Brede Primary School

ICT CURRICULUM

Intent Statement:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. Brede Primary School use Purple Mash, which is a comprehensive set of resources aligned to the National Curricula for Computing, Technology and Digital Competence. The Scheme of Work exposes children to a wide variety of digital tools, technological skills, and innovations. The scheme for Early Years (Reception) shows opportunities for using Mini Mash blended with Purple Mash as part of the Early Years classroom to support children in working towards early learning goals.

National Curriculum Aims:

- The national curriculum for computing aims to ensure that all pupils:
    - can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
    - can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
    - can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
    - are responsible, competent, confident and creative users of information and communication technology.

Age Related Statutory Coverage:

EYFS	**Key Stage One Learning**	**Key Stage Two**
	Pupils should be taught to: • 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	Pupils should be taught to: • 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

	• 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.	• 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.

EYFS	
Mouse and Trackpad Skills	• hold a computer mouse with my finger on the correct buttons. • use a mouse to make the cursor move around the computer screen where I want it to go. • click the correct mouse button to play games on the computer. • use a mouse accurately to click and drag objects on the screen. • use the mouse roller to scroll up and down a page. • use a laptop touchpad.
Keyboard Skills	• find all the letters of the alphabet on a keyboard. • put spaces between words in my typed work. • know how to correct typed work without re-doing the work entirely using the delete keys. • type capital letters and lower case and know how to change between these • type numbers using a keyboard.

	• know how to move to the next line down when typing. • use the arrow keys to move around the screen • use the different inputs of a computer keyboard.
Drawing Skills	• select colours when painting on the computer. • draw pictures on the computer to go with my work. • use a computer to draw with different widths of pens. • try the different tools that I can draw with on the computer. • use the undo button correctly. • use the erase button. • use a touchscreen device purposefully. • draw on a computer using a mouse.
Robots	• talk about where I am moving a toy vehicle whilst I am moving it. • describe the route taken by a toy vehicle. • follow directions to make a route for a toy vehicle. • plan a route for a toy vehicle. • follow my own plan for where the toy vehicle should move. • make a floor robot move. • control the forwards, backwards and rotation of a floor robot one step at a time. • program a 3-step route for a floor turtle. • predict where a floor robot will end up when given the instructions for a 2 or 3 step route. • plan a route for a floor robot and then carry out these instructions one step at a time. • plan a route for a floor robot and then carry out these instructions more than one step at a time.
Sounds	• make music using a computer. • add sound effects to my work. • use a device to record myself speaking and play back the sounds.
Photography	• talk about what photos show. • take photos using a digital device. • use the webcam in Mini Mash. • can open photos, including those that they have taken
Technology Around Us	• talk about what technology is used at home.

	• talk about what technology is used outdoors. • talk about what technology is used in the world around me.
Hardware	• understand why having clean hands is important when using shared devices. • understand why it is not sensible to eat and drink whilst using a technological device. • understand why I need to take care with electronic devices and their plugs and wires. • take appropriate actions when I need to carry a device to a different location. • use devices with care. • identify the technology used around me. • identify the parts of a computer and what they are for.
Safety and Privacy	• explain how my work on the computer belongs to me and other people's work belongs to them. • explain what it means for something to be private. • talk about how my body feels when I am not comfortable with something. • know who can help me when I am feeling worried. • show that I understand how to be kind to others. • choose activities in my free time that help me to be healthy.

KS1						
End of Key Stage 1 Progression Overview	**Computer Science**			**Informational Technology**	**Digital Literacy**	
Statement	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, keep personal information private; identify where to go for help\ support with concerns about content or contact on the internet or other online technologies.
Outcome	Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.	Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need for logical, programmable steps.	Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause-and effect sentence of what will happen in a program	Children demonstrate an ability to organise data using, for example, a database such as 2Investigate and can retrieve specific data for conducting simple searches. Children can edit more complex digital data such as music compositions. Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their	Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge. Children make links between the technology they see around them, coding and multimedia work they do in school e.g. animations, interactive code and programs.	Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work on a display board. They develop an understanding of using email safely and know ways of reporting inappropriate behaviours and content

				digital content including photos, text and sound.		

