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|---|--|--|---|---|--|--|------------------------------|---|
| <p>Expectations</p> <ul style="list-style-type: none"> • I can use text, photo, sound and video editing tools to refine my work. • I can use the skills I have already developed to create content using unfamiliar technology. • I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. • I can select an appropriate online or offline tool to create and share ideas. • I can review and improve my own work and support others to improve their work. | <p>Vocabulary to use</p> <table border="1"> <tr> <td data-bbox="712 288 1025 879"> <p>Animate Animation App Audience Bullet points Clipart Comic strip Document Edit Folder Font Greenscreen Insert Heading / sub-heading Hyperlink Layout</p> </td> <td data-bbox="1025 288 1355 767"> <p>Narration Persuasive Right click Select Screen shot Shift Slides Software Sound effect Sound recording Storyboard Style Tab</p> </td> </tr> <tr> <td></td> <td data-bbox="1025 767 1355 815"> <p><i>Vocabulary to develop</i></p> </td> </tr> <tr> <td></td> <td data-bbox="1025 815 1355 901"> <p><i>Template Theme</i></p> </td> </tr> </table> | <p>Animate Animation App Audience Bullet points Clipart Comic strip Document Edit Folder Font Greenscreen Insert Heading / sub-heading Hyperlink Layout</p> | <p>Narration Persuasive Right click Select Screen shot Shift Slides Software Sound effect Sound recording Storyboard Style Tab</p> | | <p><i>Vocabulary to develop</i></p> | | <p><i>Template Theme</i></p> | <p>Skills</p> <ul style="list-style-type: none"> • Use keyboard to confidently input text, characters and numbers • Use bullet points • Add text boxes • Move, resize and rotate shapes, text and pictures • Use common keyboard shortcuts on laptops and PCs • Combine appropriate apps using the camera roll on a tablet • Combine software to achieve effective outcomes. • Work collaboratively on documents and presentations • Create hyperlinks within and between documents |
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| | <p><i>Vocabulary to develop</i></p> | | | | | | | |
| | <p><i>Template Theme</i></p> | | | | | | | |
| <p>Expected prior learning</p> <ul style="list-style-type: none"> • Create hyperlinks to websites • Use spell checker effectively • Use a variety of media to create atmosphere • Provide and use constructive feedback | <p>Cross curriculum context</p> <ul style="list-style-type: none"> • English • Capture learning in a topic • Choose to use technology to present historical, geographical, religious, cultural, mathematical, or other learning | <p>Experiences</p> <ul style="list-style-type: none"> • Create documents and slides • Presentation using slides • <i>Use greenscreen to create weather forecast</i> • Create audio including sound effects • <i>Use CAD to create a building</i> | | | | | | |
| <p>Concepts and understanding</p> <ul style="list-style-type: none"> • Effective strategies can be used to refine work • Skills and knowledge can be used with unfamiliar technologies • Effective outcomes can impact on others | <p>Develop Computational thinking</p> <p>Expectations: Computational thinker model http://bit.ly/comptinkingSomerset</p> <table border="1"> <tr> <td data-bbox="712 1257 1288 1437"> <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1288 1257 1534 1437">  </td> <td data-bbox="1534 1257 2168 1437"> <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table> | | <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> |  | <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> | | | |
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Year 5 Programming Knowledge Map

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| <p>Expectations</p> <ul style="list-style-type: none"> • I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. • I can refine a procedure using repeat commands to improve a program. • I can use a variable to increase programming possibilities. • I can change an input to a program to achieve a different output. • I can use 'if' and 'then' commands to select an action. • I can talk about how a computer model can provide information about a physical system. • I can use logical reasoning to detect and debug mistakes in a program. • I use logical thinking, imagination, and creativity to extend a program. | <p>Vocabulary to use</p> <table border="1"> <tr> <td data-bbox="768 204 1025 794"> <p>Algorithm Block Collaboration Command Control Debug Design Effect Event Forever Imagine Implement Input Make mistakes Pattern Output</p> </td> <td data-bbox="1037 204 1361 794"> <p>Persevere Repeat Rotation Selection (If Then) Sequence Sprite X position / Y position</p> <hr/> <p><i>Vocabulary to develop</i></p> <p><i>Broadcast</i> <i>Computational thinking</i> <i>Decomposition</i> <i>Variable</i></p> </td> </tr> </table> | <p>Algorithm Block Collaboration Command Control Debug Design Effect