	Computer Science	Vocabulary
KS1	**Algorithms** *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 programs** *Pupils should be taught to create and debug simple programs* **Reasoning** *Pupils should be taught to use logical reasoning to predict the behaviour of simple programs*	
Year 1	Spring 1 Programming 2: Bee-Bot (Kapow) 1.To explore the basic functions of a Bee-Bot. 2.To understand how to make a Bee-bot go forwards, backwards and turn 3.To be able to plan and follow a set of instructions precisely To know that algorithms move a Bee-Bot to a chosen place. Sequence a series of instructions (algorithms) 4.To know how to program a device 5.To know how to create a program to re-tell a story Sum 1 Algorithms unplugged (Kapow)/Programming Animations (Teach Computing) 1. To understand what an algorithm is (Kapow L1) An algorithm is a set of instructions Instructions sometimes needed to be carried out in a certain order 2. To follow instructions precisely to carry out an action (Kapow L2) 3. To be able to choose a command for a given purpose (TC L1) 4. To know that a series of commands can be joined together (TC L2) 5. To be able to predict the effect of changing a value (TC L3) To know that each sprite has its own instructions (TC L4	Spring 1 Tier 2: Clear, Code, Demonstration, Filming, Instructions, Precise, Predict, Video Tier 3:Algorithm, Bee-Bot, Debug, Program Summer 1 Tier 2: instructions, computer, tasks, order, specific, solution, command, compare, joining, program, predict, effect, change, value Tier 3: algorithm, Scratch Jr, Bee-Bot, sprite, programming, block, Start block, background, delete, reset
Year 2	Summer 1- Programming Quizzes (Teach computing) 1. To explain that a sequence of commands has a start 2. To explain that a sequence of commands has an outcome 3. To be able to create a program using a given design Create instructions to draw a simple shape or move a character across the screen 4. To know how to change a given design 5. To be able to create a program using my own design 6. To be able to decide how my project can be improved Begin to edit their work in the light of their own discussions and observations	**Summer 1** Tier 2: program, run, start, predict, design, actions, project, modify, change, match, compare, evaluate Tier 3: Sequence, command, outcome, blocks, Sprite, algorithm, debug
KS2	*2.1 Create Programs 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* *2.2 Develop programs Pupils should be taught to use sequence, selection, and repetition in programs; work with variables and various forms of input and output 2.3 Reasoning Pupils should be taught to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs*	
Year 3	Autumn 2 (from 2023/24) Sum 1(2023) Programming A Sequencing Sounds (TeachComputing) 1. To explore a new programming environment 2. To know that commands have an outcome 3. To explain that a program has a start 4. To know that a sequence of commands can have an order 5. To know how to change the appearance of a project 6. To be able to create a project from a task description Use an algorithm in block coding Sum 1 (from 2024) Programming B- Events and Actions in programs (TeachComputing) 1. To be able to explain how a sprite moves in an existing project 'Events' sense 'inputs', which then trigger scripts to run 2. To know how to create a program to move a sprite in four directions 3. To know how to adapt a program to a new context Set up is the process of setting starting values for a program, so that the program starts in the same way each time 4. To know how to develop my program by adding features 5. To be able to identify and fix bugs in a program A bug is an error in the design or the coding of the program Debugging is finding and fixing bugs 6. To know how to design and create a maze-based challenge	**Aut 2:** Tier 2: animation, Predict, outcome Tier 3: Algorithm, Code block, Debug, Decompose, Program, Remix, Sprite, Tinker Sum 1: Tier 2: Motion, logic, event, move, resize, design, action, errors, test Tier 3: sprite, algorithm, extension block, pen up, set up, debugging, code,
Year 4	Spr 1 Coding (Kapow) 1. to be able to sequence block instructions to write computer code to solve problems 2. To understand how a Scratch game works by using decomposition to identify key features Solve problems by decomposing them into smaller parts using block coding (scratch) 3. To understand what a variable is and how to make one A variable is a value that can change (depending on conditions) 4. To understand how to make a variable in Scratch 5. To be able to use knowledge of how variables work to create a quiz Sum 2 Link with DT 1. To know the benefits of using computer control 2. To know what a Crumble is and how it works 3. To be able to predict what sections of code will do 4. To be able to plan an algorithm for a toothbrush timer 5. To be able to select code blocks to form an algorithm 6. To be able to test, debug and improve my code	Spr 1 Tier 2: Features, Game, Information, Negative numbers, Position, Program, Project, Script Tier 3: Broadcast block, Code blocks, Conditional, Coordinates, Decomposition, Orientation Parameters, Sprite, Stage, Tinker, Variables Sum 2 Tier 2: connection, Tier 3: algorithm, Microcontroller, Crumble, components, sparkle, output, repetition, selection, computer control
