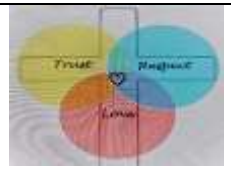

Ettington Primary School Progression Document
COMPUTING

INTENT

At Ettington CE Primary School, we believe that the children should be equipped to use computational thinking and creativity to understand and change the world. Computing has become an integral part of our everyday life and will play an immeasurable part in our children's futures, therefore it is vital that we provide all our children with the skills, creativity and enthusiasm to live and thrive in a world increasingly dependent on computing. The children have many opportunities to use technology, through learning the basic IT skills, such as word processing and paint, to rapidly moving on to creating their own computer programs. The children are able to experiment with code through a range of different technology, such as BeeBot and Microbits so that they are learning to code and debug their programs effectively. **However, at the heart of our computing curriculum, we strive to provide children with the knowledge and skills needed to become digitally literate through a comprehensive E-safety curriculum where children are able to use, and express themselves through information technology safely.**

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum	Within the provision there are toys and equipment that allow the children to practise computational and logical thinking. Children have access to tablets, computers and IWB to be	**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 · use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have		**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 · 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			

	able to practise their information technology skills. Children will discuss online safety through stories and role play	concerns about content or contact on the internet or other online technologies.	· 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.

Reception Technology Progression in Learning – small steps to Key Stage 1			
Autumn Term	Spring Term	Summer Term	Key vocabulary
Know digital devices can be used to answer a question or find out information.	Suggest using a digital device/internet to answer a question or find information.	Use the internet with adult supervision to find and retrieve information of interest to them.	IPAD, Laptop, Interactive Screen, Internet Select, drag, camera, photo, Beebot, algorithm, instructions Values Resilience Individual Liberty Mutual Respect Tolerance Democracy
Explore the functions of different tools on drawing programme. Explore how to select and move items on the interactive screen white board/IPAD to play a simple game.	Explore different technology found at home, naming, talking and asking questions about what I notice. Explore the functions of the camera on an IPAD.	Explore the different buttons on a Beebot, asking questions and talking about what I notice.	
Draw my own picture. Use the interactive screen/IPAD to independently play a simple game.	Use an IPAD to independently take a photo of an object and themselves.	Programme a Beebot to follow a set on instructions. Debug instructions with support. Know what an algorithm is.	
Know and follow given rules when using ICT equipment.	Talk about some ways to keep myself safe when using ICT equipment.		

	Autumn Term	Spring Term	Summer Term
Year 1	Computer systems and networks - Technology Around Us Creating Media - Digital Painting	Programming A - Moving A Robot Data and Information - Grouping Data	Creating Media - Digital Writing Programming B - Programming Animations
Year 2	Computing systems and Network - Information Technology Around Us Creating Media - Digital Photography	Programming A - Robot Algorithms Data and Information - Pictograms	Creating Media - Digital Music Programming B - Programming Quizzes
Year 3	Computing Systems and Network - Connecting Computers Creating Media- Stop Frame Animations	Programming A - Sequencing Sounds Data and Information - Branching Databases	Creating Media-Desktop Publishing Programming B - Events and Actions in Programs
Year 4	Computing Systems and Network -The Internet Creating Media - Audio Production	Programming A- Repetition in Shapes Data and Information - Data Logging	Creating Media - Photo Editing Programming B - Repetition in Games
Year 5	Computing Systems and Network - Systems and Searching Creating Media - Video Production	Programming A - Selection in Physical Computing Data and Information- Flat-file Databases	Creating Media - Vector Graphics Programming B - Selection in Quizzes
Year 6	Computing Systems and Network - Communication and Collaboration Creating Media - Webpage Creation	Programming A - Variable In Games Data and Information - Introduction to Spreadsheets	Creating Media - 3D Modelling Programming B -Sensing Movement

Key Units Autumn – Year 1	Knowledge	Skills	Vocabulary
Computer systems and networks - Technology Around Us Creating Media - Digital Painting	Pupil will develop understanding of technology and how it can help them. They will become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly. Children will explore the world of digital art and its exciting range of creative tools. Children will create their own paintings, while getting inspiration from a range of other artists.	Keyboard and mouse skills. How to use technology responsibly. Creating art using technology. Digital Art skills.	Technology, computer, mouse, trackpad, keyboard, screen, double-click, typing. Paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers.4
Key Units Spring– Year 1	**Knowledge**	**Skills**	**Vocabulary**
Programming A - Moving A Robot Data and Information - Grouping Data	Learners will explore using individual commands, both with other learners and as part of a computer program. They will identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. Learners are also introduced to the early stages of program design through the introduction of algorithms. Children will use labels to put objects into groups, and label these	Basic use of algorithms. Understanding and using basic commands. Use of labels to sort data. Counting sills.	Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program. object, label, group, search, image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same

