COMPUTING

WHOLE SCHOOL OVERVIEW

At Reddal Hill we use a 'Purple Mash' scheme of work. The units are progressive and are followed in consecutive order, hence they do NOT fit into half term periods.

Key Stage 1 (KS1)										
	Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**	**Unit 7**	**Unit 8**	**Unit 9**	**Unit 10**
Year 1	**Retrieval Opportunity** Logging on and off the computer / ipad	**Retrieval Opportunity** Logging on and off the computer / ipad Sorting – maths link	**Retrieval Opportunity** Logging on and off the computer / ipad Pictograms	**Retrieval Opportunity** Logging on and off the computer / ipad Imperative verbs (commands) – English link	**Retrieval Opportunity** Logging on and off the computer / ipad	**Retrieval Opportunity** Logging on and off the computer / ipad	**Retrieval Opportunity** Logging on and off the computer / ipad	**Retrieval Opportunity** Logging on and off the computer / ipad	**Retrieval Opportunity** Logging on and off the computer / ipad Naming electrical devices/ Tecnology	**Retrieval Opportunity** Logging on and off the computer / ipad Positional language – maths link
	FOCUS: Unit 1.1 **Online Safety & Exploring Purple Mash** Duration – 4 weeks To use technology safely and respectfully, keeping personal information private. To explore the Purple Mash tools and know the common icons for Save, Print, Open, New. **Unit Overview** Week 1 - How do you login and save your work? Week 2 - How do you find, save and search for resources? Week 3 - What and where are icons? Week 4 - What are the purpose of icons and how do I log out? **Programs –** Various	FOCUS-Unit 1.2 **Grouping & Sorting** Duration 2 weeks To sort items on a computer using the 'Grouping' activities in Purple Mash. **Unit Overview** Week 1 - How do you sort items using a range of criteria? Week 2 - How do you sort items using "Grouping" activities? **Programs –** 2DIY	FOCUS: Unit 1.3 **Pictograms** Duration 3 weeks To understand that data can be represented in picture format. (Pictogram) **Unit Overview** Week 1 - How is data shown in picture format? Week 2 -How do we create a class pictogram? Week 3 - How can you use a pictogram to record the results of an experiment? **Programs –** 2Count	FOCUS: Unit 1.4 **Lego Builders** Duration 3 weeks To follow and create simple instructions on the computer. To understand an algorithm is a precise, step-by-step set of instructions used to solve a problem (debugging) **Unit Overview** Week 1 – Can you follow a set of instructions? Week 2 - How do you create simple instructions on the computer? Week 3 - Does the order of instructions affect the result? **Programs –** 2DIY	FOCUS: Unit 1.5 **Maze Explorers** Duration 4 weeks To create and debug a simple set of instructions (algorithm). **Unit Overview** Week 1 - How do you use the direction keys on a keyboard? Week 2 – Can you create and debug a set of instructions (Algorithm)? Week 3 – Can you create, change, and extend an algorithm list? Week 4 - Can you set and adapt an algorithm challenge? **Programs –** 2Go	FOCUS: Unit 1.6 **Animated Story Books** Duration 5 weeks To create an e-book story with animation, sound, and text. **Unit Overview** Week 1 - How do you use the programs e-books and 2Create a Story? Week 2- How do you add animation to a story? Week 3 - How do you add sound to a story, including voice recording and music? Week 4 - How do you add a background, copy and paste pages? Week 5 – Can you enhance the story using additional features? **Programs –** 2Create a Story	FOCUS: Unit 1.7 **Coding** Duration 6weeks To understand what coding means in computing. To use the 2Code program to create a simple program. **Unit Overview** Week 1 - Can you create and build simple instructions on a computer using coding? Week 2 -How do use the 2Code program to create a simple program? Week 3 - How do you use Design Mode to add and change backgrounds, characters and objects? Week 4 - How do you use code blocks to make characters move? Week 5 - How do you use the Stop button to make characters stop? Week 6 - How do you use Collision Detection to make objects perform actions and sounds? **Programs –** 2Code	FOCUS: Unit 1.8 **Spreadsheets** Duration 3 weeks To begin to explore spreadsheets, add and retrieve information. **Unit Overview** Week 1 - What are the features of a spreadsheet? Week 2 - How do you add images to a spreadsheet? Week 3 - How do you use the "speak and Count" tools? **Programs –** 2Calculate	FOCUS: Unit 1.9 **Technology Outside School** Duration 2 weeks To identify technology used in the local community. **Unit Overview** Week 1 - Can you name technology used outside school? Week 2 - Can you explain how examples of technology are used outside school? **Programs –** Various	FOCUS: Algorithms (Using Beebots) Duration 2 weeks To operate and follow precise and unambiguous instructions **Unit Overview** Week 1 – How do you make the Bee-Bot work? Week 2 - How do you create a symbol algorithm?

