

Year 1	AUTU	IMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUM	MER 2
Computing focus	Introduction to Purple Mash	Creative Computing	Data Explorers	Animated Stories	Creating and Following Instructions	Coding	Technology Around Us	Making Beats
Number of Lessons	3	4	6	6	3	6	4	4
Key Objectives in Unit	Introduction to Purple Mash - Introducing Purple Mash and the essential skills for the year 1 scheme units. -Logging in and out of Purple Mash -Opening and using 2Dos -Saving work in the Work area	Developing mouse skills and ICT skills using the creative 2DIY tools in Purple Mash. -Making digital art -Making and sharing jigsaws -Making a drag and drop game	Grouping and sorting objects. Relating this to organising and interpreting data. Using pictorial data on Purple Mash. -Sorting and grouping quizzes -Understanding what data is -Representing data electronically	Creating and combining digital art and text to produce digital books using the 2Create a Story tool. -Creating digital art and text -Adding animation to images -Adding sound	Understanding simple algorithms through unplugged activities before moving to sequencing activities on digital devices. -Following instructions -Creating Instructions -Understanding simple algorithms	Introducing block coding using 2Code. -Using blocks to code -Understanding objects, actions and events -Planning and designing a program	Defining and understanding what technology is. Relating this to school, home, outside and to its use in the wider world. -Understanding what technology is -Recognising technology in the local environment and wider world	Introducing the concept of digital music. -Creating sounds using 2Explore -Combining instruments using 2Beat -Composing digital music
Key Vocabulary	Avatar File Name Home Page Icon Login Logout Password Save 2do	Arrow keys Digital art Drag and drop Hotspot Touchscreen gestures	Criteria Data Group Pictogram Sort	Animation Background Copy and paste Digital book Eraser Font Sound effect Text Undo	Algorithm Computer bug Debugging Instructions Program		Device Digital Technology Electronic Hardware Technology	
Online Safety	Self-image and self-identity – 2 Online		Online Reputation – 2 sessions Online Bullying – 1 session	Managing online information – 3 sessions	Health, wellbeing and lifestyle – 1 session Copyright and ownership – 4 sessions	Online Relationships – 4 sessions	Privacy and sec	curity – 3 sessions

	Domains linked to the National Curriculum	
Information Technology	Computer Science	Digital Literacy



Year 2	AUTU	IMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUM/	MER 2
Computing focus	Route Explorers	The Internet	Creating Pictures	Spreadsheets	Questioning	Coding	Presenting Ideas	Making Music
Number of Lessons	4	4	5	6	4	6	4	3
Key Objectives in Unit	Coding using 2Go. Writing simple instructions to move a screen turtle along routes Coding using Understanding what the internet is. -Defining the		Using a digital art tool to create art in different traditional art styles. -Using 2Paint a Picture templates -Exploring the features of each template -Compiling an online art portfolio -Comparing digital art effects to non digital effects	Introducing spreadsheets and the way they organise data using the 2Calculate tool. -Understanding cells and columns -Inserting images with values B Using totalling tools -Creating graphs	Investigating data, how it is collected and how it can be presented. -Asking the right question to collect or 0000present data -Keeping a tally -Using 2Count to present the data -Using a branching database	Developing coding skills using 2Code. -Understanding algorithms -Introducing sequencing -Coding interaction between objects -Using timers -Debugging	Creating mind maps using 2Connect to organise and present ideas. -Using and making mind maps -Using a mind map as a presentation tool	Composing digital melodies using 2Sequence. -Understanding a digital music tool -Relating the functions to musical terms -Composing music digitally
Key Vocabulary	Algorithm Algorithm Coding Computer bug Command Debugging Direction Browser Home Page Internet Keywords Link Modem Router Search engine Search bar Smart device Website Webpage Wi-Fi World Wide Web		Apparatus Automatically Axis / axes Block diagram Cell Click and drag Column Controls toolbar Count tool Data Format 'Is equals' tool Labels 'Quiz' tool Row Value	Branching database Closed question Data Grouping Open question Pictogram Primary data Sorting Tally chart Yes or No question				
Online Safety	_	I self-identity – 2 ions	Online Reputation – 3 sessions Online Bullying – 3 session	Managing online information – 5 sessions	Health, wellbeing and lifestyle – 1 session Copyright and ownership – 2 sessions	Online Relationships – 7 sessions	Privacy and sec	curity – 4 sessions

