Itchen Abbas Primary School Scheme of Work for Computing

Thresholds Concepts – These need to be explicitly taught and explained each time they are covered. The symbol in the planning will inform you which concept is being taught. Retrieval – you must refer to previous examples of when the threshold concept was taught when you teach new knowledge to support children in developing their concept schemas and make links in their learning.

Threshold concept symbol	Threshold concept
	Computing Systems and Networks
	Creating Media
	Programming
	Data & Information

In our school, PSHE and RSE is embedded throughout our wider curriculum. These are the Threshold Concepts.

Threshold concept symbol	Threshold concept title and descriptor
	Keeping myself safe This concept involves knowing the importance of and how to stay safe both online and with personal safety. It includes understanding who to talk to and when.
	Making and maintaining healthy relationships This concept is about understanding how to be a friend and what skills and qualities friends need to have and demonstrate over time. It involves understanding what a healthy relationship is and how to respond and protect yourself and others when a relationship is healthy. It is also about having a healthy relationship with yourself.
	Health and wellbeing This concept is about understanding and maintaining good physical and mental health. It includes understanding the positive impact of physical and wellbeing activities have on the body and mind.
	Living in the wider world To learn to be tolerant and show acceptance towards others. To understand the importance of living in an inclusive society and the responsible role we all play within it. To know how to show good citizenship towards others.

How do these concepts link to the National Curriculum?

National Curriculum Coverage – Years 1 and 2

National curriculum coverage - Years 3 and 4

National curriculum coverage - Years 5 and 6

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Squirrels Year R	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Little Computers		Computers are everywhere and we all need to learn how to use them. But how do they work? In this 'apptivity', children will begin to learn how to use the computers in their settings and begin to understand what the different parts of a computer are, explain about peripherals and programs. Most of this apptivity is delivered without using a computer, this is called an 'unplugged apptivity'. It is designed to introduce children to the concept of computer programs. The children will: Explore the inside of a computer. Junk Model their own computer - Practice basic computer skills using inputs and outputs.	Exposure to technology at home and within their previous nursery settings. Phones/laptops/iPads etc.	Simple Program, Operating system, Memory, Inputs, Outputs, CPU.
Autumn 2	Let's Celebrate		This apptivity should be ideally delivered around the Christmas period as it can be directly linked to "writing an email to Santa". The aim is teach children about sending their first email and the rules that they should be aware of when communicating digitally. The Children will Understand that messages can be in pictures, sound and text, and can be sent electronically over distances and that people can reply to them.	How do talking tins work? How do you use them in English to help you? You learnt how to use iPads safely in the first half term.	iPad, record, Talking Tins.

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			Begin to understand there are rules to help them stay safe when online (see eSafety section). With support, type and send a short email from a class account (e.g. a letter to Santa). Children explore how they can use email to communicate with real people within their school, families, and community.		
Spring 1	Junior Explorers	</>	Children are already immersed in a programmed world, whatever technology we use it operates via a program which contains algorithms – or more simply a sequence of instructions. This apptivity is aimed at introducing children to the fact that technology works through a sequence of instructions. It is an excellent introduction to teaching control, directional language and simple programming to young children. Much of this apptivity is delivered without using a computer, it is an 'unplugged apptivity'. It is designed to introduce children to the concept of computer programs. It uses Bee-Bots (or other floor robots) to teach children to control robots using simple instructions to make the robot move. Children will understand that instructions need to be given in a correct order and children will be able to give simple instructions using directional language and numerical units. The final lesson will provide children with the opportunity to program a Bee-Bot unaided and annotate a simple program using symbols.	Last half term you started to explore different technology and how to use it.	Control, directional language, sequencing, simple programme.
Spring 2	A is for Algorithm		Using popular stories is a great way to introduce children to computational thinking and processes. By breaking down a popular tale you can demonstrate to children the importance of sequencing. By breaking a story down into individual elements and then rearranging them, children can see the importance of following a sequence. For example rearranging the series of events from the Three Little Pigs could see the wolf blowing down a house before it has been built! This is an 'unplugged apptivity' as it introduces children to computational ways of thinking without using computers.	Last term you learnt how to use directional language.	Algorithm and sequencing