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	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Computing in other curriculum areas
Year 2	**Retrieval Opportunity** Logging on, off and saving work. Add / change background or charactres Code blocks	**Retrieval Opportunity** Name different technology	**Retrieval Opportunity** Add images Speak and count tools	**Retrieval Opportunity** Questions – Emglih link	**Retrieval Opportunity**	**Retrieval Opportunity** Hand eye coordination	**Retrieval Opportunity**	**Retrieval Opportunity** Add animation / sound	Internet Safety week
	FOCUS: **Unit 2.1 Coding** Duration 5 weeks To create and debug simple programs To use logical reasoning to predict the behaviour of simple programs **Unit Overview** Week 1 -How do you create a computer program using simple algorithms? Week 2 -How do you use the repeat and timer commands? Week 3 -How do you test and debug simple programs? Week 4 - How do you create, predict, and discuss programs using different object types? Week 5 - How do you design, code, and test a more complex program? **Programs –** 2Code	FOCUS: **Unit 2.2 Online Safety** Duration 3 weeks Begin to understand that information put online leaves a digital footprint or trail. To identify the steps that can be taken to keep personal data and hardware secure. **Unit Overview** Week 1 - How do we use digital technology to share work with others locally and globally? Week 2 - How do you open and send a simple email? Week 3 - How do you keep personal data and hardware secure online? **Programs –** Various	FOCUS: **Unit 2.3 Spreadsheets** Duration 4 weeks To create and present data on a spreadsheet. **Unit Overview** Week 1 - Review lesson - How do you edit a spreadsheet? Week 2 - How do you copy and paste using totalling tools? Week 3 - How do you use a spreadsheet to add amounts? Week 4 - How do you create a table and block graph? **Programs –** 2Calculate	FOCUS: **Unit 2.4 Questioning** Duration 5 weeks To use a database to answer complex search questions. To use the search tool to find information. **Unit Overview** Week 1 - How do you show information on pictograms? Week 2 - How do use yes/no questions to separate information? Week 3 - How do you construct a binary tree? Week 4 - How you use 2Question (a binary tree) to answer questions? Week 5 - How do use a database to search for information? **Programs –** 2Question, 2Investigate	FOCUS: **Unit 2.5 Effective Searching** Duration 3 weeks To develop a greater understanding of searching on the Internet. **Unit Overview** Week 1 – How clear does your search terminology need to be? Week 2 -Can we make our search on the Internet quicker? Week 3 -How do you create a leaflet to help someone search for information on the Internet? **Programs –** Browser	FOCUS: **Unit 2.6 Creating Pictures** Duration 5 weeks To re-create an artist's work using 2Paint a picture. To explore surrealism and eCollage **Unit Overview** Week 1 -How do you recreate a picture in the impressionist style on the computer? (Monet, Degas, Renoir) Week 2 -How do you recreate pointillist art? (Seurat) Week 3 -How do you recreate a picture in the style Piet Mondrian? Week 4 -How do you recreate a picture in the style William Morris? Week 5 -How do you explore surrealism and eCollage? **Programs –** 2PaintAPicture	FOCUS: **Unit 2.7 Making Music** Duration 3 weeks To explore, edit, record, upload and combine sounds on a program. **Unit Overview** Week 1 -How do you explore, edit and combine sounds using 2Sequence? Week 2-How do you add and change sounds to a tune to express feelings? Week 3- How do you upload, record, and create your own tune? **Programs –** 2Sequence	FOCUS: **Unit 2.8 Presenting Ideas** Duration 4 weeks To collect, organise and present data and information in digital content. **Unit Overview** Week 1 -How can a story can be presented in different ways? Week 2- How do you make a quiz about a story or class topic? Week 3- How do you make a fact file on a non-fiction topic? Week 4 - How do you make a presentation using a variety of software? **Programs –** Various	