Year 5	Autumn 2- Space Adventures Unit 1 (LGfL) 1. To be able to use sequence and repetition in an animation The forever loop repeats a line or lines of code forever 2. To know how to program user input to control the movement of a sprite 3. To be able to use selection based on sensing as part of a game The "If…then…" block states that an action cannot happen until certain requirements are met 4. To be able to use a count variable to keep score in a game A variable is a value that can change (depending on conditions) 5. To use a variable to store and increase speed in a game A variable is a value that can change (depending on conditions) 6. To know that using additional costumes can change the appearance of a sprite within a program Summer 2- Programming 1- Music (Kapow) 1. To understand that tinkering is an important computational process 2. To be able to use a loop in a program 3. To understand that digital music can enhance a scene in a film 4. To know that using loops can make the process of writing music simpler and more effective. 5. To be able to code a piece of music that combines a variety of structures and uses loops. To know that programming music is a way to apply skills 6. To be able to code a piece of music that combines a variety of structures and uses loops	Autumn 2 Tier 2: action, instruction, sequence, size, game Tier 3: code, program, algorithm, bug, debug, loop, input, conditional statement, selection, repetition Summer 2 Tier 2: beat, error, instructions, melody, music, performance, play, predict, soundtrack, repeat, Tier 3: bugs, coding, command, debug, decompose, loop, output, pitch, programming, rhythm, tempo, timbre, tinker,

	To know that programming music is a way to apply skills	
Year 6	Aut: Bebras Challenge 2 weeks Computational Thinking Autumn 2: Computing Systems and Networks – Bletchley Park 1. To know that there are lots of different types of secret codes such as Caesar Ciphers and Pigpen Ciphers 2. To know that brute force hacking is the process of using methodical trial and error to crack a code To know that computers can crack a code much faster than a human 3. To know that the first computers were created at Bletchley Park to crack the Enigma code to help the war effort in World War 2 4. To know at least one of the people who contributed to computing history Gladys West – GPS, Dabbala Rajagopal Reddy – AI, Steve Jobs – Apple, Katherine Johnson – NASA 5. To know how historical figures were influential in creating modern computers Spring 2: Programming- Intro to Python 1. To know that there are text-based programming languages such as Logo and Python 2. To know that nested loops are loops inside of loops 3. To know basic Python commands and choose them for a purpose 4. To know how to use repetition in Python 5. To know that random numbers can be used in a code Summer 1: physical control (linked with DT) of a fairground ride 1. To be able to control a simple circuit connected to a computer. 2. To be able to write a program which includes count-controlled loops To know that a count-controlled loop is a form of repetition in which a set of commands are carried out a specific number of times. 3. To know that a loop can stop when a condition is met To know that a condition-controlled loop is a form of repetition in which a set of commands stop being carried out when a condition is met. 4. To know that a loop can be used to repeatedly check whether a condition has been met 5. To be able to design a physical project that includes selection 6. To be able to create a program that controls my amusement ride	Autumn 2 Tier 2: code, combination, contribute, convince, discovery, hero, invention, password, present, scrambled, secret, secure, technological advancement, trial and error Tier 3: Bletchley Park, Alan Turing, Enigma code, acrostic code, brute force hacking, caesar cipher, chip and pin system, cipher, date shift cipher, Nth Letter Cipher, Pig Latin, Pigpen cipher, Spring 2 Tier 2: design, instructions, patterns, random, repeat, shape Tier 3: algorithm, code, command, import, indentation, input, loop, nested loop, output, remix, Logo, Python Summer 1 Tier 2: connection, motor Tier 3: Microcontroller, Crumble, components, infinite loop, sparkle, output, repetition, count-controlled loop, condition-controlled loop, selection

	Information Technology	Vocabulary
KS1	*Pupils should be taught to use technology purposefully to create, organise, store, manipulate and retrieve digital content*	
Year 1	Aut 1 Intoduction to basic skills and online safety To know that "log in" and "log out" means to begin and end a connection with a computer Logging in and out Learning where keys are on a keyboard, enter, space bar, backspace Aut 2 Computing Systems and networks- improving mouse skills 1.To log in to a computer and access a website To know that "log in" and "log out" means to begin and end a connection with a computer 2.To develop mouse skills Use a mouse to move and place items accurately on a screen Develop mouse control through, dragging clicking and resizing images 3.To use mouse skills to draw and edit shapes Use basic tools to draw images, Shapes, Free hand tool, fill and lines 4.To draw a scene from a story using digital tools Use a paint package to create a picture 5.To create a self-portrait using digital techniques To know that a computer and mouse can be used to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art. Spring 2 Data Handling: Introduction to data 1. To know that data can be represented in different ways 2.To know how to use technology to represent data in different ways To know that charts and pictograms can be created using a computer. 