	groups. Pupils will demonstrate that they can count a small number of objects, before and after the objects are grouped. They will then begin to demonstrate their ability to sort objects into different groups, based on the properties they choose.	Sorting skills.	
Key Units Summer – Year 1	Knowledge	Skills	Vocabulary
Creating Media - Digital Writing Programming B - Programming Animations	Learners will familiarise themselves with typing on a keyboard and begin using tools to change the look of their writing, and then they will consider the differences between using a computer and writing on paper to create text. On-screen programming through ScratchJr. Learners will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify, and create programs.	Typing skills. Changing the font. Programming skills. Use of Scratch Junior. Use of Sprites.	word processor, keyboard, keys, letters, type, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo, redo, format, compare, typing, writing. ScratchJr, command, sprite, compare, programming, area, block, joining, start, run, program, background, delete, reset, algorithm, predict, effect, change, value, instructions, design.
A pupil at the end of Year 1 will know: The different components of a computer. How to create Art work using technology. How to use basic commands and algorithms. How to sort different objects into groups to help handle data. How to type on a keyboard. How to use Scratch Junior and know what a sprite is.		A pupil at the end of Year 1 will be able to: Name the different parts of a computer. Create Art using technology. Use algorithms to create programs. Sort objects into different groups. Type using basic keyboarding skills. Create basic programs using sprites.	

Know how to keep safe on the internet and what to do if they don't feel safe online.	
Links to values and aims	Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others

Key Units Autumn – Year 2	Knowledge	Skills	Vocabulary
Computing systems and Network - Information Technology Around Us Creating Media - Digital Photography	Children will learn about how technology is used in our lives and how it can help us in society. They will also learn how to use it safely and in the correct manner. Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos.	How technology is used in every day life safely and securely. How to take photographs and edit and improve them.	Information technology (IT), computer, barcode, scanner/scan device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting,
Key Units Spring– Year 2	**Knowledge**	**Skills**	**Vocabulary**
Programming A - Robot Algorithms Data and Information – Pictograms	Learners will understand instructions in sequences and the use of logical reasoning to predict outcomes. Learners will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those	Programming sills – use of logical reasoning to predict outcomes. Design skills in programming. Testing algorithms and debugging skills.	instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute,

	algorithms as programs and debug them. Learners will begin to understand what data means and how this can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Learners will use the data presented to answer questions.	Data handling skills – use of tally charts to help organise data. The skills associated with understanding pictograms.	group, same, different, conclusion, block diagram, sharing
Key Units Summer – Year 2	Knowledge	Skills	Vocabulary
Creating Media - Digital Music Programming B - Programming Quizzes	Learners will explore how music can make them think and feel. They will make patterns and use those patterns to make music with both percussion instruments and digital tools. They will also create different rhythms and tunes, using the movement of animals for inspiration. Finally, learners will share their creations and compare creating music digitally and non-digitally. Learners begin to understand that sequences of commands have an outcome and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr and	Creating music using patterns. Creating rhythms and tunes using technology. Scratch Junior programming skills to create own quizzes.	music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit. sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code.

	realise these designs in ScratchJr using blocks of code.		
A pupil at the end of Year 2 will know: How technology is used in every day society. How different devices can be used to create photographs. How sequencing and logical reasoning can be used when programming. How to use technology to help create tally charts and pictograms. How to create music using technology and patterns within technology. How to create quizzes using programming skills.		A pupil at the end of Year 2 will be able to: Explain how technology is used on our society. Create and edit photographs using technology. Use logical reasoning and prediction to help when programming. Create tally charts and pictograms. Make music and tunes using technology. Create quizzes using Scratch Junior.	
Links to values and aims		Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others	

Key Units Autumn – Year 3	Knowledge	Skills	Vocabulary
Computing Systems and Network - Connecting Computers Creating Media- Stop Frame Animations	Children will develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They will start by comparing digital and non-digital devices, before being introduced to computer networks that include network infrastructure devices like routers and switches. Learners will use a range of techniques to create a stop-frame animation using tablets. Next, they will apply those skills to create a story-based animation.	To be able to use inputs, outputs and processes. Create stop frame animations and short stores using media.	digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets animation, flip book, stopframe, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition.

Key Units Spring– Year 3	Knowledge	Skills	Vocabulary
Programming A - Sequencing Sounds Data and Information - Branching Databases	Children will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. To know what a branching database is and how to create one. Children will use yes/no questions to gain an understanding of what attributes are and how to use them to sort groups of objects.	Use Scratch to create programs using motion, sound, event blocks and sequences. Learners will create physical and on-screen branching databases.	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code. attribute, value, questions, table, objects, branching, database, objects, equal, even, separate, structure, compare, order, organise, selecting, information, decision tree.
Key Units Summer – Year 3	**Knowledge**	**Skills**	**Vocabulary**
Creating Media-Desktop Publishing Programming B - Events and Actions in Programs	Children will become familiar with the terms 'text' and 'images' and know that they can be used to communicate messages. They will use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Learners will be know the terms 'templates', 'orientation', and 'placeholders' and begin to understand how these can support them in making their own template for a magazine front cover.	To be able to manipulate font size, colour, style and page layout using publisher to create magazine front covers.	text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits. motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions.