Event Forever Imagine Implement Input Make mistakes Pattern Output</p> | <p>Persevere Repeat Rotation Selection (If Then) Sequence Sprite X position / Y position</p> <hr/> <p><i>Vocabulary to develop</i></p> <p><i>Broadcast</i> <i>Computational thinking</i> <i>Decomposition</i> <i>Variable</i></p> | <p>Skills</p> <ul style="list-style-type: none"> • Work collaboratively to learn and create • Investigate an individual block to improve understanding of what it will do • Make and use a variable in a program • Creating and importing sprites and backgrounds • Recording voice • <i>Edit sound in Scratch</i> • Use selection and forever • Use operator blocks • Change input to a program • Decomposition of a problem • Thinking through an algorithm as part of a design • Identify sprites and backgrounds as part of design • Recognising and debugging an error • Evaluate and refine project | |
| <p>Algorithm Block Collaboration Command Control Debug Design Effect Event Forever Imagine Implement Input Make mistakes Pattern Output</p> | <p>Persevere Repeat Rotation Selection (If Then) Sequence Sprite X position / Y position</p> <hr/> <p><i>Vocabulary to develop</i></p> <p><i>Broadcast</i> <i>Computational thinking</i> <i>Decomposition</i> <i>Variable</i></p> | | | | |
| <p>Expected prior learning</p> <ul style="list-style-type: none"> • Use of selection (if ... then) • Make a background • Decomposition to break a problem up into smaller parts • Keep testing a program when putting it together • Change properties of a sprite • Implementation of an algorithm as a program • Articulating explanation of algorithm and blocks • Self and peer assessment | <p>Cross curriculum context</p> <ul style="list-style-type: none"> • 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 | <p>Experiences</p> <ul style="list-style-type: none"> • Use of block challenges to assess knowledge • Predict, Run, Investigate, and modify a Scratch program that includes variables • Use and modify to improve sequences • Design process to make a simple counting system • RAG algorithm and implement as a program • Apply knowledge using other software / apps • <i>Apply knowledge to program a physical object</i> | | | |
| <p>Concepts and understanding</p> <ul style="list-style-type: none"> • Decomposition as part of algorithm design • Use of variables to control a program • Importance of forever as part of selection • Imagination and logical thinking increase creativity | <p>Develop Computational thinking Expectations: Computational thinker model http://bit.ly/comptinkingSomerset</p> <table border="0"> <tr> <td data-bbox="768 1273 1317 1457"> <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1328 1249 1462 1433" style="text-align: center;">  </td> <td data-bbox="1473 1273 2163 1457"> <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table> | | <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> |  | <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> |
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Year 5 Technology in our Lives Knowledge Map

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| <p>Expectations</p> <ul style="list-style-type: none"> • I can describe different parts of the Internet. • I can use different online communication tools for different purposes. • I can use a search engine to find appropriate information and check its reliability. • I can recognise and evaluate different types of information I find on the World Wide Web. • I can describe the different parts of a webpage. • I can find out who the information on a webpage belongs to • I know which resources on the Internet I can download and use. • I can describe the ways in which websites advertise their products to me. | <p>Vocabulary to use</p> | | <p>Skills</p> <ul style="list-style-type: none"> • Identify different parts of the internet • Explain understanding • Efficient web searching • Distinguish between reliable and unreliable sources of information • Recognise persuasion in advertising • Recognise resources which can be downloaded (considering copyright) • Cite sources of images and text • Add positive comments online • <i>Use of safe alias in online community</i> • <i>Effective navigation of Google Earth</i> |
| <p>Expected prior learning</p> <ul style="list-style-type: none"> • Recognise different search engines • Identify key words for searches • Use filters for efficient searching • Evaluate information online • Recognise copyright and images that can be used • World Wide Web is one part of Internet | <p>Blog Citation Communicate Computing devices Copyright Email Digital content Digital advertising Hyperlink Internet QR Code Reliability Search engine</p> | <p>Search result Search query Vlog Webpage Website World Wide Web</p> <hr/> <p><i>Vocabulary to develop</i></p> <hr/> <p><i>Filter</i> <i>Internet Services</i></p> | <p>Experiences</p> <ul style="list-style-type: none"> • Explanation of different parts of the internet • Explanation of how search engines work • Evaluate content of a website • Create a checklist to identify reliable information • Investigate digital advertising • <i>Use Google Earth to explore earth and locality</i> • <i>Participate in Scratch online community</i> • <i>Consider access to the internet across world</i> |