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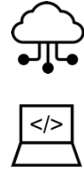
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Summer 1	Art Attack		The aim of this apptivity is to experiment with drawing apps and software across a range of devices. The children will also learn to find images using the web and be introduced to different styles of digital art. In the first lesson children will be introduced to a selection of artists, you can replace this with the artist of your own choosing if you like. The children in the following lessons will be set the tasks of drawing their favourite things; favourite food, toy, friend and colour. These drawings can be printed off and used for an exhibition.	At the beginning of the year, you learnt how a computer works. You also learnt how to use different language to do with computers in the first term.	Digital art, styles, drawing, printed, exhibition.
Summer 2	Fantastic Tales		There are various ways that stories are retold and brought to life - animation is one of these methods and one that demands children to demonstrate an understanding of the original story but allows them the creativity to put their own interpretation on a classic tale. This is a cross curricula activity with links to both Literacy and Art. Children will learn a popular tale and then re-tell the story by producing their own animation. The first part of this 'apptivity' is unplugged and aims to introduce children to computational ways of thinking.	What happens in the very hungry caterpillar? How do you record using an iPad?	Programming, animation, stories, retold.

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Hedgehogs Cycle A **Year 1/2**	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Technology around us		Develop children's 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.	In Year R, you learnt about how to use different technology, such as iPads and MacBook's.	Computer, mouse, trackpad, keyboard, screen, technology.
Autumn 2	Digital Painting		Explore the world of digital art and its exciting range of creative tools. Empower them to create their own paintings, while getting inspiration from a range of other artists. Conclude by asking them to consider their preferences when painting with, and without, the use of digital devices.	You learnt about technology last half term. You learnt how a mouse and keyboard words and how to use technology safely. You learnt how to create drawings on an iPad in Year R when you used Tizzy to label flowers.	Piet Mondrian, primary colours, shape tools, line tool, fill tool, undo tool paint program, paintbrush & erase.
Spring 1	Moving a robot – Beebot.		This unit introduces children to early programming concepts. They will explore using individual commands, both with other children 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. The unit is paced to ensure time is spent on all aspects of programming and builds knowledge in a structured manner. Children are also introduced to the early stages of program design through the introduction of algorithms.	You have learnt what happens if you move forwards, backwards, left and right.	Forwards, backwards, turn, clear, go, commands, instructions & directions.
Spring 2	Grouping Data		This unit introduces children to data and information. They will begin by using labels to put objects into groups, and labelling these groups. Children 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. Finally, they will sort objects into different groups to answer questions about data.	You have learnt about how to sort objects into groups in Maths.	Object, label, group, search, image, property, value, colour, size, shape, more, less, most, fewest.

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Summer 1	Digital Writing		Promote children's understanding of the various aspects of using a computer to create and change text. Children 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.	When you started Year 1, you learnt about how to use different technology. You also used this technology to create a painting.	Capital letters, toolbar, bold, italic, underline, Word processor, keyboard, keys, letters, type.
Summer 2	Programming Animations	`</>`	This unit introduces children to on-screen programming through Scratch Jr. Children will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify, and create programs. They will also be introduced to the early stages of program design through the introduction of algorithms.	When have you coded before? You used Beebots to move them and follow your instructions.	Scratch Jr, Bee-Bot, command, sprite, compare, programming, programming area Instructions, delete & algorithm

Hedgehogs Cycle B Year 1/2	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Information technology around us		How is information technology (IT) being used for good in our lives? With an initial focus on IT in the home, children explore how IT benefits society in places such as shops, libraries, and hospitals. Whilst discussing the responsible use of technology, and how to make smart choices when using it.	In Year 1, you learnt what technology is and how to use if safely.	Information technology (IT), computer, barcode, scanner/scan.
Autumn 2	Digital Photography		Children will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will	In Year 1, you looked at the artist Piet Mondrian and his artwork. What do you remember? You only saw a photograph of it – what about seeing	Device, camera, photograph, capture, image, digital, Framing, subject, compose.