The National Curriuclum for computing aims to ensure that all pupils:

- Understand what **algorithms are**; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- **Create and debug** simple programs.
- Use logical reasoning to **predict the behaviour** of simple programs.
- Use technology purposefully to **create, organise, store, manipulate and retrieve digital content.**
- Recognise **common uses** of information technology beyond school.
- 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.

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	Lower Key Stage 2 (LKS2)								
	Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**	**Unit 7**	**Unit 8**	**Computing specifically linked within other curriculum areas**
Year 3	**Retrieval Opportunity** Repeat and timer command Add / change background and characters Code blocks	**Retrieval Opportunity** Sending emails and keeping personal information safe.	**Retrieval Opportunity** Add images Speak and count tools Copy and paste Add tables and block graphs	**Retrieval Opportunity**	**Retrieval Opportunity** Sending emails and keeping personal information safe.	**Retrieval Opportunity**	**Retrieval Opportunity**	**Retrieval Opportunity** Pictograms	**Design and Technology** – Spring Term unit of work. CAD (Computer Aided Design) within textile unit. This revisits **Year 2** – Unit 2.6 creating pictures **Internet safety week** **PSHE** – Global community – Relationship puzzle unkit
	FOCUS: **Unit 3.1 Coding** Duration 6 weeks To understand what a variable is in programming To design, write and debug programs that accomplish specific goals To create a program with an object that repeats actions indefinitely. **Unit Overview** Week 1 -How do you create a design that represents a sequential algorithm? Week 2 -How do you design and write a program that simulates a physical system? Week 3 -How do you use a 'timer' and 'if' statement to introduce selection in their program? Week 4 -How do you use a variable to create a timer? Week 5 -How do you create a program with an object and timer that repeats actions? Week 6 -How do you repeatedly test and debug a simple program? **Programs** – 2Code	FOCUS: **Unit 3.2 Online Safety** Duration 3 weeks To know where to turn for help if they see inappropriate content or have inappropriate contact from others. To know the meaning of some age restrictions symbols on digital media and devices. **Unit Overview** Week 1 -How do you use a blog and keep passwords safe? Week 2- Is all information on a website true? Week 3 -Why do age restrictions exist and what do you do if you see inappropriate? **Programs** – Various	FOCUS: **Unit 3.3 Spreadsheets** Duration 3 weeks To create pie charts and bar graphs on spreadsheets. To begin to use the tools and advance mode of 2Calculate. **Unit Overview** Week 1 -How do you create pie charts and bar graphs on the computer? Week 2 -How do you use the 'more than', 'less than' and 'equals' tools? Week 3 -How do you use the advanced mode of 2Calculate and use Co-ordinates? **Programs** – 2Caculate	FOCUS: **Unit 3.4 Touch Typing** Duration 4 weeks To begin to develop the knowledge of typing terminology. To develop typing skills- keys typed with right and left hand. **Unit Overview** Week 1 -Which fingers do you use for the home, top and bottom row of keys? Week 2 -How can you improve your typing speed and efficiency? Week 3 -Which keys do you touch type using my left hand? Week 4 -Which keys do you touch type using my right hand? **Programs** – 2Type	FOCUS: **Unit 3.5 Email (Including Email Safety)** Duration 6 weeks To be able to use and send an email safely. To add an attachment to an email. **Unit Overview** Week 1 -Can you compare the different methods of communication? Week 2 -How do you write an email to someone using an address book? Week 3 -What rules do you need to email safely? Week 4 -How do you create a quiz about how to use email safely? Week 5 -How do you add an attachment to an email? Week 6 -How do you explore a simulated email scenario? **Programs** – 2Email, 2Connect, 2DIY	FOCUS: **Unit 3.6 Branching Databases** Duration 4 weeks To create and complete a branching database. **Unit Overview** Week 1 -How do you sort objects using just 'yes' or 'no' questions? Week 2 -Can you complete a branching database? Week 3 and 4 -How do you create a branching database? **Programs** – 2Question	FOCUS: **Unit 3.7 Simulations** Duration 3 weeks To explore, analyse and evaluate a simulation. **Unit Overview** Week 1 -What are simulations? Week 2 -How do you explore a simulation? Week 3 -Can you analyse and evaluate a simulation? **Programs** – 2Simulate, 2Publish	FOCUS: **Unit 3.8 Graphing** Duration 3 weeks To enter data into a graph and solve an investigation and present the results in graphic form **Unit Overview** Week 1 -How do you enter data into a graph and answer questions? Week 2 -How do you solve an investigation and present the results in graphic form? **Programs** – 2Graph	
Year 4	**Retrieval Opportunity** Repeat and timer command Add / change background and characters	**Retrieval Opportunity** Blog Safe passwords Sharing information	**Retrieval Opportunity** Copy and paste Add tables and block graphs Add pie charts	**Retrieval Opportunity** Touch typing techniques Cut and paste	**Retrieval Opportunity** Commands – English link	**Retrieval Opportunity**	**Retrieval Opportunity**	**Retrieval Opportunity**	**Design and Techhnology** – Spring Term unit of work. CAD (Computer Aided Design) within textile unit. This revisits

