

The Downs and Northbourne Computing Scheme of Work Overview

Computing Curriculum Overview

Key Stage 1

- ❑ understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions **(1.1)**
- ❑ create and debug simple programs **(1.2)**
- ❑ use logical reasoning to predict the behaviour of simple programs **(1.3)**
- ❑ use technology purposefully to create, organise, store, manipulate and retrieve digital content **(1.4)**
- ❑ recognise common uses of information technology beyond school **(1.5)**
- ❑ use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. **(1.6)**

Key Stage 2

- ❑ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts **(2.1)**
- ❑ use sequence, selection, and repetition in programs; work with variables and various forms of input and output **(2.2)**
- ❑ use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs **(2.3)**
- ❑ 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 **(2.4)**
- ❑ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content **(2.5)**
- ❑ 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 **(2.6)**
- ❑ use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. **(2.7)**

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Year 1					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy	IT	Computer Science	Digital Literacy	IT	Computer Science
Keeping Information safe and Reporting an incident. Design a poster.	Typing / Word processing (postcard, card etc) link cross curricular	Controlling Floor Turtles	How to search safely Based around topic maybe	Using Paint Package Take photos/record sounds/Video	Coding
Lee and Kim (TUK) BBC Staying Safe Online Private or Not Clicky Rap	2 Type BBC Dance Mat 2 Publish+	Beebots What is an Algorithm? What is a bug?	Staying Safe Online BBC Safe Search Search Espresso DK Find Out	2 Paint A Picture/ Paint/Tux Paint Digital Cameras, Easi speaks. Flip Cams	What is code? Espresso Coding Year 1 Scratch Junior? Code Studio?
33. I know to tell a grown up if something online makes me unhappy. 34. I can explain why it is important to be safe online. 35. I can share how to stay safe with other people in my school (e.g. poster, song, video...). 36. I know to keep information about me safe (e.g. not sharing personal information). 37. I can explain some dangers when using a digital device (e.g. computer, tablet, mobile phone...). 38. I can list they information I should keep safe and some things I could share.	57. I know that we can use different fonts and size text on a computer. 58. I know we can change the font colours and background colour. 59. I can explain why we may want to use different colours, sizes and types of font in our work. 60. I can change font type, size and colour. 61. I can use bold, italics and underline my work. 62. I can choose a suitable background for the font colour I am using. 80. I know that the keys on a keyboard or touch screen have different functions. 81. I can explain some of the functions on a keyboard (e.g. how to get a capital letter, how to make a £ sign...). 82. I can use a typing program to help me use a keyboard more efficiently.	1. I know what an algorithm is. 2. I know that a computer needs a clear set of instructions because it does exactly as it is told. 3. I know that an algorithm is needed for a computer program to run. 6. I can follow an algorithm using a floor turtle. 10. I can create an algorithm using a floor turtle. 18. I know what a 'bug' is and what we mean by 'debugging' a problem. 19. I can spot (debug) a mistake in my instructions and change it so it will work.	42. I know how to carry out a simple web search to collect information. 43. I can carry out a simple web search and decide which websites to look at. 44. I can carry out a web search and find the relevant information.	54. I know what a digital device is. 55. I can choose the right digital device to carry out my task. 56. I can use a digital device to create a file (e.g. pictures, text, presentation, take a photo...). 66. I can select the right equipment, software or hardware for my task. 76. I know how to save my work. 77. I can retrieve and edit my work to make changes. 78. I can print my work once I am sure it is finished. 79. I can resave my work.	5. I can follow an algorithm on screen using a computer 11. I can create an algorithm on a screen 12. I can create an algorithm on screen with a sequence of steps (five or more). 14. I can create a simple program using at least two algorithms (e.g. in Scratch tell a joke, create a fish tank). 15. I know what code is. 17. I can input the code to my algorithm and see if I was right.
1.6	1.4, 1.5	1.1, 1.2, 1.3	1.6	1.4	1.1, 1.2, 1.3