Year Group Progression	Year 1	Year 2
Computer Science	• apply a logical process when sorting and grouping a range of objects. • explain that an algorithm is a set of instructions. • work out what is wrong when the steps are out of order in instructions. • know that a computer program turns an algorithm into code that the computer can understand. • say that if something does not work how it should it is because my code is incorrect. • try and fix my code if it isn't working properly. • make good guesses of what is going to happen in a program. For example, where the turtle might go.	• explain an algorithm is a set of instructions to complete a task. • know the need to carefully plan an algorithm so it will work when made into code. • design a simple program that achieves a purpose. • find and correct some errors in my program. • say what will happen in a program. • spot something in a program that has an action or effect (does something).
Information Technology	• know what sound, pictures and text are. • change content on a file such as text, sound and images. • add sound, pictures and text to a program such as 2Create a Story. • name work. • save work. • find work.	• organise data • find data using specific searches. • use several programs to organise information. • edit digital data such as data in music composition software • name, save and find my work. • include photos, text and sound in my creations.

Digital Literacy	• keep my login information safe. • save my work in a safe place such as ‘My Work’ folder. • say what technology is. • say what examples of technology are in school. • say what examples of technology are at home. • that a chair uses old technology and a smartphone uses new technology.	• find the information I need using a search engine. • know the consequences of not searching online safely • share work and communicate electronically • report unkind behaviour and things that upset me online, to a trusted adult. • see where technology is used at school such as in the office or canteen. • understand that my creations, need similar skills to the adult world. e.g. The program used for collecting money for school trips.

Lower KS2						
End of Key Stage Lower KS2 Progression Overview	**Computer Science**			**Informational Technology**		**Digital Literacy**
Statement	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.	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 concern about content and contact.
Outcome	When turning a real-life situation into an algorithm, the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and	Children's use of timers to achieve repetition effects are becoming more logical and are integrated into their program designs. They understand 'if statements' for selection and attempt to	Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of	Children understand the function, features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level.	Children can make improvements to digital solutions based on feedback. Children make informed software choices when presenting information and data. They create linked content using a range of software	Children can explore key concepts relating to online safety using concept mapping such as 2Connect. They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact. Children know the implications of inappropriate online searches. Children begin to understand how things are shared

	repetition. Children make more intuitive attempts to debug their programs	combine these with other coding structures including variables to achieve the effects that they design in their programs. As well as understanding how variables can be used to store information while a program is executing, they can use and manipulate the value of variables. Children can make use of user inputs and outputs such as 'print to screen'. e.g. 2Code	coding structures. For example, 'if' statements, repetition and variables. They can trace code and use step-through methods to identify errors in code and make logical attempts to correct them. e.g. traffic light algorithm in 2Code. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately		such as 2Connect and 2Publish+. Children share digital content within their community, i.e. using Virtual Display Boards.	electronically such as posting work on a display board. They develop an understanding of using email safely and know ways of reporting inappropriate behaviours and content

Year Group Progression	Year 3	Year 4
Computer Science	• make a real-life situation into an algorithm for a program. • design an algorithm carefully, thinking about what I want it to do and how I can turn it into code. • identify an error in my program and fix it. • experiment with timers in my programs. • identify the difference in using the effect of a timer or repeat command in my code. • know that a variable stores information while a program is running (executing). • identify ‘If’ statements, repetition and variables. • read programs with several steps and predict what they will do.	• turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. • use repetition in my code. For example, using a loop that continues until a condition is met such as the correct answer being entered. • use timers within my program designs more accurately to create repetition effects. For example, I can create a counting machine. • use selection (decision) in my programming. For example, using an ‘if statement’ for a question where the program takes one of two paths. • use variables within my program and know how to change the value of variables. • use the user inputs and output features within my program, such as ‘Print to screen’. • identify errors in my code using methods including stepping through lines of code. • read programs that contain several steps and predict the outcomes with increasing accuracy. • recognise the main component parts of hardware which allow computers to join and form a network.
Information Technology	• carry out searches to find digital content on a range of online systems, such as within Purple Mash or on an internet search engine. • collect data and input it into software. • analyse data using features within the software, such as formulae in 2Calculate (spreadsheets). • present data and information using different software such as 2Question (branching database) or 2Graph (graphing tool). • consider what the most appropriate software to use when given a task by my teacher. (Across units) • create purposeful (appropriate) content and attach this to emails.	• create and improve my solutions to a problem based on feedback. For example, create an effective animation or musical composition. • review solutions that others have created, using a checklist of criteria. • work collaboratively to create content and solutions. • share digital content using a variety of applications such as: 2Blog, 2Email and Display Boards. (Across units • understand the purpose of a search engine and the main features within it. • look at the information on a webpage and make predictions about the accuracy of the information contained within it.