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			use this knowledge to recognise that images they see may not be real.	it in a different light? (Show children photos with different effects, black and white, really bright, etc)	
Spring 1	Robot algorithms	</>	In this lesson, children will follow instructions given to them and give instructions to others. Children will consider the language used to give instructions and how that language needs to be clear and precise. They will combine several instructions into a sequence that can then be issued to another child to complete. Children will then consider this clear and precise set of instructions in relation to an algorithm, and they will think about how computers can only follow clear and unambiguous instructions.	You learnt how to give clear instructions in Year 1 when you learnt to control a Beebot. You also learnt about the word 'algorithm' last year.	Instruction, sequence, clear, unambiguous, algorithm, program Artwork, design, route, mat.
Spring 2	Pictograms		This unit introduces the children to the term 'data'. They 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. Children will use the data presented to answer questions.	In Year 1, you learnt how to use a keyboard and mouse. In Year 2 so far, you have programmed a Beebot to follow instructions from the data you provided.	More than, less than, most, least, organise, data, object, tally chart, votes, total Attribute, group, same & different.
Summer 1	Making Music		Children 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, children will share their creations and compare creating music digitally and non-digitally.	In Year 1, you learnt how to use an iPad. In Year 2 so far, you have created an image gallery at the end of Year 1 – what skills did you use then for your photography?	Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions, Neptune, pitch, tempo, rhythm, notes.
Summer 2	Programming Quizzes	</>	This unit initially recaps on learning from the Year 1 Scratch Junior unit 'Animations'. Children 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 Scratch Jr and realise these designs in Scratch Jr using blocks of code. Finally, children evaluate their work and make improvements to their programming projects.	You began coding with Scratch Junior at the end of Year 1. What coding did you have to use for that?	blocks, code area, sprite, algorithm, code, motion blocks, block menu.

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Otters **Cycle A**	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Connecting Computers		Challenge children to develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. Start by comparing digital and non-digital devices, before introducing them to computer networks that include network infrastructure devices like routers and switches.	In Year 1, you learnt what technology is and how to use if safely. In Year 2, you learnt about IT is being used for good in our lives.	Digital device, input, process, output, program, digital, non-digital.
Autumn 2	Stop-Frame Animations		Children will use a range of techniques to create a stop-frame animation using iPads. Next, they will apply those skills to create a story-based animation. This unit will conclude with learners adding other types of media to their animation, such as music and text.	In Year 1, you looked at the artist Piet Mondrian and his artwork. In Year 2, you explored photography and how to make music using digital devices.	Animation, flip book, Stop-frame animation, onion skinning, consistency.
Spring 1	Sequencing Sounds - Scratch		This unit explores the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano. The unit is paced to focus on all aspects of sequences, and make sure that knowledge is built in a structured manner. Children also apply stages of program design through this unit.	Last year, you began coding animations using Scratch Junior. In Squirrels, you also learnt how to program a Beebot.	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop.
Spring 2	Branching Databases		During this unit, children will develop their understanding of what a branching database is and how to create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. The children will create physical and on-screen branching databases. Finally, they will evaluate the effectiveness of branching databases and will decide what types of data should be presented as a branching database.	In Year 1 you had to group different data and sort them into groups. Last year, you sorted data into a pictogram and tally chart.	Attribute, value, questions, table, objects, branching database, structure, compare, order & organise.

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Summer 1	Desktop publishing		During this unit, children will become familiar with the terms 'text' and 'images' and understand 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. Children will be introduced to 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. They will start to add text and images to create their own pieces of work using desktop publishing software. Children will look at a range of page layouts thinking carefully about the purpose of these and evaluate how and why desktop publishing is used in the real world.	In Year 1 you explored digital writing and how to type on a digital device.	Text, images, advantages, disadvantages, communicate, desktop publishing, copy, paste.
Summer 2	Events and actions in programs		This unit explores the links between events and actions, whilst consolidating prior learning relating to sequencing. Children will begin by moving 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. This unit also introduces programming extensions, through the use of pen blocks. Learners are given the opportunity to draw lines with sprites and change the size and colour of lines. The unit concludes with children designing and coding their own maze tracing program.	In Squirrels, you learnt how to program a Beebot. In year 2 you began coding to create your own quiz.	Move, resize, algorithm, motion, event, sprite, logic.