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Year 2					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy/IT	IT	Computer Science	Digital Literacy	IT	Computer Science
<p>What technology is around us? Typical day what technology do we meet? What do we have at home/school/work?</p>	<p>Create an animated story based on Lit/Hist Data Handling Graphs/Pictograms</p>	<p>Parts of a computer Unplugged Computing (Paul) (yr2/3)</p>	<p>Consider how we communicate online.</p>	<p>Multimedia presentation/animation and Create a game</p>	<p>Coding</p>
<p>How do we use computers The Internet Ninas Song How computers have changed? Computers Everywhere Tour of school Parts of a computer</p>	<p>2 Create Story/Superstory Starting Graph www.ptolemy.co.uk/furbles08 Gordon ITPs/Top Marks</p>	<p>Scrapyard challenge Jam Sandwich Robot Unplugged Code studio What is the Internet? Roamers/Probot/Big Track? Computer Storage</p>	<p>Hectors World Passwords Bad Netiquette Stinks VC resource (Google Hangout /skype)</p>	<p>Photostory 2Animate/Pivot Stick/ZU3D) 2DIY Create a game.</p>	<p>Espresso Coding Year 2</p>
<p>20. I know that digital devices have inputs and outputs. 21. I know computers have lots of parts. 22. I can explain three input devices I may use (e.g. mouse, keyboard, Beebot...). 23. I can explain how some parts of a computer work. 24. I can create a diagram to explain different parts of a computer. 45. I know how technology can be used in school. 46. I know how technology is used all around us. 47. I can explain some of the advantages and disadvantages with using technology. 48. I can explain different ways technology is used both in school and in everyday life. (E.g. hospitals, supermarket). 49. I can list different types of technology and how they are</p>	<p>63. I know what a file is. 64. I know information can be presented in different ways on a digital device (e.g. graph, poster, video...etc). 67. I can explain why it is useful to use a computer to do some things. 69. I can create a text document. 70. I can use or create sound in my work. 71. I can use or create images in my work. 74. I can create a graph or pictogram to show information I have collected.</p>	<p>4. I can follow an algorithm without using a computer. 9. I can create a simple algorithm on paper (at least three steps). 28. I know that computers can be connected together to form a network. 29. I know I can save my work to a shared area. 30. I understand that I can print from lots of different computers to the same printer 31. I can explain that I can access the same software on lots of different computers. 32. I can access the same piece of work from lots of different computers. 83. I know my work can be stored in different places. 84. I know information can be stored on the computer or on portable devices (e.g. school network, usb, SD card, cloud...).</p>	<p>39. I know how to be kind to other people when online and think carefully about what I say. 40. I can explain the kind of things that would upset someone if I posted something about them. 41. I can create a message that is suitable to post online to someone. 50. I know that there are lots of different ways to communicate with people. (E.g. email, video conference, blog, instant message, text...). 51. I can decide which the best form of communication to use is and who will be able to see it. 52. I can send a message or post a comment online (E.g. blog, forum...). 53. I can take part in a video conference.</p>	<p>72. I can create a multimedia presentation. 73. I can create an animation. 75. I can create a game.</p>	<p>7. I understand that sometimes there is more than one solution to solve a problem. 8. I can break down a problem into smaller steps to help me solve it. 13. I can write two different algorithms to achieve the same goal. 16. I can look at a code and explain what I think will happen before testing it.</p>

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<p>used to help us. (E.g. map a journey of technology you see typically in a day).</p> <p>65. I know different ways a computer may be used for in school (e.g. alarm, controlling temperature...).</p> <p>68. I can explain when it may be better to use the computer and when it may not be.</p>		<p>85. I know files can be saved as different types (e.g. mp3, jpeg, doc).</p> <p>86. I know that information is stored in Bytes, Kilobytes, Megabytes and Gigabytes.</p> <p>87. I can explain what happens to my work when I save it.</p> <p>88. I can explain which type of files take up a lot of space and those that don't.</p>			
1.5	1.4	1.4, 1.5	1.5 and 1.6	1.4	1.1, 1.2, 1.3