Digital Literacy	• create a secure password. (3.2 • 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. • understand the importance of keeping safe online and behaving respectfully. (3.2) • identify different ways that the internet can be used for communication. • use email such as 2Email to respond to others appropriately and attach files. (3.5) • report unacceptable content and contact online in more than one way to a trusted adult. (3.2) • use communication tools such as 2Email respectfully and use good etiquette. (3.2, 3.5	• I have a good understanding of the online safety rules we learn at school. • I can demonstrate how to use different online technologies safely. • I can demonstrate how to use a few different online services safely. • I know I have a right to privacy both on and offline. • I recognise that my wellbeing can be affected by how I use technology. • I can report with ease any concerns with content and contact online and know immediate strategies to keep safe.

Upper KS2							
End of Key Stage Upper KS2 Progression Overview	**Computer Science**				**Informational Technology**		**Digital Literacy**
Statement	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 concern about content and contact.
Outcome	Children can turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction)	Children translate algorithms that include sequence, selection and repetition into code and their designs show that they are	Children can interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to	Children understand and can explain in some depth the difference between the Internet and the World Wide Web. Children know what a WAN and LAN are and can	Children readily apply filters when searching for digital content. They can explain in detail how credible a webpage is and the information it contains. They compare a range	Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g.	Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. 2Respond activities. They recognise the value in preserving their privacy when online

	and then logically decomposing them using their knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.	thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, and inputs from the user of the program such as button clicks and the value of functions.	explain the program as a whole.	describe how they access the internet in school	of digital content sources and can rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication.	2Blog. They can use criteria to evaluate the quality of digital solutions and can identify improvements, making some refinements	for their own and other people’s safety.

Year Group Progression	Year 5	Year 6
Computer Science	• make more complex real-life problems into algorithms for a program. • test and debug my programs as I work. • convert (translate) algorithms that contain sequence, selection and repetition into code that works. • use sequence, selection, repetition, and some other coding structures in my code. • organise my code carefully, for example, by naming variables and using tabs. I know this will help me debug more efficiently. • use logical methods to identify the cause of any bug with support to identify the specific line of code.	• turn a complex programming task into an algorithm. • identify the important aspects of a programming task (abstraction). • decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. • test and debug my program as I work on it and use logical methods to identify a cause of a bug. • identify a specific line of code that is causing a problem in my program and attempt a fix. • translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. • use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object. • 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. • explain the difference between the internet and the World Wide Web. • explain what a WAN and LAN is and describe the process of how access to the internet in school is possible.

Information Technology	• make appropriate improvements to the digital work I have created. (Acro • comment on how successful a digital solution is that I have created. For example, a program built in 2Code that sorts decimals numbers. (Across units • work collaboratively with others creating solutions to problems using appropriate software such as 2Code. (Across units) • use collaborative modes such as within 2Connect to work with others and share it. (5.7) • search precisely when using a search engine. For example, I know I can add additional words or remove words to help find better results. (5.2) • explain in detail how accurate, safe and reliable the content is on a webpage. • know the importance of computer networks and how they help solve problems and enhance communication. (5.2)	• use filters when searching for digital content. • explain in detail how accurate and reliable a webpage and its content is. • compare a range of digital content sources and rate them in terms of content quality and accuracy. • consider the intended audience carefully when I design and make digital content. • use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.
Digital Literacy	• recognise the main dangers that can be perpetuated via computer networks. • explain what personal information is and know strategies for keeping this safe. • use the most appropriate form of online communication according to the digital content. For example, use 2Email, 2Blog and Display Boards. • have a clear knowledge of online safety rules taught at school. • demonstrate the safe and respectful use of different online technologies and online services. • always relate appropriate online behaviour to my right to have personal privacy. • know how to not let my mental well-being or others be affected by the use of online technologies and services.	• demonstrate safe and respectful use of a range of different technologies and online services. • identify more discrete inappropriate behaviours online. For example, someone who may be trying to groom me or someone else. • use critical thinking to help me stay safe online. • know the value of protecting my privacy and others online. • design and create my own online blogs ensuring that my content is appropriate.