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	Code blocks	Age restrctions							
	FOCUS: Unit 4.1 Coding Duration 6 weeks To create a program with a character that repeats actions. To know what decomposition and abstraction are in computer science. To solve problems by decomposing them into smaller parts **Unit Overview** Week 1 -How do you review the design, test a code, and debug a program? Week 2 -How do you use IF/ELSE statements in a program? Week 3 -How do you use "Repeat Until" commands? Week 4 -How make timers and counting machines using variables? Week 5 -How do you investigate control by creating a simulation? Week 6 -What are decomposition and abstraction in computer science? Programs – 2Code	FOCUS: Unit 4.2 Online Safety Duration 4 weeks To understand how you can protect themselves from online identity theft. To identify appropriate behaviour when participating or contributing to collaborative online projects for learning. **Unit Overview** Week 1 -How can you protect yourself from online identity theft? Week 2 -What are the risks and benefits of installing software including apps? Week 3 -What is plagiarism and what are the consequences? Week 4 -What are the positive and negative influences of technology on health and the environment? Programs – Various	FOCUS: Unit 4.3 Spreadsheets Duration 5 weeks To be able to add formulae and explore formatting cells. To explore using spreadsheet and formatting tools, including creating line graphs, exploring place value and budgeting. **Unit Overview** Week 1 -How do you add formulae and explore formatting cells? Week 2 -How do you use the timer and spin button? Week 3 -How do you create a line graph in a spreadsheet? Week 4 -How do use a spreadsheet for budgeting? Week 5 -How do explore place value in a spreadsheet? Programs – 2Caculate	FOCUS: Unit 4.4 Writing for different audiences Duration 5 weeks To use technology to organise, reorganise, develop, and explore ideas. To develop word processing skills, e.g. explore how font size and style can affect the impact of a text. **Unit Overview** Week 1 -How do you explore font size and style and how can it affect the impact of a text? Week 2 and 3 -Can you use a simulated scenario to produce a news report? Week 4 and 5 -Can you use a simulated scenario to write for a community campaign? Programs – 2Email, 2Connect, 2DIY	FOCUS: Unit 4.5 Logo Duration 4 weeks To learn common commands and constructs of the Logo programming language. To develop their ability to compose algorithms for drawing mathematical s structures and turn these into Logo code. **Unit Overview** Week 1 -How do you input simple instructions in Logo? Week 2 -How do you to create letter shapes? Week 3 -How do you use the Repeat function in Logo to create shapes? Week 4 -How do you use and build procedures in Logo? Programs – Logo	FOCUS: Unit 4.6 Animation Duration 3 weeks To learn about onion skinning in animation and add backgrounds and sounds to animations and be introduced to "Stop motion". **Unit Overview** Week 1 -How are animations created by hand and using computer program? Week 2 -How do you add backgrounds and sounds to animations? Week 3 -What is "Stop animation" and how is it used? Programs –2Animate	FOCUS: Unit 4.7 Effective Search Duration 3 weeks To use search technologies effectively (e.g. Google), appreciate how results are selected and ranked, and be discerning in evaluating digital content is it true and reliable. **Unit Overview** Week 1 -How do you locate information on the search results page? Week 2 How do you search effectively to find out information? Week 3 -How do you assess whether an information source is true and reliable? Programs – Browser	FOCUS: Unit 4.8 Hardware Investigators Duration 2 weeks To understand and recall the different parts that make up a computer. **Unit Overview** Week 1 -What are the different parts that make up a computer? Week 2 -Can you recall the function of computer parts?	Year 2 – Unit 2.6 creating pictures. Internet safety week PSHE - – Internet safety and cyber bullying – Celebratng diffetmce puzzle unit,