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Year 3					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy	IT	Computer Science	Digital Literacy	IT	Computer Science
Dangers of meeting Online friends	Databases and simulations	Modelling and Simulation	Passwords Phone use Email Create Folders for work	Multimedia media presentations and Paint package in style of an artist.	Coding
Smart Crew (Childnet)	Textease CT Textease Branch What is a database Sorting Games Right Move Or Wards search houses Who Dunnit? Greenfield Rd Exploring on screen simulations Hot Air Balloon Car Parking Simulator Why use simulators?	Kodu	Webonauts Password Rap Dinopass Password Lesson Plan Do you play games on Phones Sending emails Email (sending email between schools) Writing Good emails (lesson Plan) How email works	Powerpoint 2 Paint a Picture/ Paint/ Clicker Paint	Espresso Coding Year 3
24.I know how to report an incident. 25. I know I can tell an adult, contact Childline or CEOP if something happens online that makes me unhappy. 26. I can explain the procedure we have in school for reporting an incident. 35.I know that people online are strangers and may not be who they say they are. 36.I know that if someone asks me to meet them, I will talk to an adult first. 37.I can explain the dangers of meeting up with someone online or adding them as a friend. 39. I know that some websites can be harmful and show unpleasant things. 40. I know that I must only	57. I know what a database is used for. 58. I know a database is made up of records and each record is divided into fields. 59. I can look at the results of a database search and identify inaccurate information. 60. I can explain different situations in which we may use a database. 61. I can search a database to find relevant information. 62. I can create a database. 63. I can make changes to a database to change inaccurate information. 64. I know that a branching database can help me to sort things according to different criteria. 65. I understand that	1. I know why it is important to use a sequence of instructions. 2. I know a program is made up of algorithms of code. 3. I know that you need to code each part of a program (e.g. add code to both the cat and a mouse in a game). 7. I can create a program that has a sequence of at least six steps on screen.	31. I can explain the type of messages or comments that would be acceptable and those that wouldn't. 32. I can create a guide to show the type of messages and comments we should and should not use when communicating online. 33. I know that you should keep information about passwords safe. 34. I can explain why we should keep our passwords secret and what may happen if we don't.	51. I know how to present information to my audience in a clear and interesting way. 52. I can evaluate what to changes I need to make with my work to make it better. 56. I can create a multimedia presentation which combines, text, edited audio and photos. I can create a picture in the style of....using a paint package.	6. I can break down a program in to smaller parts to make it easier to program or explain how it works. 7. I can create a program that has a sequence of at least six steps on screen. 9. I can design a simple algorithm using a loop (repeat command). 10. I can change the order of a mixed up algorithm so that it works. 13. I know that a bug is an error and will stop the program running correctly.

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<p>open messages online that are safe.</p> <p>42. I can evaluate if the message I receive is genuine or may be unsafe to open.</p>	<p>questions need to be either 'yes' or 'no' when creating a branching database.</p> <p>66. I can explore a branching database to sort information and answer questions.</p> <p>67. I can create my own branching database.</p> <p>25. (KS1) I know that some things are simulated.</p> <p>26. (KS1) I can give examples of when simulations may be used when it is too dangerous to carry it out for real. (E.g. train a pilot by flying a helicopter in a snowstorm using a simulator).</p> <p>27. (KS1) I can explore simulations and use logical reasoning. (E.g. Kent ICT Games, BBC Science clips, completing a circuit did not work so try a different solution...).</p> <p>20. I know that some jobs are better completed by computers than humans (e.g. production line...).</p> <p>21. I can explain that advantages and disadvantages of using simulations.</p> <p>22. I can give examples of jobs which use computers rather than humans.</p> <p>23. I can explore a range of simulations and evaluate how realistic they are</p>				
2.7	2.6	1.1, 1.2, 1.3	2.7	2.6	1.1, 1.2, 1.3