| <p>Concepts and understanding</p> <ul style="list-style-type: none"> • World wide web is one part of the Internet that includes websites • Reliability of information • Search results are selected and ranked by private companies | <p>Develop Computational thinking</p> <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> | | <p>Expectations: Computational thinker model http://bit.ly/comptinkingSomerset</p> <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p>  |

Year 5 Data Handling Knowledge Map

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| <p>Expectations</p> <ul style="list-style-type: none"> I can use a spreadsheet and database to collect and record data. I can choose an appropriate tool to help me collect data. I can present data in an appropriate way. I can search a database using different operators to refine my search. I can talk about mistakes in data and suggest how it could be checked. | <p>Vocabulary to use</p> <table border="1"> <tr> <td data-bbox="712 204 1025 475"> <p>Chart Collect Complex questions Data Database Data logger Decision tree Field</p> </td> <td data-bbox="1025 204 1355 475"> <p>Model Predict Questions Record Results Tally Sort Venn diagram</p> </td> </tr> <tr> <td data-bbox="712 475 1025 550"></td> <td data-bbox="1025 475 1355 550"> <p>Vocabulary to develop</p> </td> </tr> <tr> <td data-bbox="712 550 1025 678"></td> <td data-bbox="1025 550 1355 678"> <p><i>Anomaly</i> <i>Average</i> <i>Formulae</i> <i>Plausible</i></p> </td> </tr> </table> | <p>Chart Collect Complex questions Data Database Data logger Decision tree Field</p> | <p>Model Predict Questions Record Results Tally Sort Venn diagram</p> | | <p>Vocabulary to develop</p> | | <p><i>Anomaly</i> <i>Average</i> <i>Formulae</i> <i>Plausible</i></p> | <p>Skills</p> <ul style="list-style-type: none"> Combine appropriate apps using the camera roll on a tablet Combine software to achieve effective outcomes. Work collaboratively on documents and presentations Interrogate information presented by others Plan an investigation Measure data in different circumstances Identify data type to collect – continuous or discrete Add to a spreadsheet Add to a database Graph information in database or spreadsheet |
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| | <p><i>Anomaly</i> <i>Average</i> <i>Formulae</i> <i>Plausible</i></p> | | | | | | | |
| <p>Expected prior learning</p> <ul style="list-style-type: none"> Use a data logger (app or device) to sense and record discrete and continuous data Use an online database Plan an investigation Plan a database | <p>Cross curriculum context</p> <ul style="list-style-type: none"> English: ask relevant questions, explain understanding of information, use spoken language, identify main ideas, write for different purposes, distinguish between fact and opinion Maths: Use appropriate software and data loggers to create and interpret line graphs. Complete and interpret tables to present and understand information. Investigate and represent information for scientific, geographical, mathematical, or other learning | <p>Experiences</p> <ul style="list-style-type: none"> Collect data about planets, create Top Trump cards Create a database or spreadsheet of planets Answer questions by interrogating database created by others Identify errors in a database or spreadsheet Present investigation findings to others Compare databases <i>Consider conservation of water through data</i> <i>Learn about computer modelling</i> <i>Measure rainfall and compare to national data</i> <i>Plan an investigation about melting and cooling</i> <i>Investigate active lifestyle choices</i> | | | | | | |
| <p>Concepts and understanding</p> <ul style="list-style-type: none"> Data becomes information as it is interpreted and presented to others Data can be collected in different ways and may be discrete or continuous Plausibility of data | <p>Develop Computational thinking</p> <p>Expectations: Computational thinker model http://bit.ly/comptinkingSomerset</p> <table border="0"> <tr> <td data-bbox="712 1268 1288 1452"> <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> </td> <td data-bbox="1288 1268 1534 1452" style="text-align: center;">  </td> <td data-bbox="1534 1268 2168 1452"> <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> </td> </tr> </table> | | <p>Attitudes Comfortable making mistakes Perseverance Imagination Collaboration</p> |  | <p>Skills Pattern recognition Decomposition Algorithm design Abstraction and generalisation</p> | | | |
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