The National Curriuclum for computing aims to ensure that all pupils:

- **Design, write and debug** programs that accomplish specific goals, including controling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use **sequence, selection and repetition** in programs; work with variables and various forms of input and output.
- Use **logical reasoning** to explain how simple **algorithms work** and to detect and correct errors in algorithms and programs.
- 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.
- Use **search technologies** effectivley, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- **Select, use and combine a variety of software** (includign 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.
- Use technology safely, respectfully and responsibly; **recognise acceptable / unacceptable behaviour**; identify a range of ways to report concerns about content and contact.

Upper Key Stage 2 (UKS2)

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	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Computing in other curriculum areas
Year 5	**Retrieval Opportunity** Repeat and timer command If / else statements Decomposition and abstraction	**Retrieval Opportunity** Blog Safe passwords Sharing information Age restrctions Plagiarism	**Retrieval Opportunity** Adding formulae Formatting cells Add tables, block graphs, pie charts and line graphs	**Retrieval Opportunity** Adding formulae Formatting cells	**Retrieval Opportunity** Adding animation Adding sound Commands (coding)	**Retrieval Opportunity** Add background and sounds to animations. Stop animation	**Retrieval Opportunity**	**Design and Technology –** Summer Term unit of work. CCP (Computer Controlled Programme) within systems. Thisclosely links with Yea5 5 - Unit 5.5 game creator. **Internet safety week** PSHE - – Internet safety and cyber bullying – Celebratng diffetmce puzzle unit, **PSHE –** Media and social media – Healthy me, relationship puzzle units
	FOCUS: Unit 5.1 Coding Duration 6 weeks To explore text variables. Review and combine work with variables. To read code and create program so that it can be adapted, personalised and improved. **Unit Overview** Week 1 -Prior learning review - How do you design and create a program using Code? Week 2 -How do you design and write a program that simulates a physical system? Week 3 -Can you explore text variables? Week 4 and 5 -How do you create a competitive game using variables, IF/Else statements, and repeats? Week 6 -How do you use the launch command? **Programs –** 2Code	**FOCUS: Unit 5.2 Online Safety** Duration 3 weeks To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. **Unit Overview** Week 1 -What are the impacts of sharing digital content? Week 2 -What are appropriate and inappropriate text, photographs, and videos? Week 3 -How do you search the Internet whilst considering the reliability of the results of sources? **Programs –** Various	**FOCUS: Unit 5.3 Spreadsheets** Duration 5 weeks To create a formula in a spreadsheet to convert different measurements and use the counting tool. **Unit Overview** Week 1 -How do you convert measurements in a spreadsheet? Week 2 -How do you use the count tool? Week 3 -How do you use formulae to calculate area and perimeter of shapes and solve real life problems? Week 4 -How do you use text variables to perform calculations? Week 5 -How do you use a spreadsheet to plan a real-life event? **Programs –** 2Caculate	**FOCUS: Unit 5.4 Databases** Duration 4 weeks To learn how to search for information on a database. To create a database around a chosen topic. **Unit Overview** Week 1 -How do you search for information