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Year 4					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy	IT	Computer Science	Digital Literacy	IT	Computer Science
<p>Effective Searching Web Research</p>	<p>Word Processing Skills (tables, wrapping text etc) Create a talking booking (2 Create) or animation</p>	<p>Coding and Bugs</p>	<p>Cyberbullying, creating shared documents</p>	<p>Data logging Data Handling creating and analysing graphs</p>	<p>Coding</p>
<p>Welcome to the Web work through modules</p> <p>Dog Island, Tree Octopus, All About Explorers Website Validity Welcome to The Web Flying Penguins</p>	<p>Ms Word/ Publisher 2Publish+ 2 Create</p>	<p>Scratch 2DIY Create a game Logic Bug What is a bug</p>	<p>BBC Computing KS2 - Different ways to communicate Padlet /Google doc Espresso Online Bullying Online Bullying Quiz</p>	<p>Logit Explorers Textease CT/ Excel Photostory (linked with science)</p>	<p>Espresso Coding Year 4</p>
<p>20. (UKS2) I know what a web browser (e.g. Google, Safari) is for [i.e. software on the computer to help access information on the Internet]. 22. (UKS2)I can list some of the web browsers that we may use to search the World Wide Web. 26. (UKS2) I can explain the different features of a web page (e.g. URL, hyperlinks etc...).</p> <p>38. I know that not all information online may be true. 41. I can evaluate if a website is appropriate for me to use. 43. I can explore some spoof websites and identify the inaccurate information by comparing this with alternative sites</p>	<p>50. I know that sometimes it is better to make changes to something before publishing it. 51. I know how to present information to my audience in a clear and interesting way. 52. I can evaluate what to changes I need to make with my work to make it better. 56. I can create a multimedia presentation which combines, text, audio and images.</p>	<p>6. I can break down a program in to smaller parts to make it easier to program or explain how it works. 7. I can create a program that has a sequence of at least six steps on screen. 9. I can design a simple algorithm using a loop (repeat command). 10. I can change the order of a mixed up algorithm so that it works. 12. I can create a program that controls more than one thing (e.g. two or more sprites in Scratch or similar software or App). 13. I know that a bug is an error and will stop the program running correctly. 14. I can look at an algorithm and explain what I think will happen before testing it. 15. I can debug a program/game that doesn't</p>	<p>30. I know that I should be kind to people I communicate with online. 44. I know there are lots of different ways we may communicate and collaborate with people. 45. I can explain some of the different ways we could communicate and which may be most useful for the task. 46. I can explain the advantages and disadvantages of sharing a document online. 47. I can take part in a Video Conference. 48. I can create my own blog post or reply to a discussion board. 49.I can use a wiki, or shared area to collaborate with other people.</p>	<p>68. I know that I can use computers to create graphs. 69. I know that there are different types of graphs to display information. 70. I understand that some graphs are better than others to present the information. 71. I can select the most appropriate type of graph to display my findings. 72. I can explain why line graphs are better for showing how something changes. 73. I can create at least two different types of graphs to show my information I have collected. 74. I know that a data logger can be used to collect useful data. 75. I can explain what the graph or data shows. I can spot any unusual features. 76. I can explore measuring</p>	<p>12. I can create a program that controls more than one thing (e.g. two or more sprites in Scratch or similar software or App). 14. I can look at an algorithm and explain what I think will happen before testing it. 15. I can debug a program/game that doesn't work. 17. I know that sometimes we need to ask a computer to make choices. 18. I can explain where in a game a choice is being made by the computer. 19. I can create a game or activity which uses a selection command (e.g. if, then or else).</p>

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		work.		temperature, sound or light with a data logger. 77. I can create a graph using a data logger. 51. I know how to present information to my audience in a clear and interesting way. 52. I can evaluate what to changes I need to make with my work to make it better.	
2.7	2.6	2.1, 2.2, 2.3	2.7	2.6	2.1, 2.2, 2.3