3.To be able to collect and record data 4.To know how to use questions to sort data To understand that a branching database is a way of sorting a group of objects. 5.To be able to design an invention to gather data To know that computers understand different types of 'input'.	Autumn 1 and 2 Tier 2: Click, Keyboard, Drag, Undo Tier 3:Log in, Log out / off, Mouse, Password, Account, Username, Cursor Spring 2: Tier 2: Categorise, Chart, Compare, Count, Data, Information, Label, Record, Sort Tier 3: Bar chart, Block graph, Branching database, Input, Line graph, Pictogram, Pie chart, Table, Tally, Values
Year 2	Aut 2 Computing systems and networks 2: Word processing 1. To begin to learn to touch type To know that touch typing is the fastest way to type. Develop familiarity and correct use of the keyboard – spacebar, backspace, shift (for capital letters – not 'caps lock'), return etc. 2. To understand how to type and format text using a word processor To know that I can make text a different style, size and colour. Word process short texts. Use the return key to create line breaks; navigate around text in a variety of ways (mouse, arrow keys etc.) as work is edited 3. To understand how to add images to a text document 4. To create a poetry book using sources from the internet Spring 1 Data and Information – Pictograms (Teach Computing) 1. To know that we can count and compare objects using tally charts 2. To recognise that objects can be represented as pictures 3. To know how to create a pictogram to represent data 4. To know some of the different ways of presenting data We can present data using tally charts, pictograms, bar graphs, line graphs or pie charts 5. To know how to select objects by attribute and make comparisons Spring 2- Fire of London presentation	Autumn 2 Tier 2: copy, image, Tier 3: backspace, bold, copyright, cut, delete, forward button, highlight, home row, home screen, import, italics, keyboard, keyboard character, keyword, layout, navigate, paste, redo, return, search, shift, space bar, text, text effects, touch typing, underline, undo, word processing Spring1 Tier 2: More than, less than, most, least, organise, object,

	1. To understand what a slideshow presentation is A slideshow presentation is a series of slides, which may have text, images, audio or video. 2. To be able to modify text in Powerpoint Develop word processing skills including altering text size, and colour. 3. To be able to search for, import and alter appropriate images for a slideshow Select appropriate images and add to work Make use of graphics, video and sound to enhance text in multimedia work 4. To be able to evaluate the effectiveness of a slideshow presentation Sum 2 Creating Media: Stop Motion Animation (Kapow) 1. To understand that an animation is made up of a sequence of still images 2. To know that stop motion animation is a sequence of photographs with small changes in each one 3. To be able to take a sequence of photographs using a camera Have experiences of controlling other devices (beebot, camera, visualizer, etc) 4. To be able to create a stop motion animation from a sequence of pictures 5. To be able to work collaboratively with others to plan an animation Animators normally sketch a storyboard to plan their ideas and the sequence for an animation 6. To be able to use a planning sheet to structure and create a stop motion animation animation	votes, total, compare, common Tier 3: tally chart, data, pictogram, attributes Spring 2 Tier 2: copy, image, layout, navigate, text, search, Tier 3: backspace, bold, copyright, cut, delete, forward button, highlight, home row, home screen, import, italics, keyboard, keyboard character, keyword, paste, redo, space bar, text effects, touch typing, underline, undo, word processing Summer 2 Tier 2: Animation, animator, background, drawing, Tier 3: digital camera, flipbook, frames, moving images, onion skinning, still images, duration, focus, upload,
KS2	*Pupils should be taught to 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* *Pupils should be taught to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content*	
Year 3	Aut 1 Creating Media – Desktop Publishing (Teach Computing) 1. To recognise how text and images convey information Know how to use chrome books and how to care for them Log into the school network/chrome books using own username and password 2. To recognise that text and layout can be edited 3. To be able to choose appropriate page settings 4. To know how to add content to a desktop publishing publication Be able to copy and paste text and images To be able to demonstrate how to use key phrases in search engines to gather accurate information online. 