Key vocabulary -						
EYFS	**KS1**		**KS2**			
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
General	**Coding**					
Technology	Action	Bug	Alert	Co-ordinates	Abstraction	Launch Command
Computer	Algorithm	Button	Command	Design	Concatenation	Procedure
Mouse	Background	Click events	Debug/Debugging	Execute	Decomposition	Properties
Button	Click	Collision Detection	Degrees	‘If’ statement	Efficient	String
Screen	Code	Collison Detection Action	Event	‘If/Else’ statement	Friction	Tabs
Click	Code blocks	Collision detection Event	Flowchart	Prompt	Function	Text Adventure
Drag	Coding	Image	Input	Repeat until	Physical System	Text Object
Laptop	Code View	Implement	Nest	Selection	Random	Turtle Object
Ipad	Command	Instructions	Object	Variable	Simplify	X and Y properties
Keyboard	Debug\Debugging	Interaction	Predict		Simulation	
Space	Design View	Interval	Repeat		String	
Type	Event	Object name	Right-Angle		Tabs	
Delete	Execute	Predict				
Arrow Key	Instruction	Sequence				
Undo button	Object	Test				
Forward	Output	Text				
Backwards	Plan	Timer				
Instruction	Programmer/Coder	Turtle Object				
Logon/Login	Properties	When Key event				
On	Run	When Swiped Event				
Off	Scale					
Sound	Scene					
Moving	Software					
Collect	Sound					
Command	When Clicked					
Equipment Monitor	**Online Safety**					
Movement	Alert	Attachment	Appropriate	AdFly	Bibliography	Data Analysis
Organise	Avatar	Digital Footprint	Blog	Citation	Communication	Inappropriate
Phone	Button	Display Board	Inappropriate	Collaborate	Creative commons licence	Location sharing
Camera	Device	Email	Permission	Collaborative	Critical thinking	Print Screen
Photograph	File Name	Filter	Reliable Source	database	Encrypt	Screen Time
Choice	Filter	Identifying	Reputable Source	Cookies	Identity theft	Secure websites
Create	Home screen	Internet	Spoof	Copyright	Image manipulation	

Internet information Share Website	Icon Login Log Out Menu My Work Area Notification Password Private Purple Mash Tools Saving search Shared Folder Textbox Think About Box Topic area Too Bar Typing writing Template	Personal information Private Information Protection Reply Search Secure Sharing	Verify Vlogs Website	Data Analysis Digital footprint Malware Phishing Plagiarism Ransomware Report SMART rules Software Spam Virus watermark	Ownership PEGI ratings Reference Reliability Responsibility Reliable Source Screenshot Spoof Validity	
					Concept Maps	**Blogging**
					Concept Concept Map Connection Collaborate Heading Sub-Heading Node Presentation Mode Story mode	Approval Archive Blog Blog post Collaborate Commenting Connections Nodes Vlog
			Simulations	**Animation**	**Game Creator**	**Text Adventures**
			Advantages Analysis Decision Disadvantages Evaluation Modelling Point-of-view Realistic Simulation Solution Unrealistic	Animation FPS (Frame Per Second) Frame Onion skinning Pause Stop motion	Evaluation Feedback Image Instructions Promotion Quest Scene Screenshot Texture Theme	Debug\ Debugging Flow of Control Function Link QR Code Repeat Selection Sprite Step Through Text Adventure Variables

