Computing Curriculum Objectives 2022-2023

	R	By the end of Key Stage One	By the end of Key Stage Two
EYFS Framework / National Curriculum Objectives	No expectations for computing to be taught within the EYFS framework. EYFS will instead look at skills that will prepare them for KS1 computing – e.g. logging in and using a mouse.	• 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.	• design, write and debug programs that accomplish specific goals, including controlling 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 some 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 effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • 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 • 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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Year Group	R	1	2	3	4	5	6
Knowledge & Understanding *Computer Science* *Information Technology (Mostly skills based)* *Digital Literacy* *Online Safety*		• explain that an algorithm is a set of instructions. (1.4, 1.5) • know that an algorithm written for a computer is called a program. (1.4, 1. • work out what is wrong when the steps are out of order in instructions. • say that if something does not work how it should it is because my code is incorrect. (1.7) • I can try and fix my code if it isn't working properly. (1.7) • make good guesses of what is going to happen in a program. For example, where the turtle might go. (1.5, 1.7) • say what technology is. (1.9) • say what examples of technology are in school. (1.9) • say what examples of technology are at home. (1.9) • know that a chair uses old technology and a smart phone uses new technology. (1.9)	• explain an algorithm is a set of instructions to complete a task. (2.1) • know I need to carefully plan my algorithm so it will work when I make it into code. (2.1) • find and correct some errors in my program. (2.1) • say what will happen in a program. (2.1) • spot something in a program that has an action or effect (does something).(2.1) • know the consequences of not searching online safely. (2.2, 2.5) • understand that my creations such as programs in 2Code, need similar skills to the adult world. (2.1) • see where technology is used at school such as in the office or canteen. (2.2)	• know that a variable stores information while a program is running (executing). (3.1 • spot something in a program that has an action or effect (does something).(2.1) • identify the difference in using between the effect of a timer or repeat command in my code. (3.1 • identify 'If' statements, repetition and variables. (3.1) • identify different ways that the internet can be used for communication. (3.5) • I can explain the importance of having a secure password and not sharing it with others. (3.2, 3.5) • explain the negative consequences of not keeping passwords safe and secure. (3.2, 3.5) • understand the importance of keeping safe online and behaving respectfully. (3.2)	• use repetition in my code. For example, using a loop that continues until a condition is met such as the correct answer being entered.(4.1) • turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. (4.1, 4.5) • use timers within my program designs more accurately to create repetition effects. For example, I can create a counting machine. (4.1) • use selection (decision) in my programming.(4.1) • use variables within my program and know how to change the value of variables. (4.1) • use the user inputs and output features within my program, such as 'Print to screen'. (4.1) • identify errors in my code by using different methods, such as steeping through lines of code and fixing them. (4.1) • understand that network and communication components can be found in many different devices which allow them to join the internet. (4.2, 4.7, 4.8) • recognise the main component parts of hardware which allow computers to join and form a network. (4.8) • understand the purpose of a search engine and the main features within it. (4.7) • look at information on a webpage and make predictions about the accuracy of information contained within it. (4.7) • have a good understanding of the online safety rules we learn at school. (4.2 & across curriculum) • demonstrate how to use different online technologies safely. (4.2 & across curriculum) • demonstrate how to use a few different online services safely. (4.2 & across curriculum) • know I have a right to privacy both on and offline. (4.2 & across curriculum) • recognise that my wellbeing can be affected by how I use technology. (4.2 & curriculum)	• make more complex real-life problems into algorithms for a program. (5.1) • test and debug my programs as I work. (5.1, 5.5) • convert (translate) algorithms that contain sequence, selection and repetition into code that works. (5.1) • use sequence, selection, repetition, and some other coding structures in my code. (5.1) • organise my code carefully and know this will help me debug more efficiently. (5.1) • use logical methods to identify the cause of any bug with support to identify the specific line of code. (5.1) • know the importance of computer networks and how they help solve problems and enhance communication. (5.2) • recognise the main dangers that can be perpetuated via computer networks. (5.2) • make appropriate improvements to digital work I have created. (Across units) • comment on how successful a digital solution is that I have created. (Across units) • explain in detail how accurate, safe and reliable the content is on a webpage. (5.2) • search precisely when using a search engine. For example, I know I can add additional words or removes words to help find better results. (5.2) • use collaborative modes such as within 2Connect to work with others and share it. (5.7) • use the most appropriate form of online communication according to the digital content. (5.2 & others) • know how to not let my mental wellbeing or others be affected by use of online technologies and services. (5.2 & across units) • explain what personal information is and know strategies for keeping this safe. (5.2) • have a secure knowledge of online safety rules taught at school. (5.2 & across units) • demonstrate the safe and respectful use of different online technologies and online services. (5.2 & across units) • relate appropriate online behaviour to my right to have personal privacy. (5.2 & across units)	• turn a complex programming task into an algorithm. (6.1) • identify the important aspects of a programming task (abstraction). (6. • decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. (6.1) • test and debug my program as I work on it and use logical methods to identify a cause of a bug. (6.1) • identify a specific line of code that is causing a problem in my program and attempt a fix. (6.1) • translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. (6.1) • use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object (6.1, 6.7) • interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. (6.1) • explain the difference between the internet and the World Wide Web. (6.2, 6.4,6.6) • explain what a WAN and LAN is and describe the process of how access to the internet in school is possible. (6.2,6.6) • explain in detail how accurate and reliable a webpage and its content is. (6.2) • consider the intended audience carefully when I design and make digital content. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • design and create my own online blogs. (6.4) • demonstrate safe and respectful use of a range of different technologies and online services. (6.2, 6.4) • identify more discrete inappropriate behaviours online. (6.2) • know the value of protecting my privacy and others online. (6.2, 6.4)

