

Expectations • I can use photos, video and sound to create an atmosphere when presenting to different audiences. • I am confident to explore new media to extend what I can achieve. • I can change the appearance of text to increase its effectiveness. • I can create, modify, and present documents for a particular purpose. • I can use a keyboard confidently and make use of a spellchecker to write and review my work. • I can use an appropriate tool to share my work and collaborate online. • I can give constructive feedback to my friends to help them improve their work and refine my own work.	<table><tr><th colspan="2">Vocabulary to use</th></tr><tr><td>Animate/animation App Backspace Clipart Comic strip Document Edit Enter Folder Font Greenscreen Image Insert Heading Hyperlink Narration Presentation</td><td>Right click Select Shift Slides Software Sound effect Space bar Storyboard Text</td></tr><tr><td></td><td>Vocabulary to develop</td></tr><tr><td></td><td>Audience Layout Persuasive Screen shot Style Template</td></tr></table>	Vocabulary to use		Animate/animation App Backspace Clipart Comic strip Document Edit Enter Folder Font Greenscreen Image Insert Heading Hyperlink Narration Presentation	Right click Select Shift Slides Software Sound effect Space bar Storyboard Text		Vocabulary to develop		Audience Layout Persuasive Screen shot Style Template	Skills • Use a keyboard effectively, including the use of numbers • Know how to use spellcheck • Be aware of keyboard shortcuts on laptops and PCs. • Change font sizes and colour of text • Use appropriate screen capture and insert in document or presentation • Rename documents and other files • Create hyperlink to a website • Recognise appropriate online sources for clipart and images
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Animate/animation App Backspace Clipart Comic strip Document Edit Enter Folder Font Greenscreen Image Insert Heading Hyperlink Narration Presentation	Right click Select Shift Slides Software Sound effect Space bar Storyboard Text									
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Expected prior learning • Use images with variety of apps and software • Amend text by highlighting and using select/delete and copy/paste • Use save and save as • Copy and rename files to edit	Cross curriculum context • English • Capture learning in a topic • Choose to use technology to present historical, geographical, religious, cultural, mathematical, or other learning	Experiences • Create a comic book • Create a persuasive advert • Use music creation software • Create and edit video								
Concepts and understanding • Tools can be used to create atmosphere • Using constructive feedback and providing constructive feedback can improve the effectiveness of outcomes • Appropriate tools allow collaboration online	<table><tr><td>Develop Computational thinking</td><td>Expectations: Computational thinker model http://bit.ly/comptinkingSomerset</td></tr><tr><td>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</td><td>  Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</td></tr></table>		Develop Computational thinking	Expectations: Computational thinker model http://bit.ly/comptinkingSomerset	Attitudes Comfortable making mistakes Perseverance Imagination Collaboration	 Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation				
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Year 4 Programming Knowledge Map

Expectations • I can use logical thinking to solve open-ended problem by breaking it up into smaller parts. • I can use an efficient procedure to simplify program. • I can use a sensor to detect a change which can select an action within my program. • I know that I need to keep testing my program while I am putting it together. • I can use a variety of tools to create a program. • I can recognise an error in a program and debug it. • I recognise that an algorithm will help me to sequence more complex programs. • I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.	Vocabulary to use <table><tr><td>Algorithm Background Block Collaboration Command Control Costume Debug Design Effect Event Forever Imagine Implement Input</td><td>Make mistakes Movement Pattern Output Persevere Repeat Rotation Sequence Sprite Stage Wait / Pause</td></tr><tr><td></td><td><i>Vocabulary to develop</i></td></tr><tr><td></td><td><i>Computational thinking</i> <i>Selection (If Then)</i></td></tr></table>	Algorithm Background Block Collaboration Command Control Costume Debug Design Effect Event Forever Imagine Implement Input	Make mistakes Movement Pattern Output Persevere Repeat Rotation Sequence Sprite Stage Wait / Pause		<i>Vocabulary to develop</i>		<i>Computational thinking</i> <i>Selection (If Then)</i>	Skills • Copy and rename files • Continual testing and debugging of parts of sequence as a program is made • Use decomposition to identify parts of a problem • Plan more than one sequence in an algorithm for specific outcomes • Set rotation style for a sprite • Make a background • Use of if...then selection block and Forever block • Use of if on edge bounce block • Explanation of purpose of blocks • Collaboration to support and learn from others • Self-assessment using RAG model • Peer assessment (2 stars and a wish)
Algorithm Background Block Collaboration Command Control Costume Debug Design Effect Event Forever Imagine Implement Input	Make mistakes Movement Pattern Output Persevere Repeat Rotation Sequence Sprite Stage Wait / Pause							
	<i>Vocabulary to develop</i>							
	<i>Computational thinking</i> <i>Selection (If Then)</i>							
Expected prior learning • Use repeat command to increase efficiency of a program • Programming more than one sprite in Scratch • Sequence in Scratch can run without or with a control block • Use of sound and costumes in Scratch • Recognition of making mistakes as part of programming	Cross curriculum context • 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 • Maths: understanding of number, properties of shapes, problem solving	Experiences • Predict purpose of sequences for Etch a Sketch • Modify and make sequences for own Etch a Sketch • Predict, investigate, modify, and make game • Sensor used to select an action in a game • Decomposition to plan algorithms for parts of game • Use of block challenges to assess knowledge • RAG algorithm and implement as a program • Debug own and programs of others • Apply knowledge using other software / apps • <i>Apply knowledge to program a physical object</i>						
Concepts and understanding • Importance of ongoing continual testing as a program is built • Importance of algorithm to implement more complex programs • Selection increases programming possibilities	Develop Computational thinking Expectations: Computational thinker model http://bit.ly/compthinkingSomerset <table><tr><td>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</td><td></td><td>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</td></tr></table>		Attitudes Comfortable making mistakes Perseverance Imagination Collaboration		Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation			
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Year 4 Technology in our Lives Knowledge Map

