Year	Term	Topic Overview	Lesson Focus
FS2	Autumn (1)	Children in Foundation Stage will recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. For example:	L1 – Introduction to computers and digital technology L2 – What are computers L3 – How we use computers
	Autumn (2)	Communication and Language – "Being Imaginative". Using a variety of applications to create electronic artwork and stories.	L1 – Introduction to iPads and Purple Mash L2 – Create a picture in 2Paint L3 – Editing pictures in 2Paint
	Spring (3)	Reading – An introduction to online tools that require reading to properly understand. Create slideshows and receive emails. Writing – Writing on an electronic device using a keyboard or touchscreen.	L1 – What are instructions? Giving and following instructions. L2 – Instructions for direction (1) L3 – Instructions for direction (2)
	Spring (4)	Exploring and using Media – Experiment with electronic tools for making music, paintings and 3D modeling.	L1 – Representing instructions with pictures L2 – Representing instructions with pictures (2) L3 – Consolidation
	Summer (5)	Life Skills – Using technology to learn more about healthy living and relationships.	L1 – Introduction to Bee Bots L2 – Bee Bot exploration
	Summer (6)		L1 – Planning an algorithm L2 – Coding and debugging an algorithm L3 – Coding an algorithm L4 – Consolidation
Year 1	Autumn (1)	Online Safety – Why do we have usernames, passwords and avatars? How do they keep us safe? Understanding what makes a good username, avatar and password	L1 – Logging in / usernames and passwords L2 – Creating avatar / exploring Purple Mash L3 – Saving and organizing work
	Autumn (2)	Art and Design – Animated Story books: Exploring and creating e-books, comparing similarities and differences with traditional books	L1 – Create an e-book page L2 – Add background and animation L3 – Add sound and copy and paste L4 – Add to your e-book

	Spring (3)	**Introduction to coding** – Begin to understand how computers depend on specific instructions to function and create basic programmes	L1 – Instructions L2 – Objects and actions L3 – When code executes
	Spring (4)	**Introduction to coding (cont…)**	L1 – Events / When code executes L2 – Setting the scene L3 – Using a plan
	Summer (5)	**Coding and computational thinking** – Lego Builders: begin to think logically about scenarios. Children will be introduced to the term 'algorithm'. This concept is at the core of coding.	L1 – Following instructions L2 – Following and creating simple instructions L3 – To consider how the order of instructions affects results
	Summer (6)	**Data Handling** – Pictograms: What is a pictogram? How can it be used to present and interpret data **Introduction to Spreadsheets** – Introduction to how spreadsheets use data and how to add images	L1 – Data in pictures / Class pictogram L2 – Recording results L3 – Introduction to spreadsheets L4 – Adding images to spreadsheet / Using the image toolbox
Year 2	Autumn (1)	**Online Safety** – searching the internet safely and understanding our "digital footprint"	L1 - SMART rules - discussion L2 - Email safety and screentime - spam emails L3 - Screentime and digital footprint
	Autumn (2)	**Coding** – writing code and debugging where needed	L1 – Algorithms L2 – Collision detection L3 – Properties and buttons L4 – Debugging
	Spring (3)	**Spreadsheets** – using spreadsheets to store data and the copy/paste tool	L1 – Copying and Pasting / Totalling tools L2 – Using a spreadsheet to add amounts L3 – Creating a table and block graph
	Spring (4)	**Art and Design** – Creating images: Exploring different styles of traditional art using electronic medium, e.g. pointilsim, cubism	L1 – Introduction and impressionism L2 – Pointillist art / Piet Mondrian (combined lesson) L3 – William Morris and pattern
	Summer (5)	**Presenting Ideas** – using a range of tools to explore non-fiction and fiction topics	L1 – Presenting a story three ways L2 – Presenting ideas as a quiz L3 – Making a non-fiction fact file
	Summer (6)	**Data Handling** – Asking questions and creating branching data bases	L1 – Using and creating pictograms L2 – Asking Yes or No questions / Binary trees (combined lesson) L3 – Using 2Question: a computer-based binary tree program L4 – Using 2Investigate: a non-binary database