Skills	Computational Skills		

Computational Skills

- sort sound, pictures and text. (1.2)
- add sound, pictures and text to a program such as 2Create a Story. (1.6)
- name my work. (1.2, 1.3, 1.6, 1.7, 1.8)
- save my work. (1.2, 1.3, 1.6, 1.7, 1.8)
- find my work. (1.2, 1.3, 1.6, 1.7, 1.8)
- change content on a file such as text, sound and images.(1.3, 1.6, 1.7, 1.8)
- I can keep my login information safe. (1.1 and most units)

- report unkind behaviour and things that upset me online, to a trusted adult. (2.2)
- design a simple program using 2Code that achieves a purpose. (2.1)
- organise data – for example, using a database such as 2Investigate. (2.3, 2.4)
- use several programs to organise information – for example 2Question or spreadsheets such as 2Calculate. (2.4, 2.8)
- find data using specific searches – for example, using 2Investigate. (2.4, 2.5)
- I can edit digital data such as data in music composition software like 2Sequence. (2.7)
- c
- include photos, text and sound in my creations. (2.8, 2.6)
- find information I need using a search engine. (2.5)
- share work and communicate electronically – for example using 2Email (2.2)

- use email such as 2Email to respond to others appropriately and attach files, (3.5)
- read programs with several steps and predict what it will do. (3.1)
- identify an error in my program and fix it. (3.1)
- make a real-life situation into an algorithm for a program. (3.1)
- experiment with timers in my programs. (3.1)
- design an algorithm carefully, thinking about what I want it to do and how I can turn it into code. (3.1)
- collect data and input it into software. (3.3, 3.6, 3.8)
- create purposeful content and attach this to emails.(3.3, 3.5, 3.6, 3.7, 3.8, 3.9)
- present data and information using different software such as 2Question or 2Graph . (3.3, 3.6, 3.8,3.9)
- consider what the most appropriate software to use when given a task. (All)
- create a secure password. (3.2)
- use communication tools such as 2Email respectfully and use good etiquette. (3.2, 3.5)
- report unacceptable content and contact online in more than one way to a trusted adult. (3.2)

- read programs that contain several steps and predict the outcomes with increasing accuracy. (4.1, 4.5)
- share digital content using a variety of applications such as: 2Blog, 2Email and Display Boards. (Across units)
- work collaboratively to create content and solutions. (4.1, 4.3, 4.4,48)
- review solutions that others have created, using a checklist of criteria. (4.1, 4.2)
- create and improve my solutions to a problem based on feedback. (4.1, 4.2)
- report with ease any concerns with content and contact online and know immediate strategies to keep safe. (4.2 & across curriculum)

- use logical methods to identify the cause of any bug with support to identify the specific line of code. (5.1)
- work collaboratively with others creating solutions to problems using appropriate software such as 2Code. (Across units)
- To use tables within MS Word to present information.
- To add features to a document to enhance its look and usability.
- To change the look of text within a document.
- To know how to use word wrap with images and text.
- To add and edit images to a word document.