				Logo		**Quizzing**
				Debugging Grid Logo Logo Commands Multi Line Mode Pen Down Pen Up Prediction Procedure Repeat Run Speed SETPC SETPS		Audience Audio Case-Sensitive Clipart Clone Cloze Copy\Paste Database Database Record Database Field Image Image Filter Selfie Statistics Undo\Redo Preview Quiz
		Questioning		**Artificial Intelligence**		**Binary**
		Avatar Binary Tree Data Database Field Information Pictogram Question Record Search Sort		Artificial Intelligence Algorithm Data		Binary Bit Decimal Denary Digit Game States Integer Microprocessor Nanotechnology Nibble, Byte, Kilobyte, Megabyte, Gigabyte and Tetrabyte Switch Transistor Variable
		Spreadsheets				
		Addition Calculations Cell Clipart Coins	Advanced mode Budget Cell address Data Data Table		Area Budget Computational Model	Auto fit Average Budget Calculation Categories Ribbon

		Column Count Tool Data Data Table Delete Equals Equals Tool Graph Image Image Value Move Cell Price Row Select Speak Tool Spreadsheet Total Totalling Tool	Equal to Tool Formula Bar Formula Wizard Graph – Bar graph, line graph, pie chart Quiz Tool Random Number tool Range Spinner Tool Timer tool		Converting values: imperial measures, metric measures Count Tool Data Dice Tool Expenses Formula Formula Bar Hypothesis Perimeter Profit Variable	Cell Cell Reference Chart Column Computational Model Conditional formatting Currency Data Delimiter Expense Filter Flash-fill Formatting Formula Formula Bar Graph Horizontal axis Maximum Minimum Profit Range Row Series Sheet Sorting Spreadsheet Template Text Wrapping Vertical axis Workbook
			Email		**Databases**	**Networks**
			Address Book Attachment BCC – Blind Carbon Copy CC – Carbon Copy Communication Compose Email Inbox		Arrange Avatar Chart Collaborative Data Database Database Report Field Group	Data: DNS (Domain Name Server) Ethernet Hosting Hub\Switch Internet IP address ISP (Internet Service Provider) LAN (Local Area Network)

			Link Mind mapping Node Password Personal Information Save to draft Trusted Contact Binary Tree Branching Database Data Database Debugging		Record Search Sort Statistics	Network Router Search engine WAN (Wide Area Network) Web Page: A document on the World Wide Web. Web server Website WLAN Wi-Fi World Wide Web
	Lego Builders	**Creating Pictures**			**Modelling**	
	Algorithm Code Computer Debugging Instructions Machine Program Recipe Sequence	Art Clip-art Diagonal Dilute eCollage Fill Horizontal Impressionism Line Palette Parallel Pointillism repeating Pattern Rotated Stamps Style Surrealism Symmetry Vertical			2D 3D 3D Printing CAD – Computer Aided Design Design Brief Net Pattern Fill Points Template	
	Animated Story Books		**Touch Typing**	**Writing for Different Audiences**	**Word Processing**	
	Animation Background Category Clip-Art Gallery Copy Drop-Down Menu		Keys Posture Spacebar Typing	Campaign Format Font Genre Opinion Reporter	Attributing Bulleted Lists Breaks Caps Lock Captions Column (table)	

	E-Book Edit Eraser Features Font Sound Overwrite Pain Tools Paste Play Mode Redo Save Sound effect text Undo Voice recording			Viewpoint	Columns (newspaper) Copy and Paste Copyright Creative Commons Cropping Cursor Distributing Columns Document Drop Capitals Editor Options Font Font Screen Grammar Check Hyperlink Image Editing Image Transparency Merge Cells Numbered Lists Page Orientation Readability Row Selecting/highlighting Sharing Spell Check Styles Template Text Box Text Formatting Text Wrapping Word art Word Processing Tool Zoom	
		Effective Searching		**Effective Searching**		
		Browser Device Digital Footprint Domain Internet Network Search engine		Balanced View Easter eggs Internet Reliability Results Page search Engine		

		URL Web Address Web Page Web Site World Wide Web				
		Making Music		**Making Music**		
		Bars Beat Compose Note Tune repeat Sound Effect Soundtrack Speed Tempo Volume		BPM (Beats per Minute) Dynamics Harmonious Melody Pitch Pulse Rhythm Tempo Texture Synths		
	Technology Outside School			**Hardware**	**External Devices: Purple Chip**	
	Computer Technology			Components CPU Graphics Card Hard Drive Hardware Input Motherboard Network card Output Peripherals RAM Software	Alert Algorithm Chip show text Code View Debug Design Design View Emulator/Simulator event External device Function Host IF/else Input Output Print to Screen QR code Sensor URL: The address of a webpage Variable	