Expectations • I can tell you whether a resource I am using is on the Internet, the school network, or my own device. • I can identify key words to use when searching safely on the World Wide Web. • I think about the reliability of information I read on the World Wide Web. • I can tell you how to check who owns photos, text, and clipart. • I can create a hyperlink to a resource on the World Wide Web. • I can recognise that websites use different methods to advertise products	Vocabulary to use		Skills • Browse to a specified website • Create hyperlink to a website • Recognise appropriate online sources for clipart and images • Check for reliability of information • Add knowledge to an online tool • Identify key words to use for a search query • Acknowledge work of other people • Navigate school network • Find a document on device or school network • Create hyperlinks to content on world wide web	
	Blog Communicate Computing devices Copyright email Hyperlink Internet QR Code Reliability Search engine Search result Search query	Vlog Webpage Website World Wide Web		<i>Vocabulary to develop</i>
		<i>Citation</i> <i>Filter</i>		
Expected prior learning • Use appropriate search engine eg Swiggle • Use filters for efficient searching eg + and – and “ • Evaluate information online • Recognise copyright and images that can be used • World Wide Web is one part of Internet	Cross curriculum context • English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language, identify main ideas, write for different purposes • Explore information for a topic • Investigate information for historical, geographical, religious, cultural, mathematical or other learning		Experiences • Investigate a spoof website • Discuss what is ‘true’ online and how we can check for reliable information • Use online tool (eg Padlet) to share learning • See the use of a citation to recognise the source of a photo and acknowledge source in own work • Investigate and find resources on school network • Create a guide to school network • Add hyperlink to a webpage within project work • Investigate use of different search engines	
Concepts and understanding • Web pages need to be checked for reliability • Sources of information must be acknowledged • Digital information can be stored locally or online	Develop Computational thinking Expectations: Computational thinker model http://bit.ly/compthinkingSomerset			
	Attitudes Comfortable making mistakes Perseverance Imagination Collaboration		Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation	

Year 4 Data Handling Knowledge Map

Expectations • I can organise data in different ways. • I can collect data and identify where it could be inaccurate. • I can plan, create and search a database to answer questions. • I can choose the best way to present data to my friends. • I can use a data logger to record and share my readings with my friends.	Vocabulary to use <table><tr><td>Branching database Chart Collect Data Database Data logger Decision tree Graph Information Interpret Investigate</td><td>Predict Questions Record Results Tally Sort Venn diagram</td></tr><tr><td></td><td><i>Vocabulary to develop</i></td></tr><tr><td></td><td><i>Field</i> <i>Hypothesis</i></td></tr></table>	Branching database Chart Collect Data Database Data logger Decision tree Graph Information Interpret Investigate	Predict Questions Record Results Tally Sort Venn diagram		<i>Vocabulary to develop</i>		<i>Field</i> <i>Hypothesis</i>	Skills • Rename documents and other files • Use appropriate screen capture and insert in document or presentation • Add data to a graphing program • Interrogate data • Plan a database • Create a branching database • Sort a database to answer questions • Use a data-logger or data logging app to record discrete and continuous data
Branching database Chart Collect Data Database Data logger Decision tree Graph Information Interpret Investigate	Predict Questions Record Results Tally Sort Venn diagram							
	<i>Vocabulary to develop</i>							
	<i>Field</i> <i>Hypothesis</i>							
Expected prior learning • Use a data logger (app or device) to sense and record changes • Use appropriate apps and/or software to collect and record data • Collect and present data in different ways • Generate questions for an investigation and make decisions about data that will need to be collected • Use and answer questions from a branching database	Cross curriculum context • English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language to share learning • Maths: Use appropriate software and apps to present and interpret data. Interpret data collected with data-loggers. • Investigate and represent information for scientific, geographical, mathematical or other learning	Experiences • Discuss differences between data and information • Measure sound levels using a data logger or data logging app • Record changes in noise levels • Plan an investigation of sound insulation and present findings • Use a graphing program or spreadsheet • Create a branching database <i>to sort and classify game characters</i> • Use an online database • <i>Search database to answer questions</i>						
Concepts and understanding • Data becomes information when it has a context and units of measure • Information can be collected as discrete or continuous data • A database can be filtered to provide answers to questions	Develop Computational thinking Expectations: Computational thinker model http://bit.ly/comptinkingSomerset <table><tr><td>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</td><td></td><td>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</td></tr></table>		Attitudes Comfortable making mistakes Perseverance Imagination Collaboration		Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation			
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