	To know what events and actions are, whilst consolidating prior learning relating to sequencing. To know how to move a sprite in four directions (up, down, left and right). They will then explore movement within the context of a maze, using design to choose an appropriately sized sprite.	To be able to move sprites in four directions and complete mazes. To create your own mazes.	
A pupil at the end of Year 3 will know: What inputs, processes and outputs are and be able to compare digital and non-digital devices. What a stop frame animation is and how to create them. What motion, sound, event blocks and sequencing are in programming. To know what branching databases are. How to use publisher and the range of features it possesses. To move a sprite in four directions and explore movement within a maze.		A pupil at the end of Year 3 will be able to: Use inputs, processes and outputs. Create a stop frame animation. Use Scratch to make programs using motion, sound, block frames and sequences. Create physical and on-screen databases. Create magazine front covers thinking of text features and layout. Complete mazes and create mazes using design and choosing appropriate sprites.	
Links to values and aims		Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others	

Key Units Autumn – Year 4	Knowledge	Skills	Vocabulary
Computing Systems and Network - The Internet Creating Media - Audio Production	They will learn that the World Wide Web is part of the internet, and will be given opportunities to explore the World Wide Web for themselves in order to learn about who owns	Understand what the internet is and apply skills in how to use it.	internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links,

	content and what they can access, add, and create. Finally, they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information. Learners will identify the input device (microphone) and output devices (speaker or headphones) required to work with sound digitally. Learners will discuss the ownership of digital audio and the copyright implications of duplicating the work of others.	In order to record audio themselves, learners will use Audacity to produce a podcast, which will include editing their work, adding multiple tracks, and opening and saving the audio files.	files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.
Key Units Spring– Year 4	Knowledge	Skills	Vocabulary
Programming A- Repetition in Shapes Data and Information - Data Logging	Children will know what repetition and loops within programming are. Pupils will consider how and why data is collected over time. Pupils will consider the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment.	Pupils will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language. Pupils will be able to collect data and analyse data. They will look at data points, data sets, and logging intervals. Pupils will spend time using a computer to review and analyse data.	Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure. data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.

Key Units Summer – Year 4	Knowledge	Skills	Vocabulary
Creating Media - Photo Editing Programming B - Repetition in Games	To know how digital images can be changed and edited, and how they can then be resaved and reused. They will consider the impact that editing images can have, and evaluate the effectiveness of their choices. To know what repetition in programming is using the Scratch environment. To know the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition.	To be able to take images, resave and reuse them and edit the for effectiveness. To design and create a game which uses repetition, applying stages of programming design throughout.	audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback. Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate.
A pupil at the end of Year 4 will know: What the Internet is and how to use it safely. What input and output devices are in terms of sound. What repetition and loops are in programming. How and why data is collected over time How digital images can be taken, saved and edited. What repetition in programming is.		A pupil at the end of Year 4 will be able to: Use the Internet safely and know reliable sources. Produce a podcast using sound devices. Use Logo to create programs with shapes. Collect and analyse data over time. Take images and edit and improve their effectiveness. Design and create a game using repetition.	
Links to values and aims		Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others	

Key Units Autumn – Year 5	Knowledge	Skills	Vocabulary
Computing Systems and Network - Systems and Searching Creating Media - Video Production	To know how information is transferred between systems and devices. Learners consider small-scale systems as well as large-scale systems. They explain the input, output, and process aspects of a variety of different real-world systems. To know how to create short videos in groups. Children will will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video.	To be able to find information on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines. To be able to create short videos and be able to edit and manipulate videos.	system, connection, digital, input, process, storage, output, search, search engine, refine, index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking. video, audio, camera, talking head, panning, close up, video camera, microphone, lens, mid-range, long shot, moving subject, side by side, angle (high, low, normal), static, zoom, pan, tilt, storyboard, filming, review, import, split, trim, clip, edit, reshoot, delete, reorder, export, evaluate, share.
Key Units Spring– Year 5	Knowledge	Skills	Vocabulary
Programming A - Selection in Physical Computing Data and Information- Flat-file Databases	Children will know how to explore the concept of selection in programming through the use of the Crumble programming environment. Learners will be introduced to a microcontroller (Crumble controller) and learn how to connect and program components (including output devices- LEDs and motors). To know that flat-file database can be used to organise data in records. Pupils use tools within a database to	Learners are introduced to conditions as a means of controlling the flow of actions and make use of their knowledge of repetition and conditions when introduced to the concept of selection (through the if, then structure). To be able to create graphs and charts from their data to help solve problems. They use a real-life	microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer database, data, information, record, field, sort, order, group, search, value, criteria, graph, chart, axis, compare, filter, presentation.