5. To understand how different layouts can suit different purposes 6. To know two benefits of desktop publishing The benefits of desktop publishing include reduced time requirements, reduced costs, ability to share jobs and better overall appearance of documents. Spr 1 Computing systems and networks – Connecting computers (Teach Computing) 1. To understand that digital devices accept inputs, follow processes and produce outputs 2. To understand the relationships between input, processes and outputs 3. To be able to recognise similarities and differences between using digital devices and using non-digital tools 4. To be able to explain how a computer network can be used to share information To know that the computers in the classroom are part of a school network: connected by wires (or wirelessly) to a main computer called the server 5. To understand the role of a switch, server, and wireless access point in a network 6. To be able to recognise the physical components of a network To know that the server is connected to the Internet which is made up of a global network and is able to communicate with other servers to share resources and data.	Aut 1 Tier 2: Text, images, advantages, disadvantages, communicate, template, layout, content, purpose, benefits Tier 3: font style, Landscape, portrait, orientation, placeholder, Desktop publishing, copy, paste Spr 1 Tier 2: connection, Tier 3: Digital device, internet, input, process, output, program, digital, non-digital, network, network switch, Server, wireless access point, Network cables, network sockets
Year 4	Aut 1 E-safety and using Google Slides to present information 1. To describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy To know that sites can contain, true or false facts, or opinion. Aut 2 Collaborative Learning with G-Suite (Kapow) 1. To understand that software can be used collaboratively online to work as a team without being in the same room. To understand the need to be thoughtful when working on a collaborative document. 2. To be able to use comments to suggest changes to a document and understand how to resolve comments. To know what type of comments and suggestions on a collaborative document can be helpful. 3/4 To be able to create a Google Form with a range of different questions types that will provide different types of answer, e.g. text, multiple choice or numerical values Spr 2 Creating Media: Website Design (Kapow) 1. To know how to use a range of features in Google Sites including Insert, pages, themes and text tabs To know that a website is a collection of pages that are all connected 2. To be able to plan content for a collaborative webpage To know that websites usually have a homepage and subpages as well as clickable links to new pages, called hyperlinks. 3. To be able to create a clear webpage as part of a collaborative class website To know that websites should be informative and interactive. 4. To be able to create a clear plan for a website including which Google Sites features to use 5. To know how to create a website using a range of features 6. To be able to evaluate the effectiveness of a website	Autumn 2 Tier 2: collaboration, comment, suggestion, multiple choice, presentations, resolved, share Tier 3: format, numerical data, survey Spr 2 Tier 2: Audience, Collaboration, Content, Design, Evaluate, Features, Insert, Published, Style, Theme Tier 3: Embed, Google Sites, Homepage, Hyperlinks, Subpage, Tab
Year 5	Spr 1 – Computing Systems and Networks: Search engines (Kapow) 1. To understand what a search engine is and how to use it A search engine is a website that allows you to find information on the world wide web 2. To be aware that not everything online is true To understand that anyone can create a website and therefore we should take steps to check the validity of websites. 3. To be able to search effectively using keywords and TASK When using a search-engine use different strategies for finding information (using different keywords, quotes, filters (- to remove unwanted terms) and BOOLEAN operations (And/Or), cross-checking with other websites, referring to other sources such as books, people etc.) 5. To know that web crawlers are computer programs that crawl through the internet to make sure every page is on their index	Spr 1 Tier 2: Appropriate, Correct, Credit, Deceive, Fair, Fake, Inappropriate, Incorrect, Index, Information, Privacy, Rank, Real, Website Tier 3: Algorithm, Copyright, Data leak, Keywords, Network, Search engine, TASK, Web crawler

Year 6	Spring 1: Animation 1. To know about one significant development in stop motion technology (thaumatropes, flick books and Zoetropes) To know some key figures in stop motion animation including Willis O'Brian, Ray Harryhausen, Lotte Reiniger and Nick Park 2. To know that stop motion animation can use a combination of techniques including drawings,clay models and silhouettes To know that modelling clay/plasticine allows us to create figures for animations that can be repositioned To know that adding audio and sound effects to animation can make it more effective 3. To be able to plan a short animation using a combination of clay models, drawing and audio/sound effects with consideration of frame rate 4. To be able to use animation software and create animation for an intended audience 5. To be able to use animation software and create animation for an intended audience 6. To be able to evaluate an animation and suggest improvements	Spr 1 Tier 2: animation, image, capture, audio, sound effects Tier 3:stop motion, onion skinning, frame rate, thaumatropes, flick books, Zoetrope

	Digital Literacy	