in a database? Week 2 -How do you add information into a class database? Week 3 and 4 -Can you create a database around a chosen topic? **Programs –** 2Question, 2Investigate	**FOCUS: Unit 5.5 Game Creator** Duration 5 weeks To create the game environment and game quest. Upload images and design backgrounds and characters to complete the game to share with friends. **Unit Overview** Week 1 -How do you set the scene within a game? Week 2 -How do you create a game environment? Week 3 -How do you create a game quest? Week 4 -How do you finish and share the game? Week 5 -How successful is your game? **Programs –** 2DIY 3D	**FOCUS: Unit 5.6 3D Modelling** Duration 4 weeks To explore the effect of moving points when designing for a purpose. To understand printing and making to create a 3D model. **Unit Overview** Week 1 -How do you design a building using 2Design and Make? Week 2 -How do you explore the effect of moving points when designing? Week 3 -How do you design a 3D model for a purpose? Week 4 -How do print a 2D design and make a 3D model? **Programs –** 2Design and Make	**FOCUS: Unit 5.7 Concept Maps** Duration 4 weeks To create a collaborative concept map and present this to an audience. **Unit Overview** Week 1 -Explain the need for visual representation? Week 2 -How do you create a concept map? Week 3 -How is a concept map used to retell stories and information? Week 4 -How do you create a collaborative concept map and present this to an audience? **Programs –** 2Connect	
Year 6	**Retrieval Opportunity** Repeat and timer command If / else statements Decomposition and abstraction Launch command	**Retrieval Opportunity** Blog Safe passwords Sharing information Age restrctions Plagiarism	**Retrieval Opportunity** Adding formulae Formatting cells Add tables, block graphs, pie charts and line graphs	**Retrieval Opportunity** Bogs Sharing information	**Retrieval Opportunity** Commands (coding)	**Retrieval Opportunity** Safe search Sharing information Age restrictions	**Retrieval Opportunity** Adding pictures Touch typing	**Design and Techhnology –** Spring Term unit of work. CAD (Computer Aided Design) within textile unit. This revisits Year 2 – **Unit 2.6** creating pictures. **Internet saftey week** **PSHE –** Media and social media –relationship puzzle unit
	FOCUS: Unit 6.1 Coding Duration 6 weeks To use functions and understand why they are useful in 2Code and debug a program and organise the code into tabs. To know how include interactivity in programming and use flowcharts to test and debug a program. To	**FOCUS: Unit 6.2 Online Safety** Duration 3 weeks To have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour. To	**FOCUS: Unit 6.3 Spreadsheets** Duration 5 weeks To create a spreadsheet to answer a mathematical question relating to probability. **Unit Overview**	**FOCUS: Unit 6.4 Blogging** Duration 5 weeks To understand how to write and contribute to a blog. To peer-assess blogs against the agreed success criteria. **Unit Overview** Week 1 -What are the features of a blog?	**FOCUS: Unit 6.5 Text Adventures** Duration 4 weeks To plan, create and code a map-based text adventure. **Unit Overview** Week 1 -How do you to plan a story adventure using a computer?	**FOCUS: Unit 6.6 Networks** Duration 3 weeks To find out what a LAN and a WAN are and how we access the internet in school. **Unit Overview** Week 1 -What do you know about the internet? Week 2 -What is LAN and a WAN?	**FOCUS: Unit 6.7 Quizzing** Duration 6 weeks To make a picture quiz for young children use the question types within 2Quiz. To make a quiz that requires the player to search a database. **Unit Overview**	