	order and answer questions about data.	database to answer a question, and present their work to others.	
Key Units Summer – Year 5	Knowledge	Skills	Vocabulary
Creating Media - Vector Graphics Programming B - Selection in Quizzes	To know how to use different drawing tools to help them create images. Learners recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. Pupils develop their knowledge of selection by revisiting how conditions can be used in programs and then learning how the If… Then… Else structure can be used to select different outcomes depending on whether a condition is true or false.	To be able to create images and objects using shapes and line and be able to layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work. Children will represent their understanding in algorithms and then by constructing programs using the Scratch programming environment. They use their knowledge of writing programs and using selection to control outcomes to design a quiz in response to a given task and implement it as a program.	vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflection Selection, condition, true, false, count-controlled loop, outcomes, conditional statement, algorithm, program, debug, question, answer, task, design, input, implement, test, run, setup, operator
A pupil at the end of Year 5 will know: How information is transferred between systems and devices. How to capture, create and edit videos. What selection means in programming and know how to connect and program components. To know what flat-file databases are and how to use them. How to use different drawing tools to help create images. What selection is and what outcomes are in programming.		A pupil at the end of Year 5 will be able to: Find information on the world wide web, searching safely and effectively and comparing different search engines. Create, edit and manipulate short vidoes. Control the flow of actions in programming. Create graphs and charts to help solve real life problems. Create shapes and lines and layer objects. Design a quiz using algorithms and control outcomes on Scratch.	

Links to values and aims	Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others

Key Units Autumn – Year 6	Knowledge	Skills	Vocabulary
Computing Systems and Network - Communication and Collaboration Creating Media - Webpage Creation	To know how data is transferred over the internet. Learners initially focus on addressing, before they move on to the makeup and structure of data packets. Learners then look at how the internet facilitates online communication and collaboration. Finally, they learn how to communicate responsibly by considering what should and should not be shared on the internet. To know what makes a good web page and use this information to design and evaluate their own website using Google Sites. To know what copyright is and fair use of media, the aesthetics of the site, and navigation paths.	Be able to communicate and collaborate online safely thinking about what should and should not be shared. To be able to make and evaluate a web page thinking about aesthetics and navigation paths.	communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, oneway, two-way, one-to-one, one-to-many. TinkerCAD, 2D, 3D, shapes, select, move, perspective, view, handles, resize, lift, lower, recolour, rotate, duplicate, group, cylinder, cube, cuboid, sphere, cone, prism, pyramid, placeholder, hollow, choose, combine, construct, evaluate, modify.
Key Units Spring– Year 6	**Knowledge**	**Skills**	**Vocabulary**
Programming A - Variable In Games Data and Information - Introduction to Spreadsheets	To know what variables are and relate them to real-world examples of values that can be set and changed. To know how to the Use-Modify-Create model and experiment with variables in an	To use variables to create a simulation of a scoreboard.	variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare

	existing project, then modify them, before they create their own project. To know what spreadsheets are and how to organise data into columns and rows to create their own data set.	To create own data sets using spreadsheets to help organise data.	data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools.
Key Units Summer – Year 6	Knowledge	Skills	Vocabulary
Creating Media - 3D Modelling Programming B -Sensing Movement	Know how to use a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, moving, resizing, and duplicating objects. To know how to utilise a physical device — the micro:bit. The unit begins with a simple program for pupils to build in and test within the new programming environment, before transferring it to their micro:bit.	Children will create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy. Then learners will examine the benefits of grouping and ungrouping 3D objects, then go on to plan, develop, and evaluate their own 3D model of a building. To be able to use a micro:bit and combine all of the pre taught programming aspects and put them into context.	website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed. Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug.
A pupil at the end of Year 6 will know: How data is transferred over the Internet, what data packets are and how to communicate online. What makes a good website and what copyright is.		A pupil at the end of Year 6 will be able to: Communicate and collaborate online safely and effectively. Make a website and evaluate its effectiveness. Use variable to create a scoreboard.	

What variables are and how they are used. What spreadsheets are and how they can be used. How to create 3D models using a computer. What a Micro:Bit is and why it is used.	Use spreadsheets to help organise data into groups. Create a 3D Model of a building using the appropriate tools. Use a Micro:Bit and combine all of their pre taught skills from KS2.
Links to values and aims	Curiosity, Collaboration, Communication and Perseverance Mutual respect - working together Tolerance - listening and respecting opinions of others