KS1	*Pupils should be taught to recognise common uses of information technology beyond school* *Pupils should be taught to 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 technology*	
Year 1	Sum 2 Digital Imagery 1. To understand and create a sequence of pictures 2. To know how to take clear photos To know that your position is important to take good pictures. 3. To know that you can edit, crop and filter photographs 4. To be able to search for and import images To know how to search safely for images online. 5. To be able to create a photo collage Aut 1 Intoduction to basic skills and online safety and Aut 2 Computing Systems and networks- improving mouse skills To know that passwords are important for security. (EfaCW) **Privacy and security**- I can explain why I should always ask a adult before I share any information about myself online I can explain how passwords can be used to protect information and devices	Autumn 1 and 2 Tier 2: private, safe Tier 3:Log in, Log out / off, Password, Account, Username, Summer 2 Tier 2: background, camera, device, edit, image, internet, online, photograph, sequence Tier 3:crop, download, filter, import, keyword, save as, search engine, software
Year 2	Aut 1 What is a computer? 1. To be able to recognise and name the parts of a computer To know the difference between a desktop and laptop computer- a desktop computer stays in one place. A laptop computer is easy to carry and move around. 2. To understand how technology is controlled To know that people control technology. To know that computers often work together. 3. To be able to recognise different forms of technology 4. To be able to use inputs and outputs in a design for an invention 5. To understand the role of computers To know that computers often work together. Aut 2 Computing systems and networks 2: Word processing 5. To understand what happens to information posted online Information put online about someone can last for a long time (EfaCW) Anyone's online information could be seen by others(EfaCW)	Aut 1 Tier 2: Battery, Buttons, Camera, Computer, Digital, Electricity, Function, Invention, Laptop, Screen, System, Tablet, Technology, Video, Wires Tier 3: Desktop, Device, Input, Keyboard, Monitor, Mouse, Output Aut 2 Tier 2: offline, online, information, private, safe, trusted adult Tier 3:
KS2	***2.6** Pupils should be taught to 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* ***2.7** Pupils should be taught to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	
Year 3	Aut 1 Creating Media – Desktop Publishing (Teach Computing) **4. Managing online information** To be able to demonstrate how to use key phrases in search engines to gather accurate information online. **Copyright and ownership** To know that copying someone else's work from the internet without permission isn't fair. Spr 2 Data handling: Comparison cards databases (Kapow) 1. To understand the terminology around databases A database is a collection of data stored in a logical, structured and orderly manner 2. To be able to compare paper and computerised databases Computerised databases allow us store larger amounts of information and quickly search for information. 3. To be able to sort, filter and interpret data Filtering displays only the information that is specified or selected Sorting arranges items by order or into categories Use a spreadsheet to record data and produce graphs 4. To know how to represent data in different ways Use a spreadsheet to record data and produce graphs 5. To be able to sort data for a purpose Sum 2 Producing an interactive book (Summer 2023 only- then replaced) 1. To be able to demonstrate basic skills when using Powerpoint Know how to use chrome books and how to care for them Log into the school network/chrome books using own username and password 2. To be able to plan a layout to suit a purpose 3. To understand how choices about font, text size and colour impact the focus audience When using media software (word, PowerPoint, Docs, Slides etc) Use different font sizes, colour and effects, layout, format, graphics, illustrations, cut, copy and paste for audience purposes. 4. To understand how choices about images and background colours and effects impact the focus audience When using media software (word, PowerPoint, Docs, Slides etc) Use different font sizes, colour and effects, layout, format, graphics, illustrations, cut, copy and paste for audience purposes. 5. To be able to evaluate the effectiveness of presentations for a particular audience 6. To be able to use feedback to improve a presentation Sum 2 (2024 onwards) Creating Media: Video Trailers 1. To understand the purpose of a book trailer	Spr 2: Tier 2: database, fields, filter, spreadsheet Tier 3: categorise, data, graphs/charts, information, record, sort Sum 2 (2023): Tier 2: text, images, layout, focus audience, purpose, content Tier 3: font, background colour, caption, Powerpoint, slide, Sum 2(2024 onwards): Tier 2: key events, photo, video, plan, Tier 3: application, camera angle, clip, edit, film editing software, graphics, import, recording, sound effects, storyboard, time code, trailer, transition, voiceover

	2. To know that how shots are framed can change the effect 3. To be able to import photos or video and add sound effects or music in video editing software 4. To be able to incorporate text and transitions in a video 5. To know what makes an effective video trailer	