- use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
- compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
- use filters when searching for digital content. (6.2,6.9)
- use critical thinking to help me stay safe online. (6.2)

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Year Group		R	1	2	3	4	5	6
Topic		**You've Got a Friend in Me**	**My 5 Senses**	**Pirates**	**India**	**Africa**	**Macbeth**	**Woeful Wars**
ICT Focus		_____	**1.1 Online Safety**	**2.1 Coding**	**3.5 Email**	**4.2 Online Safety (4 weeks) / 4.9 Making Music (2 weeks)**	**5.1 Coding**	**6.1 Coding**
Autumn 1	**Knowledge & Understanding**	• Exploring - How can I keep myself safe online?		• I can explain an algorithm is a set of instructions to complete a task. (2.1) • I know I need to carefully plan my algorithm so it will work when I make it into code. (2.1) • I can find and correct some errors in my program. (2.1) • I can say what will happen in a program. (2.1) • I can spot something in a program that has an action or effect (does something).(2.1)	• identify different ways that the internet can be used for communication. (3.5) • I can explain the importance of having a secure password and not sharing it with others. (3.2, 3.5) • explain the negative consequences of not keeping passwords safe and secure. (3.2, 3.5)	• have a good understanding of the online safety rules we learn at school. (4.2 & across curriculum) • demonstrate how to use different online technologies safely. (4.2 & across curriculum) • demonstrate how to use a few different online services safely. (4.2 & across curriculum) • know I have a right to privacy both on and offline. (4.2 & across curriculum) • ecognise that my wellbeing can be affected by how I use technology. (4.2 & curriculum)	• make more complex real-life problems into algorithms for a program. (5.1) • test and debug my programs as I work. (5.1, 5.5) • convert (translate) algorithms that contain sequence, selection and repetition into code that works. (5.1) • use sequence, selection, repetition, and some other coding structures in my code. (5.1) • organise my code carefully and know this will help me debug more efficiently. (5.1) • use logical methods to identify the cause of any bug with support to identify the specific line of code. (5.1)	• turn a complex programming task into an algorithm. (6.1) • identify the important aspects of a programming task (abstraction). (6.1) • decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. (6.1) • test and debug my program as I work on it and use logical methods to identify a cause of a bug. (6.1) • identify a specific line of code that is causing a problem in my program and attempt a fix. (6.1) • translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. (6.1) • use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object (6.1, 6.7) • interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. (6.1)

Skills	• I can use the interactive whiteboard. • I can use a mouse. • I can program a device like a bee bot or remote-control cars. • I can start to use Mini Mash. • I can log in to Mini Mash with support from an adult.	• I can keep my login information safe. (1.1 and most units)	• I can design a simple program using 2Code that achieves a purpose. (2.1)	• use email such as 2Email to respond to others appropriately and attach files. (3.5)	• review solutions that others have created, using a checklist of criteria. (4.1, 4.2) • create and improve my solutions to a problem based on feedback. (4.1, 4.2) • report with ease any concerns with content and contact online and know immediate strategies to keep safe. (4.2 & across curriculum)	• use logical methods to identify the cause of any bug with support to identify the specific line of code. (5.1)	• use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
Key Vocabulary		Log in, avatar, log out, username, MyWork, Password, Topics, Save, Notification, Tools.	Action, button, design mode, algorithm, collision detection, event, background, debug/debugging, nesting, object, run, test, predict, scale, text, properties, scene, timer, swiped, sequence, sound.	Communication, email, compose, send, report to the teacher, attachment, address book, save to draft, password, CC, formatting	**Online Safety** Computer virus, cookies, copyright, digital footprint, email, identity theft, malware, phishing, plagiarism, spam	Action, abstraction, algorithm, button, called, co-rdinates, decomposition, event, function, if, nesting, object, physical system, properties, run, repeat, score, sequence, simplify, simplified, tab, timer, variable	Event, flowchart, function, get input, if/else, launch command, number variable, nested, object, predict, procedure, prompt, properties, repeat, run, scene, selection, simulation, string, tab, timer, user input, variable
Assessment							