Year 3	Autumn (1)	**Online Safety** – What are PEGI ratings? Why do we have them? Digital foot prints and using digital media – what happens to things we post online? How can we keep ourselves safe?	L1 - SMART rules - discussion and poster L2 - Trusted sources L3 - PEGI and BBFC ratings
	Autumn (2)	**Coding** – introduction to repeating "loops", including variables and the "if" command	L1 – Flowcharts L2 – Timers and repeat L3 – Code, test and debug
	Spring (3)	**Spreadsheets** – using coordinates to navigate spreadsheets and creating bar charts	L1 – Creating pie charts and bar graphs L2 – The formula bar L3 – Using and combining tools in 2Calculate
	Spring (4)	**Branching Databases** – learning how to organize and sort information by creating a database	L1 – Introducing databases L2 – Branching databases L3 – Creating a branching database on the computer
	Summer (5)	**email** – writing and sending emails to specific addresses, including attachments when appropriate	L1 – Communication / Composing emails L2 – Using email safely: part 1 & 2 L3 – Attachments
	Summer (6)	**Simulations** – understanding how computers allow us to explore dangerous or difficult situations in safety	L1 – What Are simulations? L2 – Exploring a simulation L3 – Analysing and evaluating a simulation
Year 4	Autumn (1)	**Online Safety** – consider the risks and benefits of computer use, including as part of a healthy lifestyle	L1 – Online safety / SMART L2 – Plagiarism L3 – Healthy screentime
	Autumn (2)	**Coding** – LOGO: Using repeat loops and variable to create shapes and mathematical patterns	L1 – IF statements L2 – Co-ordinates L3 – Repeat and number variables
	Spring (3)	**Artificial Intelligence** – Introduction to artificial intelligence	L1 – What is artificial intelligence? L2 – How can artificial intelligence help us? L3 – The future of artificial intelligence
	Spring (4)	**Effective searching and Computer Hardware** – Review how to use search engines effectively. Learn the different parts that make up a computer	L1 – Hardware & components of a computer L2 – Use search effectively to answer questions L3 – Reliable information sources
	Summer (5)	**Animation** – Creating 'stop motion' animations	L1 – Animating an object L2 – 2Animate tools L3 – Stop motion animation
	Summer (6)	**Making music** – Compose a piece of music using digital software	L1 – Understanding music L2 – Rhythm and tempo / Melody and pitch L3 – Creating music

Year 5	Autumn (1)	Online Safety – Understanding importance of being safe online, including personal data and sharing concerns about things online, downloading software and apps, the need for being healthy	L1 – Online safety / SMART L2 – Age certificates and password importance L3 – Citing sources / Reliability
	Autumn (2)	Coding – designing and creating games that make use of timers and variables	L1 – Simplifying code L2 – Decomposition and abstraction L3 – Friction, function and strings
	Spring (3)	Spreadsheets – writing formulae to resolve age-appropriate mathematical problems (e.g. calculate area of triangles)	L1 – Conversion of measurements L2 – Using formulae L3 – Testing hypothesis
	Spring (4)	Data Handling – Exploring and creating databases	L1 – Searching a database L2 – Creating a class database L3 – Creating a topic database
	Summer (5)	Writing and Presenting – Choosing appropriate fonts, styles and layouts for different text types	L1 – Word processing (fonts, styles and images) L2 – Introduction to Google Slides (not a PM lesson)
	Summer (6)	3D Modeling – understanding the real-world applications and different stages of 3D computer design	L1 – Introducing 2Design and Make/moving points L2 – Designing for a purpose L3 – Printing and making
Year 6	Autumn (1)	Online Safety – understanding the risks and benefits of social media and the potential harms of excessive screen time.	L1 – Online safety L2 – Review SMART / safety game
	Autumn (2)	Coding – Writing and debugging code to include sequencing, repetition and variable dependent algorithms.	L1 – Complex programme – timer / score / variables L2 – Functions L3 – Flowcharts and debugging
	Spring (3)	Spreadsheets – Using formulae to explore real life situations and solve mathematical problems	L1 – Google Sheets (Introduction to Sheets) L2 – Google Sheets (Party planner)
	Spring (4)	Binary – investigating number systems other than base 10; understanding simple binary and its significance in computing	L1 – What is binary? L2 – Counting in binary L3 – Game States using binary
	Summer (5)	Networks – Understanding what a network is and why they are important; recognizing the internet as a global network	L1 – The World Wide Web and the internet L2 – Our school network and accessing the internet
	Summer (6)	Text adventures – Design and make a choose-your-own-adventure game using hyperlinks	L1 – What Is a text adventure? Planning a story adventure L2 – Making a story-based adventure game L3 – Coding comprehension of text adventure game