Year 4	Aut 1 E-safety and using Google Slides to present information 2. To know how to keep personal information private, depending on context 3. To be able to make choices about text (font, size, colour, position) that show a sense of 'audience'. 4. To be able to make choices about images (choice of image, size, position, effects) that show a sense of audience 5. To know how to use images, text, transitions and animation in presentation slides. 6. To be able to evaluate the effectiveness of a presentation in conveying information to a particular audience To be able to use shortcuts such as Ctrl X (cut), Ctrl C (copy), Ctrl V (Paste) Sum 1 Photo editing (Teach Computing) 1. To know that the composition of digital images can be changed by rotating and cropping 2. To know that colours can be changed in digital images 3. To know that a cloning tool can be used to alter photo composition and to retouch a photo 4. To know that images can be combined 5. To be able to combine images for a purpose 6. To be able to evaluate how changes can improve an image	Aut 1 Tier 2: text, images, layout, focus audience, purpose, content Tier 3: font, background colour, caption, slide, transition, animation Sum 1 Tier 2: Image, edit, digital, colours, select, copy, paste, combine, background, foreground, Tier 3: composition, crop, rotate, undo, save, adjustments, effects, hue, saturation, sepia, vignette, retouch, clone, composite, zoom
Year 5	Aut 1- 3D modelling TinkerCAD bridges (adapted from Y6 teach computing unit) 1. To know that you can work in three dimensions on a computer 2. To identify that digital 3D objects can be modified 3. To recognise that objects can be combined in a 3D model 4. To be able to combine objects in a design 5. To be able to construct a 3D model based on a design 6. To be able to evaluate and improve a 3D model Spr 2- Branching databases (Teach computing) 1. To be able to form yes/no questions to group objects in a database 2. To be able to identify the attributes needed to collect data about an object 3. To know why it is helpful for a database to be well structured Choosing questions that split objects into evenly sized groups means that it takes fewer questions to reach any object 4. To plan the structure of a branching database 5. To be able to create an identification tool that reflects my plan Create and use a branching database to organise and sort data to answer questions 6. To be able to use hyperlinks in Google Slides to create a branching database Spr 1 – Computing Systems and Networks: Search engines (Kapow) 1. To be able to explain the benefits and limitations of using different types of search technologies e.g. voice-activation, search engine. To be able to explain how some technology can limit the information I am presented with e.g. voice-activated searching giving one result. 4. To be able to give examples of content that is permitted to be reused and know how this content can be found online. Sum 1 Video production (Teach Computing) 1. To explain what makes a video effective 2. To be able to use a digital device to record video 3. To know about a range of techniques that can be used to capture video 4. To know how to create a storyboard 5. To know that video can be improved through reshooting and editing 6. To be able to consider the impact of the choices made when making and sharing a video	Aut 1 Tier 2: 2D, 3D, shapes, select, move, view, lift, lower, cylinder, hollow Tier 3: perspective, handles, resize, recolour, rotate, duplicate, group, placeholder, Spr 2 Tier 2: equal, even, separate, questions, structure, compare, order, organise Tier 3: Attribute, value, Branching database, database, hyperlink Spr 1 Tier 2: Appropriate Credit Fair Inappropriate Tier 3: Copyright Sum 1 Tier 2:video, topic, storyboard Tier 3: talking head, panning, close up, static camera, zooming, pan and tilt, reshooting, editing
Year 6	Aut 1: Using Databases (link to history) 1. To know that a data set is a collection of related sets of information that is made of separate elements, but can be manipulated as a unit by a computer 2. To know the names for the key elements of a spreadsheet To be able to build a data set in a spreadsheet 3. To know that formulas can be used to produce calculated data 4. To be able to apply formulas to data 5. To be able to create a spreadsheet to plan an event Sum 2: School memory video using Canva 1. To know that Canva is an online graphic design tool that can be used to create many different types of media 2. To be able to plan and organise content for a slideshow video 3. To know that using a template can be an efficient way to begin a project 4. To be able to collect and upload media (photos, video, audio) to Canva 5. To be able to edit an existing template to suit a purpose 6. To be able to evaluate the similarities and differences between different publishing and presentation software (Powerpoint, Google Slides, Canva, Publisher)	Aut 1 Tier 2: collecting, table, structure, format, row, column, calculation, input, output Tier 3: dataset, spreadsheet, cell, data, formula, cell reference, sigma, function Sum2 Tier 2: online, template, media, video, music ,transitions, layout, theme, design Tier 3: Canva, graphic design, upload, elements