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	explore how 2Code can be used to make a text-based adventure game. **Unit Overview** Week 1 and 2 -How do you design and write a complex program? Week 3 -What are functions and how are they used? Week 4 -How do you use "User Input?" Week 5 -How do you use flowcharts and controlled simulations? Week 6 -How do you make a text-based adventure game? Programs – 2Code	identify the positive and negative influences of technology on health and the environment. **Unit Overview** Week 1 -What are the benefits and risks of using mobile devices and giving personal information? Week 2 -How can you protect your digital footprint from online danger, cyberbullying, and inappropriate behaviour? Week 3 -What are the positive and negative influences of technology on health and the environment? . Programs – Various	Week 1 -How do you create a spreadsheet to answer a question about probability? Week 2 -How do you use spreadsheets in real life? Week 3 -Can you use a spreadsheet to plan pocket money spending? Week 4 and 5 -Can you use a spreadsheet to plan a school event? Programs – 2Calculate	Week 2 -How do you plan the theme and content for a blog? Week 3 -How do you create a blog? Week 4 -How can you contribute to an existing blog? Week 5 -How successful are our blogs? Programs – 2Blog	Week 2 -How do you make a story-based adventure? Week 3 -How do you map out an existing text adventure? Week 4 -How do you code a map-based text adventure? Programs – 2Code, 2Connect	Week 3 -Can you find out about the age of the internet and discuss the future?	Week 1 -How do you create a picture-based quiz for young children? Week 2 and 3 -How do you use the question types within 2Quiz? Week 4 -What do grammar quizzes look like? Week 5 -How do you make a quiz that requires the player to search a database? Week 6 -Can you make a quiz to test your teachers or parents? Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate	

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- **Design, write and debug programs** that accomplish specific goals, including controling or simulating physical systems; solve problems by decomposing them into smaller parts.
- **Use sequence, selection and repetition** in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how **simple algorithms work** and to detect and correct errors in algorithms and programs.
- 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.
- Use **search technologies effectivley,** appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- **Select, use and combine a variety of software** (includign 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.
- Use technology safely, respectfully and responsibly; recognise **acceptable / unacceptable behaviour**; identify a range of ways to report concerns about content and contact.

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Purple Mash Scheme of Work Topic Key

	Coding and Computational Thinking		Spreadsheets		Internet and Email		Art and Design		Music		Databases and Graphing		Writing and Presenting		Communication and Networks

NC computing curriculum	Topic from Purple Mash Scheme of Work
Computing Science	
Information Technology	
Digital Literacy	

Coverage of computing themes

NC computing curriculum	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computing Science	Unit 4,5,7	Unit 1	Unit 1,5	Unit 1,2,5,6,7	Unit 1,2,5,	Unit 1,2,4,5,6
Information Technology	Unit 2,3,6,7,8,	Unit 3,4,5,6,7,8	Unit 4,5,6,7,8	Unit 1,3,4,6,7	Unit 1,3,4,5,6,7	Unit 1,2,3,4,5,7
Digital Literacy	Unit 1,9	Unit2,5	Unit 2,5	Unit 2 Discussed in other units	Unit 2 Discussed in other units	Unit 2,4