Redwell Computing Intent 2022-2023

Year Group		R	1	2	3	4	5	6
Topic		Superheroes	Explorers	Victorians	India	Rainforest	The Anglo-Saxons	Magnificent Mountains
ICT Focus			1.6 Animated Stories	2.2 Online Safety (3 weeks)/ 2.5 effective Searching (3 weeks)	3.4 Touch Typing/ 3.2 Online Safety	4.9 Making Music (2 weeks) / 4.5 Logo (4 weeks)	5.2 Online Safety	6.2 Online Safety (3 weeks) / 6.6 Networking (3 weeks)
Autumn 2	**Knowledge and Understanding**			• see where technology is used at school such as in the office or canteen. (2.2) • know the consequences of not searching online safely. (2.2, 2.5)	• Children understand the names of the fingers. • Children understand what is meant by the home, bottom, and top rows.	• turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. (4.1, 4.5)	• use the most appropriate form of online communication according to the digital content. (5.2 & others) • know how to not let my mental wellbeing or others be affected by use of online technologies and services. (5.2 & across units) • explain what personal information is and know strategies for keeping this safe. (5.2) • have a secure knowledge of online safety rules taught at school. (5.2 & across units) • demonstrate the safe and respectful use of different online technologies and online services. (5.2 & across units) • relate appropriate online behaviour to my right to have personal privacy. (5.2 & across units) • know the importance of computer networks and how they help solve problems and enhance communication. (5.2) • recognise the main dangers that can be perpetuated via computer networks. (5.2)	• demonstrate safe and respectful use of a range of different technologies and online services. (6.2, 6.4) • identify more discrete inappropriate behaviours online. (6.2) • know the value of protecting my privacy and others online. (6.2, 6.4)

Skills			• add sound, pictures and text to a program such as 2Create a Story. (1.6) • name my work. (1.2, 1.3, 1.6, 1.7, 1.8) • save my work. (1.2, 1.3, 1.6, 1.7, 1.8) • find my work. (1.2, 1.3, 1.6, 1.7, 1.8) • change content on a file such as text, sound and images.(1.3, 1.6, 1.7, 1.8) I can keep my login	• report unkind behaviour and things that upset me online, to a trusted adult. (2.2) • share work and communicate electronically – for example using 2Email (2.2) • find information I need using a search engine. (2.5) •	• consider what the most appropriate software to use when given a task. • Children develop the ability to touch type the home, bottom, and top rows. • Children can use two hands to type the letters on the keyboard. • Children can touch type using the left hand. • Children can touch type using the right hand.	• read programs that contain several steps and predict the outcomes with increasing accuracy. (4.1, 4.5)		• use filters when searching for digital content. (6.2,6.9) • use critical thinking to help me stay safe online. (6.2)
Key Vocabulary			Animation, font, sound effect, e-book, file, display board	**Online Safety** Search, DisplayBoard, Internet, Sharing, Email, Attachmnt, Digital Footprint **Effective Searching** Internet, search, search engine	**Online Safety** Password, internet, blog, concept map, usernames, website, webpage, spoof website, PGEI rating **Touch Typing** Posture, top row keys, home row keys, bottom row keys, space bar	**Touch Typing** LOGO, BK, FD, RT, LT, REPEAT, SETPC, SETPS, PU, PD **Music Making** Pitch, rhythm, pulse, tempo, dynamics, texture, melody, rippler, house music	Online safey, smart rules, password, reputableencryption, identity theft, shared image, plagiarism, citations, reference, bibliography	**Online Safety** Phishing, screen time, digital footprint, password, spoof website, PEGI rating **Networking** Internet, world wide web, network, local area network, wide area network, router, network cables, wireless
Assessment							

