

Computing Overview – 2022-23

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Computing Systems: Improving mouse skills Kapow	Word/Pages	Programming: Algorithms unplugged & Bee-bots Kapow		Data Handling: Introduction to data Kapow	Creating Media: Digital Imagery Kapow
Focus	<ul style="list-style-type: none"> - Identify different digital devices around you and their uses - Navigate devices using mouse and keyboard - Use a mouse/touchpad to select and drag - Find keys on a keyboard and type with fluency - Log on to devices - Identify inputs and outputs 	<ul style="list-style-type: none"> - Open a document - Find keys on a keyboard and type - Type name into a document - Type a short sentence using capital letter and full stop - Add an image and resize it 	<ul style="list-style-type: none"> - Create an algorithm to guide from a start point to an end point - Create a sequence of instructions to be followed - Solve problems using algorithms and debugging - Recognise errors and debug them 		<ul style="list-style-type: none"> - Represent animal-themed data - Log in to device - Use mouse and keyboard skills - Represent data as pictogram, table or chart - Sort data using branching database 	<ul style="list-style-type: none"> - Explore digital art - Discuss likes and dislikes to help plan - Use tools to create a digital drawing - Use click and drag
Year 2	Computing Systems: What is a Computer? Kapow	Computing Systems: Word Processing Kapow	Programming: Algorithms and Debugging & Scratch Jr Kapow		Data Handling: ISS Kapow	Creating media: Stop-Motion Kapow
Focus	<ul style="list-style-type: none"> - Name some computer peripherals and functions - Recognise that buttons cause effects - Recognise different forms of technology - Design an invention that uses inputs and outputs 	<ul style="list-style-type: none"> - Open a document - Find keys on a keyboard and type - Add and edit text - Add and edit an image - Copy and paste text and images - Save work - Retrieve saved work 	<ul style="list-style-type: none"> - Create, follow and improve an algorithm - Move a character using a sequence of steps - Edit an algorithm - Avoid obstacles - Debug an algorithm 		<ul style="list-style-type: none"> - Collect data - Edit a table to create a bar chart - Ask and answer questions based on data collected - Present data 	<ul style="list-style-type: none"> - Explore history of animation - Create flipbook animations - Review stop-motion animations - Plan an animation - Create an animation using still frames - Insert captions/text - Evaluate the project
Year 3	Online Safety Kapow Word/Pages	Computing Systems: Networks and the internet Kapow	Programming: Scratch Jr and Scratch Kapow	Computing systems: Journey inside a computer Kapow	Data Handling: Numbers/Excel	Creating Media: Video Trailers - Kapow
Focus	<ul style="list-style-type: none"> - Open a document - Find keys on a keyboard and type - Add and edit text - Add and edit an image - Copy and paste text and images - Save work - Retrieve saved work 	<ul style="list-style-type: none"> - Recognise and explain what a network is - Explain how information moves around a network and the role of a server - Understand networks link to the internet via a router - Explain the journey a website takes 	<ul style="list-style-type: none"> - Decompose an algorithm - Write a program including text and movement - Use a repeat function - Write a program using different inputs 	<ul style="list-style-type: none"> - Recognise inputs and outputs - Explain the parts of a laptop and how they work together - Explain what an algorithm is - Explain the different memory types inside a computer 	<ul style="list-style-type: none"> - Collect data on a given subject - Create a spreadsheet to present data - Edit a table to create a bar chart - Ask and answer questions based on data collected 	<ul style="list-style-type: none"> - Watch and evaluate short trailers - Plan a book trailer using storyboarding - Take images and videos using different movements and angles - Use iMovie to import and combine videos/images