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Year 3	AUT	UMN 1	AUTU	MN 2	SPRII	NG 1	SPRING 2	SUMMER 1	SUM/	MER 2
Computing focus	Introduction to Purple Mash	Email	Route Planners	Micro:bits	Micro:bits	Branching Databases	Spreadsheets	Coding	Presentations	Touch Typing
Number of Lessons	2	6	5	2	2	4	6	6	4	4
Key Objectives in Unit		Communicating electronically using 2Email. Considering safety aspects of email communication. -Composing and replying to emails -Opening and sending attachments -Using email safely	Using 2Go to create routes for screen turtles. Coding using angles of turn and repetition. -Writing commands using rotation -Creating algorithms and writing code -Planning routes -Repetition in 2Go	Coding using a micro: bit as an external device. The software includes an emulator for use in schools without micro: bits. -Using the LED display -Sequencing and timing -Understanding inputs and outputs -Adding sounds and gestures	Coding using a micro: bit as an external device. The software includes an emulator for use in schools without micro: bits. -Using the LED display -Sequencing and timing -Understanding inputs and outputs -Adding sounds and gestures	Creating branching databases (binary tree databases) using 2Question. -Asking binary questions -Completing branching databases in 2Question -Creating and testing branching databases	Working with data using spreadsheets in the 2Calculate tool. -Creating graphs -Understanding cell addresses -Using the formula bar -Combining 2Calculate functions to analyse data	Developing coding skills using 2Code. -Using flowcharts in 2Chart -Using timers -Introducing repetition -Testing and debugging	Using industry standard software to create presentations. -Adding media -Customising with animation and timings -Designing an effective presentation	Developing touch typing skills using 2Type. -Recognising keyboard locations -Understanding correct finger positioning -Improving accuracy and speed
Key Vocabulary		Address Book Attachment Communication Compose Email Email Simulation Inbox Password Personal Information Recipient Trusted Contact	Algorithm Angle Degrees Route Turtle Object Repeat Rotation	Accelerometer Algorithm Animation Gestures Hardware Image Infinite Loop LED: Light emitting diode Output Repeat Sequence Software Sound Output Speaker	Accelerometer Algorithm Animation Gestures Hardware Image Infinite Loop LED: Light emitting diode Output Repeat Sequence Software Sound Output Speaker	Binary Choice Binary Tree Branching Database Data Database Debug\ Debugging Record				Bottom Keys Home Keys Number Row Keyboard Posture Shift Key Space Bar Top Keys Typing
Online Safety		d self-identity – 3 sions		tion – 3 sessions ng – 2 session		e information – 6 ions	Health, wellbeing and lifestyle – 2 sessions Copyright and ownership – 1 session	Online Relationships – 6 sessions	Privacy and sec	urity – 3 sessions

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Year 4		JTUMN 1	AUTUMN 2	SPRI	NG 1	SPRI	NG 2	SUMMER 1	SUMMER 2	
Computing focus	Unpacking Hardware and Software	Micro:bits	Animation	Logo	Effective Searching	Effective Searching	Sound Stories	Coding	Composing Beats	Introduction to Al
Number of Lessons	4	4	6	4	2	2	4	6	4	4
Key Objectives in Unit	Understanding technology and computer systems in relation to their hardware and software. -Defining types of technology -Knowing how systems work together -Identifying hardware - Understanding software	Coding using a micro:bit as an external device. Includes an emulator for schools without micro:bits. -Exploring sensor inputs and the 0000accelerometer -Using variables, inputs and outputs -Coding with selection and loops	Creating digital animations using the 2Animate tool. -Knowing the types of animation -Understanding onion skinning -Exploring animation features -Using storyboarding	Learning the text-based Logo coding language to create patterns and shapes Coding sequences, repetition, and procedures. -Using Logo commands -Writing commands in a sequence -Refining code using repetition and procedures	Exploring how to effectively search the internet. Exploring safety aspects of online information. -Using a search engine -Search rankings -Reliable searching -Search algorithms	Exploring how to effectively search the internet. Exploring safety aspects of online information. -Using a search engine -Search rankings -Reliable searching -Search algorithms	Adding narrative and sound effects to create audio books using 2Cast. -Recording audio content -Creating sound effects -Post- production editing	Developing coding skills using 2Code. -Introducing selection -Exploring design properties -Introducing loops -Coding number variables	Using the Busy Beats tool to explore and compose music digitally. -Exploring pulse, rhythm and tempo -Understanding pitch and texture -Composing a melody	Understanding what artificial intelligence is, how it can help and the ethics around its use. -Exploring how Al works -Investigating the positive and negative 0000impacts of Al -Considering Al in the future
Key Vocabulary	Application (App) Component Computer System Digital Technology Electrical Technology Hardware Input Manual Technology Output Peripheral Process Program Smart Technology Software Storage Technology	Accelerometer Data Gestures If statement If/Else statement Infinite Loop Light Sensor Logic Selection Sensor Simulation Variable	Animation Animation Software Background Copy Frame Evaluate Frame Frames Per Second Onion Skinning Sharing Controls Sound Effect Stop Motion Storyboard	LogoLogo Commands Pen Up Pen Down Multi-Line Mode Repeat Setps Setpc Procedure	Crawl Exact Match Fake News Filter Index Internet Keywords Rank Refine Relevance Reliable Source Search Bar Search Engine Snippet Virtual Assistant Device Website	Crawl Exact Match Fake News Filter Index Internet Keywords Rank Refine Relevance Reliable Source Search Bar Search Engine Snippet Virtual Assistant Device Website	Audiobook Background Music Edit Editor Final Mix Playback Recording Sound Effects Sound Effects Manager Sound Technician Timeline Track		BPM Dynamics Electronic Music Melody Patch Pitch Pulse Rippler Rhythm Sample Synths Tempo Texture	
Online Safety	Self-image and self-identity – 3 Online Reputa		Online Reputation – 2 sessions Online Bullying – 3 session		e information – 6 ions	Copyright and	ng and lifestyle – sions I ownership – 2 sion	Online Relationships – 3 sessions	Privacy and sec	curity – 4 sessions

