Vocabulary to develop</i></p> <p>Anomaly Formulae</p>				
<p><b>Expected prior learning</b></p> <ul style="list-style-type: none"> <li>Use a data logger (app or device) to sense and record discrete and continuous data</li> <li>Work collaboratively to plan an investigation</li> <li>Interrogate information collected and presented by others</li> <li>Add to a database and/or a spreadsheet</li> <li>Graph information from a database or a spreadsheet</li> </ul>	<p><b>Cross curriculum context</b></p> <ul style="list-style-type: none"> <li>English: ask relevant questions, explain understanding of information, identify main ideas, write for different purposes, distinguish between fact and opinion</li> <li>Maths: Use appropriate software and data loggers to create and interpret line graphs. Complete and interpret tables to present and understand information.</li> <li>Investigate and represent information for learning across the curriculum</li> </ul>	<p><b>Experiences</b></p> <ul style="list-style-type: none"> <li>Consider data and information in an online database eg Olympics</li> <li>Explore different online databases</li> <li>Use an online database to answer questions set by friends</li> <li>Plan an investigation based on online data</li> <li>Select information to present to others</li> <li><i>Use data loggers and other devices for an investigation about fitness</i></li> <li>Present findings of an investigation to others</li> </ul>			
<p><b>Concepts and understanding</b></p> <ul style="list-style-type: none"> <li>Data becomes information when it is set in a context and becomes knowledge as it is interpreted and presented to others</li> <li>We have a responsibility to share accurate data and information</li> <li>Big Data is available to increase information and knowledge</li> </ul>	<p><b>Develop Computational thinking</b></p> <p>Expectations: Computational thinker model <a href="http://bit.ly/comptinkingSomerset">http://bit.ly/comptinkingSomerset</a></p> <table border="0"> <tr> <td data-bbox="712 1228 1288 1412"> <p><b>Attitudes</b></p> <p>Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1288 1197 1433 1380" style="text-align: center;">  </td> <td data-bbox="1433 1228 2150 1412"> <p><b>Skills</b></p> <p>Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table>		<p><b>Attitudes</b></p> <p>Comfortable making mistakes Perseverance Imagination Collaboration</p>		<p><b>Skills</b></p> <p>Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p>
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