Redwell Computing Intent 2022-2023

	Year Group	R	1	2	3	4	5	6
Spring 1	**Topic**	To Infinity and Beyond	Fire! Fire!	China	Extreme Earth: Earthquakes and Volcanoes	Fantastic Beasts	Raging Rivers	Vikings
	ICT Focus		1.2 Grouping and sorting (2 weeks) / 1.4 Lego Builders (3 weeks)	2.3 Spreadsheets	3.3 Spreadsheets and 3.8 Graphing	4.6 Animation (3 weeks) / 4.3 Spreadsheets (3 weeks)	5.5 Game Creators	6.3 Spreadsheets
	Knowledge and Understanding		• explain that an algorithm is a set of instructions. (1.4, 1.5) • know that an algorithm written for a computer is called a program. (1.4, 1.					• consider the intended audience carefully when I design and make digital content. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
	Skills		• sort sound, pictures and text. (1.2)	• organise data – for example, using a database such as 2Investigate. (2.3, 2.4) • organise data – for example, using a database such as 2Investigate. (2.3, 2.4) •	• collect data and input it into software. (3.3, 3.6, 3.8) • create purposeful content and attach this to emails.(3.3, 3.5, 3.6, 3.7, 3.8, 3.9) • present data and information using different software such as 2Question or 2Graph . (3.3, 3.6, 3.8,3.9)	• work collaboratively to create content and solutions. (4.1, 4.3, 4.4,48) •	• work collaboratively with others creating solutions to problems using appropriate software such as 2Code.	• use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
	Key Vocabulary		**Grouping and Sorting** Sort, Criteria **Lego Builders** Instruction, algorithm, computer, program, debug	Backspace key, copy and paste, columns, cells, count tool, delete key, equals tool, image toolbox, move cell tool, rows, speak tool, spreadsheet	**Spreadsheets** ⇔, advance mode, copy and paste, columns, cells, delete key, equals tool, move cell tool, rows, spin tool, spreadsheet **Graphing** Graph, field, data, bar chart, block graph, line graph, pie chart, row, column	**Spreadsheets** Average function, advance mode, copy and paste, columns, cells, charts, equals tool, formula, formulawizard, move cell tool, random tool rows, spin tool, spreadsheet, timer **Animation** Animation, flipbook, frame, onion skinning, background, play, sound, stop motion, video clip	Animation, comuter game, customise, evaluation, image, instructions, interactive, screenshot, texture, perspective, playability	Equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tool, spreadsheet, timer
	Assessment							

Redwell Computing Intent 2022-2023

	Year Group	R	1	2	3	4	5	6
	Topic		**How does your garden grow?**	**Arctic and Antarctic**	**Robots**	**Romans**	**Ancient Greece**	**Frozen Kingdoms**
	ICT Focus		**1.3 Pictograms (3 weeks)/1.8 Spreadsheets**	**2.4 Questioning**	**3.1 Coding**	**4.7 Effective Searching (3 weeks)/ 4.8 Hardware Investigation (2 weeks)**	**5.3 Spreadsheets**	**6.4 Blogging (4 weeks) / 6.5 Text Adventures (2 weeks)**
Spring 2	**Knowledge and Understanding**				• know that a variable stores information while a program is running (executing). (3.1 • spot something in a program that has an action or effect (does something).(2.1) • identify the difference in using between the effect of a timer or repeat command in my code. (3.1 • identify 'If' statements, repetition and variables. (3.1)	• understand that network and communication components can be found in many different devices which allow them to join the internet. (4.2, 4.7, 4.8) • recognise the main component parts of hardware which allow computers to join and form a network. (4.8) • understand the purpose of a search engine and the main features within it. (4.7) • look at information on a webpage and make predictions about the accuracy of information contained within it. (4.7) • understand that network and communication components can be found in many different devices which allow them to join the internet. (4.2, 4.7, 4.8)	• To use a spreadsheet to help plan a school cake sale.	• explain the difference between the internet and the World Wide Web. (6.2, 6.4,6.6). • consider the intended audience carefully when I design and make digital content. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • design and create my own online blogs. (6.4)
	Skills		• change content on a file such as text, sound and images.(1.3, 1.6, 1.7, 1.8)	• organise data – for example, using a database such as 2Investigate. (2.3, 2.4) • use several programs to organise information – for example 2Question or spreadsheets such as 2Calculate. (2.4, 2.8) • find data using specific searches – for example, using 2Investigate. (2.4, 2.5)	• read programs with several steps and predict what it will do. (3.1) • identify an error in my program and fix it. (3.1) • make a real-life situation into an algorithm for a program. (3.1) • experiment with timers in my programs. (3.1) • design an algorithm carefully, thinking about what I want it to do and how I can turn it into code. (3.1)	• work collaboratively to create content and solutions. (4.1, 4.3, 4.4,48)	• To use formulae within a spreadsheet to convert measurements of length and distance. • To use the count tool to answer hypotheses about common letters in use • To use a spreadsheet to model a real-life problem. • To use formulae to calculate area and perimeter of shapes. • To create formulae that use text variables	• use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)