						<ul style="list-style-type: none"> - Add transitions and text - Evaluate final product and give feedback to others
Year 4	Online Safety Kapow Keynote/Powerpoint	Video Editing: iMovie	Programming: Further coding with Scratch & Computational Thinking Kapow	Data Handling: Investigating Weather Kapow	Creating Media: Website Design Kapow	
FOCUS	<ul style="list-style-type: none"> - Add new slides - Add and edit text - Add and edit images - Copy and paste text and images - Change the background of slides - Save work - Retrieve saved work 	<ul style="list-style-type: none"> - Experiment with green screen technology by changing a background on a picture - Plan a video using storyboarding - Export video and images to iMovie - Add text, and transitions - Present video to an audience 	<ul style="list-style-type: none"> - Decompose an algorithm and explain how it works - Use sprites and background tools to create a scene <ul style="list-style-type: none"> - Add characters and make them move - Use an 'if' statement in an algorithm - Use a repeat loop - Experiment with and include conditionals 	<ul style="list-style-type: none"> - Ask and answer questions about spreadsheets - Use given data to create a spreadsheet - Gather and present data - Use data to create a graph - Add formulas to add totals - Copy and paste a graph 	<ul style="list-style-type: none"> - Create a website on Sway with title and image - Plan a webpage - Create clear sections with links 	
Year 5	Online Safety Kapow Word/Powerpoint	Computing Systems: Search Engines Kapow	Video Editing and Green screen: iMovie	Programming Microbit Kapow	Programming Music Kapow	Creating Media: Stop motion animation Kapow
Focus	<ul style="list-style-type: none"> - Complete internet research - Add in new slides - Add and edit text - Add and edit images - Copy and paste text and images - Change the background on slides - Add transitions and animations - Save work 	<ul style="list-style-type: none"> - Explain what a search engine is - Understand not all information online can be trusted - Explore how keywords help define a search - Explore meaning of copyright and fair use 	<ul style="list-style-type: none"> - Plan a video using storyboarding - Create a script linked to the video - Record content including green screen - Export video and images to iMovie - Add backgrounds, text, music and transitions 	<ul style="list-style-type: none"> - Predict outputs from a range of inputs - Create images/animation using 'on start' and 'forever'. - Explore variables and explain how they work - Break a program down into smaller steps, suggesting appropriate blocks and match the algorithm to the program. 	<ul style="list-style-type: none"> - Evaluate how a program/game works - Decompose a program into smaller parts - Create and debug a series of algorithms - Use sensors and variables - Add multiple conditions - Add variables 	<ul style="list-style-type: none"> - Create a short stop-motion animation - Storyboard animation - Add effects - Review and feedback
Year 6	Online Safety Kapow Keynote/Pages	Computing Systems: Bletchley Park Kapow	Creating Media: History of Computers Kapow	Programming: Intro to Python	Data Handling: Big data 1 Kapow	Garageband
Focus	<ul style="list-style-type: none"> - Format text to include paragraphs, title, images, subheadings, bullet point lists and tables - Format text to change font colour, underline and bold - Use the spell check tool and thesaurus 	<ul style="list-style-type: none"> - Learn about the history of Bletchley Park - Explore codes and brute force hacking - Explore the first computer and how it was used - Carry out research on historical figures and their advancements in technology 	<ul style="list-style-type: none"> - Create a radioplay - Record, edit and add sound effects - Research how computers have changed throughout history - Create a presentation based on a computer that changed the world 	<ul style="list-style-type: none"> - Evaluate how a program/game works - Decompose a program/game into smaller parts - Create and debug a series of algorithms - Use sensors and variables 	<ul style="list-style-type: none"> - Understand how QR and barcodes are used - Create and scan own QR code - Explore infrared and RFID - Take real time data and enter into spreadsheet - Analyse data 	<ul style="list-style-type: none"> - Review digital music and techniques - Create digital music - Use live loops - Create tracks - Edit sound recordings

	<ul style="list-style-type: none">- Add animations and transitions- Add notes to assist with presenting- Create hyperlinks	<ul style="list-style-type: none">- Focus on Alan Turing, Margaret Hamilton, Steve Jobs	<ul style="list-style-type: none">- Design a computer of the future using design software			
	← E-Safety/Digital Literacy to be taught across the year →					