					Design	
	Maze Explorers		**Physical Devices: Micro:bit**			
	Algorithm Challenge Command Delete Direction Instruction Left and Right Route Undo Unit		Accelerometer Conditional Data Gestures Hardware Image Infinite Loop Input LED Output Program repeat Sequence Software Speaker	Accelerometer Conditional Data Gestures Infinite Loop Light sensor Logic Selection Sensor Simulation Variable	Ambient Temperature Crocodile Clip Electrical Circuit IF/THEN Input LED Output Pins Thermometer Thermostat	
	Pictograms		**Graphing**			
	Collect Data Compare Data Pictogram Record Results Title Totals Visual		Axis Chart Column Data Graph Investigation Row Sorting Survey Tally Chart Title			
	Grouping and Sorting	**Presenting Ideas**	**Presenting**			
	Algorithm Criteria Describe Equal Groups Less than More than Sort	E-book Fact File Fiction Mind Map Multiple-choice Node Non-fiction Presentation Quiz	Animation Audio Border Properties Duration Editing Fill Colour Font Formatting Layer Media Presentation			

			Presentation Design Preview Review Slide Slideshow Sound Effect Textbox Theme Timing Transition Video WordArt			

Hedgehogs- Reception		
Term 1 and 2	**Term 3 and 4**	**Term 5 and 6**
Taught alongside EYFS Curriculum Areas of Learning		

Rabbits- Year 1 and 2					
CYCLE A (2023/2024)					
Term 1 and 2		**Term 3 and 4**		**Term 5 and 6**	
Unit 1.1 Online Safety & Exploring Purple Mash	**Unit 1.4 Lego Builders** **Unit 1.9 Technology outside school**	**Unit 1.2 Grouping & Sorting** **Unit 2.6 Creating Pictures**	**Unit 2.5 Effective Searching**	**Unit 1.7 Coding**	**Unit 2.1 Coding**
CYCLE B (2024/2025)					
Term 1 and 2		**Term 3 and 4**		**Term 5 and 6**	
Unit 1.1 Online Safety & Exploring Purple Mash	**Unit 2.4 Questioning** **Unit 2.2 Online Safety**	**Unit 1.5 Maze Explorers**	**Unit 2.7 Making Music** **Unit 2.3 Spreadsheets**	**Unit 1.3 Pictograms**	**Unit 2.8 Presenting Ideas**

Foxes- Year 3 and 4					
CYCLE A (2023-2024)					
Term 1 and 2		Term 3 and 4		Term 5 and 6	
Unit Unit 3:1 Coding	Unit 3.2 Online safety Unit 3.3 Spreadsheets	Unit 3.5 Email	Unit 3.6 Branching Databases Unit 3.7 Simulations	Unit 3.8 Graphing	Unit 3.10 Micro:bits
CYCLE B (2024-2025)					
Term 1 and 2		Term 3 and 4			
Unit 4:1 Coding	Unit 4.2 Online safety Unit 4.4 Writing for different audiences	Unit 4.5 Logo	Unit 4.6 Animation	Unit 4.7 Effective Search Unit 4.8 Hardware Investigators	Unit 3.9 Presenting

Owls- Year 5 and 6					
CYCLE A (2023/2024)					
Term 1 and 2		Term 3 and 4		Term 5 and 6	
Unit 5.1 Coding	Unit 5.2 Online safety Unit 5.4 Databases	Unit 5.5 Game Creator	Unit 5.3 Spreadsheets	Unit 5.6 Modelling	Un it 5.7 Concept maps and word processing
CYCLE B (2024/2025)					
Term 1 and 2		Term 3 and 4		Term 5 and 6	
Unit 6.1 Coding	Unit 6.2 Online safety Unit 6.3 Spreadsheets	Unit 6.4 Blogging Unit 6.6 Networks	Unit 6.7 Quizzing	Unit 6.5 Text Adventures	Unit 6.8 Understanding Binary Number Unit 5.10 Micro:bits