Key Vocabulary			**Pictograms** Pictogram, data, collate **Spreadsheets** Arrow keys, backspace key, cursor, column, cells, clipart, count tool, delete key, lock tool, move cell tool, rows, speak tool, delete key, image toolbox, spreadsheet	Pictogram, question, data, collate, binary tree, avatar, database	Action, alert, algorithm, background, blocks of command, button, collision detection, command, debug, debugging, develop, event, execute, flowchart, nesting, object, output, plan, predict, procedure, properties, repeat, sequence, scene, sound, test, timer, values	**Hardware Investigation** Motherlode, CPU, RAM, graphics card, network card, monitor, speakers, mouse,, keyboard **Effective Searching** Easter egg, internet, internet browser, search, search engine, spoof website, website	Average function, advance mode, copy and paste, columns, cells, charts, equals tool, formula, formula izard, move cell tool, random tool, rows, spin tool, spreadsheet, timer	**Blogging** Audience, blog, blog page, blog post, collaborative, icon **Text Adventures** Text based adventure, concept map, debug, sprite, function
Assessment								

Redwell Computing Intent 2022-2023

Year Group	R	1	2	3	4	5	6
Topic	**The Great Outdoors**	**Toy Story**	**Houses and Homes**	**Bean to Bar**	**Tudors**	**Space**	**British Empire**
ICT Focus		**1.7 Coding**	**2.6 Creating Pictures**	**3.6 Databases**	**4.4 Writing for Different Audiences**	**5.6 3D Modelling (4 weeks) / 5.7 Concept Maps (2 weeks)**	**6.5 Text Adventures (2 weeks) / 6.8 Binary (4 weeks)**
Summer 1 — Knowledge and Understanding		• work out what is wrong when the steps are out of order in instructions. • say that if something does not work how it should it is because my code is incorrect. (1.7) • I can try and fix my code if it isn't working properly. (1.7) • make good guesses of what is going to happen in a program. For example, where the turtle might go. (1.5, 1.7)			• To explore how font size and style can affect the impact of a text. • To use a simulated scenario to produce a news report. • To use a simulated scenario to write for a community campaign.	• use collaborative modes such as within 2Connect to work with others and share it. (5.7)	• consider the intended audience carefully when I design and make digital content. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
Summer 1 — Skills		• name my work. (1.2, 1.3, 1.6, 1.7, 1.8) • save my work. (1.2, 1.3, 1.6, 1.7, 1.8) • find my work. (1.2, 1.3, 1.6, 1.7, 1.8) • change content on a file such as text, sound and images.(1.3, 1.6, 1.7, 1.8)	• include photos, text and sound in my creations. (2.8, 2.6)	• collect data and input it into software. (3.3, 3.6, 3.8) • create purposeful content and attach this to emails.(3.3, 3.5, 3.6, 3.7, 3.8, 3.9) • present data and information using different software such as 2Question or 2Graph . (3.3, 3.6, 3.8,3.9) • consider what the most appropriate software to use when given a task. (All)	• work collaboratively to create content and solutions. (4.1, 4.3, 4.4,48)		• use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)
Key Vocabulary		Action, algorithm, background, code, command, debug, debugging, event, execute, input, instructions, object, output, properties, run, scale, scene, sound, when clicked	Impressionism, palette, pointillism, share, surrealism, template	**Databases** Branching database, database, question, data	Font, bold, italic, underline	**3D Modelling** CAD, Modeling, 3D, viewpoint, polygon, 2D, net, 3D printing, points, template **Concept Maps** Audience, collaboratively, concept map, connection, node, thought, concept, idea, visual	**Text Adventures** Text based adventure, concept map, debug, sprite, function **Binary** Base 10, Base 2, Binary, Bit, Byte, Decimal, Denary, digit, gigabyte, integer, kilobyte