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Year 5					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy	IT	Computer Science	Digital Literacy	IT	Computer Science
<p>How to stay safe online. Profiles, Cyberbullying, meeting online friends.</p>	<p>Animation and Editing Create and animation/ radio play/Movie</p>	<p>Controlling or simulating Physical Systems</p>	<p>Copyright, creating blogs/discussion boards/sharing a file</p>	<p>3d Modelling Green Screen (possibly animation)</p>	<p>Coding and how search works. World Wide Web</p>
<p>Online Chat Spacebook Play Like Share Guy Fawkes Privacy Jigsaw (TUK) Meeting Up with Online Friends- Wonderwebworld Sometimes What Seems Like Fun If you see scary stuff</p>	<p>2Animate/Pivot stick ZU3D? Movie Maker and Flipcams Audacity and Easi Speaks</p> <p>Hyperlink a video, sound file or animation into a PowerPoint.</p>	<p>Controlling Physical systems Lego Wedo 5 Models set up – pupils program them to work. Rotate around groups to try different challenges. One unmade model for pupils to create own. Lego Wedo Lego NXT Traffic lights etc</p>	<p>Online Behaviour Digital Etiquette AllyK@tz Plagiarism AllyK@tz Copyright AllyK@tz Illegal Downloading Espresso Online Sharing Skooville (reviews)</p>	<p>Homebase/wicks plan of kitchen Google Sketch Up (see we are architects) Creating visual effects using code. Dr.Who ZU3D Animation Green screen ?</p>	<p>Espresso Coding Year 5</p> <p>How search works Video Google Data Centre BBC Video Bing it On How Search works Paul with his Kit tour of school How The Internet works</p>
<p>41. I know what I do online will leave a digital footprint about me and that information could be used later in life. (I.e. think before I post). 42. I know about the importance of privacy settings on digital devices (e.g. phones, games consoles, computers, tablets...). 44. I know what cyberbullying is. 45. I can explain what information to use and which information to keep private when creating a safe online identity 46. I can explain what may happen if I post certain things on line 47. I can explain the difference between acceptable and unacceptable behaviour when using</p>	<p>54.I can edit an audio file. 55. I can edit a video file. 73. I know that video and audio can be edited. 74. I can review my work and make changes. 75. I can edit and combine a number of audio files. 76. I can edit and combine a number of video files. 77. I know what hyperlinks are. 78. I can explain how hyperlinks may be used to help us share our information. 79. I can create hyperlinks or link pages within presentations or a web page. 99. I know that you can produce work for different audiences and the language and content may need to vary.</p>	<p>10. I know that I can control things by connecting them to a computer. 11. I can explain and use some of the things we connect and control with a computer (e.g. data logger, Lego Wedo etc, motor, lights, Makey Makey). 12. I can create a simulation of a physical system (E.g. make a set of traffic lights). 13. I can write a program to control or simulate something attached to my computer (e.g. Lego, motor, sensor, Makey Makey).</p>	<p>39. I know that some websites have age restrictions to help keep us safe. 40. I can explain why some websites have age restrictions and some of the dangers we may be exposed to. 43. I know what netiquette is (i.e. online behaviour). 54. I know that there are laws that stop me copying online content. 55. I can explain some of the things we should not do when sharing our work online. 65. I know what a blog is for. 66. I know what a wiki is for. 67. I can explain the things I need to consider when creating my own blog (e.g. who sees it, who can comment on it, who moderates it...). 68. I can create my own blog. 69. I can create my own Wiki</p>	<p>70. I know that sometimes we create models to simulate what we want to create or build. 71. I can explain a number of situations when we may create a model or plan of something. (E.g. new school, house, building...). 72. I can create a 3D model. 112. I know that sometimes special effects are used to change the background in a film or animation (Such as Green Screening). 113. I can explain what green screening is and how we could use it. 114. I can create an advert, news or weather report or animation using green screening.</p>	<p>7. I know how to detect errors in algorithms. (Debugging) 8. I can look at an algorithm to explain what should happen. 9. I can change the code in a program to fix errors and solve a problem. (debugging) 14. I know the World Wide Web is made up of content (e.g. video, music, docs etc...) 15. I know the Internet is made of lots of servers and cables linked together. 16. I can explain how the Internet works. 17.I can explain what the World Wide Web is. 18. I can explain the main differences between the WWW and the Internet. 19. I can create something that illustrates how the Internet and WWW are</p>

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<p>technology</p> <p>48. I can evaluate how safe someone's behaviour is when using technology, (e.g. look at example profile, is the information safe to post?).</p> <p>49. I can explain the advantages and disadvantages of using the Internet to communicate.</p> <p>50. I can create some advice for people who want to stay safe online.</p> <p>51. I can create an example of a good profile to have.</p> <p>52. I can create an example of a poor profile to have.</p> <p>53. I can create something that explains how we should behave online (e.g. video, presentation, podcast, song...).</p>	<p>100. I understand the need to consider purpose and audience in presenting ideas.</p> <p>101. I can create a multimedia resource (including animation)</p>		<p>or collaboration space.</p>		<p>different.</p> <p>23. I know that search engines use web crawlers to retrieve search results [i.e. searches the words you type in to the web browser].</p> <p>24. I know how search engines rank search results.</p> <p>25. I can explain how a search engine lets you find useful websites on the internet. (E.g. by using web browsers).</p> <p>27. I can create a diagram or explanation of how information is searched for using the Wide World Web.</p>
2.7	2.6	2.1, 2.2, 2.3	2.7	2.6	2.1,2.2, 2.3 , 2.5