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Year 5	A	UTUMN 1	AUTUM	N 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Computing focus	Quizzing	Micro:bits	Micro:bits	Databases	Game Creator	Spreadsheets	Coding	Word Processing
Number of Lessons	5	2	2	4	5	6	6	6
Key Objectives in Unit	Making effective quizzes using 2Quiz. Exploring types of questioning and effective presentation of a quiz. -Evaluating the features of a good quiz -Choosing appropriate question types -Making use of feedback and titles B Testing and editing quizzes	Coding using a micro:bit as an external device. Includes an emulator for schools without micro:bits. -Exploring sensor inputs and the 0000accelerometer -Using selection, variables, inputs and 0000outputs -Coding for the micro:bit pins	Coding using a micro:bit as an external device. Includes an emulator for schools without micro:bits. -Exploring sensor inputs and the 0000accelerometer -Using selection, variables, inputs and 0000outputs -Coding for the micro:bit pins	Using table- based databases for collecting, presenting, searching and analysing data. -Understanding records and fields -Creating a collaborative database -Searching databases B Analysing data	Designing and making a 3D maze adventure game using 2DIY3D. -Exploring the features of a good game -Designing and making sprites and the 0000game world -Evaluating the playability of games	Working with data using spreadsheets in the 2Calculate tool. -Using formulae -Exploring measurement conversions -Carrying out numerical investigations -Creating computational models	Developing coding skills using 2Code. -Coding efficiently by refining code -Simulating a physical system -Exploring decomposition and abstraction -Using functions and variables	Using industry standard software to create documents. -Creating documents -Using images -Entering and editing text -Using tables and templates
Key Vocabulary	Advanced Content Page Debug Design Evaluate Features Interactive Layout Multiple Choice Quiz Simple Test Topic			Condition Data Database Database Design Edit Field Filter Group Linked Tables Multiple Table Operator Query Record Sort Validation	Game Genre 2D Game 3D Game Game Design Sprite Sprite Animation Playability Game Environment Game Feedback			
Online Safety	_	nd self-identity – 2 essions	Online Reputatio Online Bullying	n – 2 sessions	Managing online information – 9 sessions	Health, wellbeing and lifestyle – 4 sessions Copyright and ownership – 2 session	Online Relationships – 5 sessions	Privacy and security – 3 sessions

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Year 6	AUTUMN 1		AUTU	AUTUMN 2 SPRING 1		SPRING 2 SUMMER 1		SUMMER 2	
Computing focus	Networks	Micro:bits	Graphing	Blogging	Data Detectives	3d Modelling	Coding	Spreadsheets	
Number of Lessons	4	4	4	4	4	4	6	6	
Key Objectives in Unit	Learning what networks do and how they connect devices. Considering safety aspects of networks and collaboration. -Identifying examples of networks -Recognising types of networks -Understanding internet services -Discussing positive and negative use of networks	Coding using a micro:bit as an external device. B Using the micro:bit as a data logger -Measuring, recording and analysing 0000environmental data -Collecting data and exporting to graphical software	Understanding the benefits of creating common graph types digitally. Using appropriate features to present data in the best possible way. -Creating a range of graph types -Incorporating multiple datasets -Using graphs to solve a problem -Exporting and importing files	Understanding how blogs and their features can effectively engage an audience. -Planning the theme, content and structure -Writing, editing and publishing a blog post -Understanding blog moderation -Reviewing and commenting on blog posts	Using the Data Detectives tool to work with large datasets to analyse complex data and answer questions. -Filtering and sorting data -Grouping data -Linking tables	Exploring computer aided design in 3D using the 2Design and Make tool. -Working with viewpoints of 3D objects -Adding and editing points on a model -Designing for a purpose	Developing coding skills using 2Code. -Using functions -Understanding flowcharts and control 0000simulations -Coding for user input	Using industry standard software to work with spreadsheets. -Performing calculations -Entering and using formulae -Presenting data -Solving real life problems	
Key Vocabulary	Network LAN (Local Area Network) WAN (Wide Area Network) Router Wi-Fi Internet World Wide Web (WWW) Website Web Browser Email Internet Chat Video Call Collaborate Respectful Communication Online Safety Censorship Firewall Filter Freedom of Speech Responsible Use		Chart Comparative Bar Chart Data Dataset Dual Bar Chart Line Graph Pie Chart	Approval Blog Blog post Commenting Draft Edit Hyperlink Moderation Netiquette Plan Publish Revise Vlog	Bar Chart Calculate Condition Data Database Field Filter Group Line Graph Linked Tables Query Record Sort				
Online Safety	_	d self-identity – 3 ssions		tion – 2 sessions ng – 2 sessions	Managing online information – 11 sessions	Health, wellbeing and lifestyle – 4 sessions Copyright and ownership – 2 session	Online Relationships – 4 sessions	Privacy and security – 6 sessions	

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