Redwell Computing Intent 2022-2023

Year Group		R	1	2	3	4	5	6
	Topic	Once Upon a Time	What a Wonderful World	Madagascar	Ancient Egypt	Street Life	Endangered Earth	Mayans
	ICT Focus		1.9 Technology Outside of School (2 weeks) / 1.5 Maze Builders (4 weeks)	2.7 Making music (3 weeks) / 2.8 Presenting ideas (3 weeks)	3.9 PowerPoint Presentations	4.1 Coding	5.8 Word Processing	6.9 Excel
Summer 2	Knowledge and Understanding		- make good guesses of what is going to happen in a program. For example, where the turtle might go. (1.5, 1.7) - explain that an algorithm is a set of instructions. (1.4, 1.5) - say what technology is. (1.9) - say what examples of technology are in school. (1.9) - say what examples of technology are at home. (1.9) - know that a chair uses old technology and a smart phone uses new technology. (1.9)		To use the skills learnt in previous weeks to design and present an effective presentation.	- use repetition in my code. For example, using a loop that continues until a condition is met such as the correct answer being entered.(4.1) - turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. (4.1, 4.5) - use timers within my program designs more accurately to create repetition effects. For example, I can create a counting machine. (4.1) - use selection (decision) in my programming.(4.1) - use variables within my program and know how to change the value of variables. (4.1) - use the user inputs and output features within my program, such as 'Print to screen'. (4.1) - identify errors in my code by using different methods, such as steeping through lines of code and fixing them. (4.1)	- To know what a word processing tool is for. - To consider page layout including heading and columns.	- To know what a spreadsheet looks like. - To use a spreadsheet to model a situation. - To use formulae for percentages, averages, max and min in spreadsheets

Skills					• I can edit digital data such as data in music composition software like 2Sequence. (2.7)	• create purposeful content and attach this to emails.(3.3, 3.5, 3.6, 3.7, 3.8, 3.9) • present data and information using different software such as 2Question or 2Graph . (3.3, 3.6, 3.8,3.9) • consider what the most appropriate software to use when given a task. (All) • To create a page in a presentation. To add media to a presentation • To add animations into a presentation • To add timings into a presentation.	• read programs that contain several steps and predict the outcomes with increasing accuracy. (4.1, 4.5) • share digital content using a variety of applications such as: 2Blog, 2Email and Display Boards. (Across units) • work collaboratively to create content and solutions. (4.1, 4.3, 4.4,48) • review solutions that others have created, using a checklist of criteria. (4.1, 4.2) • create and improve my solutions to a problem based on feedback. (4.1, 4.2)	• To use tables within MS Word to present information. • To add features to a document to enhance its look and usability. • To change the look of text within a document. • To know how to use word wrap with images and text. • To add and edit images to a word document.	• use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9) • To demonstrate how the use of Excel can save time and effort when performing calculations. • To navigate and enter data into cells. • To create a variety of graphs in Excel. • To apply spreadsheet skills to solving problems.
	Key Vocabulary		**Maze Builders** Direction, challenge, arrow, undo, rewind, forward, backwards, right turn, left turn, debug, instruction, algorithm **Technology Outside of School** Technology	**Making music** Bpm, composition, digitally, instrument, music, sound effects (SFX), soundtrack, tempo, volume **Presenting ideas** Concept map, node, animated, quiz, non-fiction, presentation, narrative, audience	Animation, design themes, font, media, presentation, presentation program, slide, slideshow, text box, text formatting, transition, WordArt	Action, alert, background, button, code block, command, co-ordinates, debug, debugging, execute, flowchart, if, else, nesting, nuber variable, object types, predict, prompt, propertis, repeat, repeat until, selection, timer, variable,	Copyright, cursor, document, font, in-built styles, merge cells, paragraph formatting, readability, template, text formatting, text wrapping, Word Art, word processing tool	Alignment Format Row Area Formula(e) Spreadsheet Calculate Function Style Cell Graph Sum Cell reference Graphics Table Chart Model Text Wrapping Column Open Value Data Range Workbook Effects Reference