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Year 6					
Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Digital Literacy	IT	Computer Science	Digital Literacy	IT	Computer Science
Effective searching, bias. Viruses and spam Online Gaming	Create school trip/party using spreadsheets. Taking and editing Photos	Understanding Networks and how information is stored and sent (CS)	Changes in Technology Pioneers, How things work	Multimedia based on Memories of the school	Coding and different languages (HTML and Java)
Online Search Using a search engine Evaluating Content Viruses and Lady Jane Grey The Three Cyber Pigs Hooked Game On Online Gaming	Textease CT or Excel Spreadsheet Planning Ideas Digital Cameras Photo editing (GIMP/Paint.Net)	Peter Packet Digitalisation Draw a simple network and Identify parts. Binary Numbers	Alan Turing Ada Lovelace How Barcodes work How a key fob works How can robots be used to help us with our daily lives? Colossus Computer BBC Robots Robots Espresso News Video Conferencing – Google Hangouts/Skype	Combination of Powerpoint/Movie Maker/Audacity/Animation	Espresso Coding Year 6 HTML and Python Star Wars
56. I know how to decide whether the information is relevant or suitable for my needs. 57. I know sometimes I need to refine my search as I don't always get the information I was expecting. 58. I can skim-read web pages, and compare the quality of the information. 59. I can decide whether the information I have found is relevant or suitable for my needs by looking at the summary. 60. I know that sometimes people misuse the Wide World Web and try to trick or mislead us. 61. I can explain why I only open up emails I know that are safe (e.g. viruses, spam, etc). 62. I can explain why it is	53. I can edit a photograph or image file. 82. I can filter information within a database or spreadsheet. 83. I know how information is stored as data. 84. I know what data is. 85. I know what information is. 87. I know what a spreadsheet is. 88. I know how to use SUM to add up numbers in column and row. 89. I know how to enter formulae, change data and predict the results. 90. I know how to format cells. 91. I can explain why a spreadsheet is useful when data may change (e.g. petrol prices go up). 92. I can create a	28. I know that information is stored in many different forms and can be accessed in a number of different ways. 29. I can explain some of the multiple services the internet provides (e.g. Learning Platform, Google Drive, Drop box etc...). 30. I can explain how I can retrieve my work remotely. 31. I know some of the hardware and vocabulary associated with computers (e.g. router, hub, html...). 32. I know all digital devices have an IP address. 33. I can understand how a simple network works in a school. 34. I create something which illustrates how a simple network works. 35. I know computers use binary to represent all data.	109. I know that there are many famous people who have influenced how computers are used. 110. I can explain the important role some famous people have had in developing the computers we have today (such as Alan Turing, Tim Berners Lee, Ada Lovelace and Mark Zuckerberg). 111. I can research a famous pioneer of the computing world and the difference it has made to our lives.	99. I know that you can produce work for different audiences and the language and content may need to vary. 100. I understand the need to consider purpose and audience in presenting ideas. 101. I can create a multimedia resource (including animation) taking into account the audience. 102. I know that there are lots of different applications to communicate my ideas. 103. I can choose the appropriate software or digital device to achieve a given goal. 104. I can independently select appropriate software or resources necessary to communicate my ideas. 105. I can communicate my ideas using the best software or resources to achieve my goal.	1. I know why we use variables in algorithms. 2. I know that there are many different types of code/computer languages (e.g. java, html, etc...). 3. I can explain what is meant by a variable and give some examples. 4. I can create a game or an activity which uses variables (e.g. create a timer, lives, score...) 5. I can create a game with multiple algorithms (E.g. Maths quiz). 6. I can create an activity that uses 'what if' or 'else' statements. 115. I know that websites usually use html or html5. 116. I know if you right click on a website and click views source code or page code (using Internet Explorer or

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<p>important to read the information before signing up online to things.</p> <p>63. I can explain some of the problems with apps (additional costs, adverts etc).</p> <p>64. I can create something that highlights the potential risks when using technology.</p>	<p>spreadsheet.</p> <p>93. I am able to develop a hypothesis and create a spreadsheet model to test it.</p> <p>94. I can generate a graph from my spreadsheet.</p> <p>95. I know that mistakes can be made when entering data.</p> <p>96. I can interpret and analyse information in graphs.</p> <p>97. I can identify and correct implausible or inaccurate data.</p> <p>98. I can create two graphs, one show the inaccurate information and one with the data corrected.</p>	<p>36. I know that data is broken down into packets when it is exchanged over the Internet.</p> <p>37. I can explain how data is transferred (e.g. information is broken down into numbers before information it can be sent or received).</p> <p>38. I can explain what a 'cookie' is.</p> <p>106. I know a computer uses binary to represent data and it is made up of 0 and 1s.</p> <p>107. I can explain how binary works.</p> <p>108. I can represent different numbers in binary.</p>			<p>Chrome) you can see how the page has been created.</p> <p>117. I can look at the source code on web pages and explain what some bits refer to.</p> <p>118. I can change the html on a web page to change the colour of the text and background.</p>
2.7	2.6	2.4	2.4, 2.6	2.6	2.1, 2.2, 2.3