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Otters **Cycle B**	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Computing systems and networks – The Internet		Children will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. 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 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.	In year 3, you learnt about digital devices and learnt about inputs, processes, and outputs. You compared digital and non-digital devices and explored computer networks that include network infrastructure devices like routers and switches.	Information, sharing, accurate, honest, content, adverts Website, web page, web address, router, routing, web browser
Autumn 2	Audio Editing		In this unit, children will initially examine devices capable of recording digital audio, which will include identifying the input device (microphone) and output devices (speaker or headphones) if available. 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. Finally, learners will evaluate their work and give feedback to their peers.	In Year 3, you created a stop-frame animation and this included you starting to think about using audio within technology.	Audio, sound, record, playback, start, pause, stop, podcast, save, file edit, selection, open.
Spring 1	Photo Editing		In this unit, children will develop their understanding of 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.	In Year 2 you learnt about photography and explored how to capture and edit photographs.	Image, fake, real, composite, paste, alter, background, foreground adjustments, effects, colours, hue/saturation, sepia, illustrator, vignette.

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Spring 2	Data and Information - Data Loggers		In this unit, children will consider how and why data is collected over time. They 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. Children will collect data as well as access data captured over long periods of time. They will look at data points, data sets, and logging intervals. Children will spend time using a computer to review and analyse data. Towards the end of the unit, pupils will pose questions and then use data loggers to automatically collect the data needed to answer those questions.	In Year 3, you learnt about branching databases and how to create one. You learnt how to sort groups of objects by using yes/no questions and evaluated the effectiveness of branching databases.	Analyse, data set, import, export Data logger, logging, data point, interval
Summer 1	Programming Repetition of shapes		This unit is the first of the two programming units in Year 4, and looks at repetition and loops within programming. Children will create programs by planning, modifying, and testing commands to create shapes and patterns. Where the plans refer to LOGO, you will find this on the Windows Laptops, where Scratch is on the MacBook's.	In Year 3, you made links between events and actions, whilst consolidating prior learning relating to sequencing. You also learnt about Sprites and how to make them move.	Program Turtle — an arrow or turtle image on screen that draws a line as it is programmed Commands Code snippet — this could be the same as a program; it can have several sets of commands in one program
Summer 2	Programming Repetition in Games		This unit explores the concept of repetition in programming using the Scratch environment. It begins with a Scratch activity similar to that carried out in Logo in Programming unit A, where children can discover similarities between two environments. Learners look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition. Their final project is to design and create a game which uses repetition, applying stages of programming design throughout.	Last half term, you learnt about how to repeat different shapes and in Year 3, about how to move and make links between blocks of code.	Scratch, programming, sprite, blocks, code, loop, repeat, value

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Foxes Cycle A	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Computing systems and networks – Sharing information		In this unit, children will develop their understanding of computer systems and how information is transferred between systems and devices. They will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. Children will also take part in a collaborative online project with other class members and develop their skills in working together online.	In Year 3, you were introduced to networks and how they work. In Year 4, you learnt how to keep networks secure and how the WWW was part of the internet.	System, connection, digital, input, process, output
Autumn 2	Vector Drawing		In this unit, children start to create vector drawings. They learn how to use different drawing tools to help them create images. Children recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. They layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work. This unit is planned using the Google Drawings app, other alternative pieces of software are available.	In Year 4, you learnt how to create shapes and drawings use different apps.	Vector drawing, object, move, resize, colour, rotate, duplicate/copy
Spring 1	Creating Media – Video Editing		This unit gives children the opportunity to learn how to create short videos in groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Active learning is encouraged through guided questions and by working in small groups to investigate the use of devices and software. Children are guided with step-by-step support to take their idea from conception to completion. At the teacher's discretion, the use of green screen can be incorporated into this unit. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video.	In Year 2, you learnt about photography and how to use this responsibly. In Year 4 you thought about editing these photos.	Video camera, microphone, lens, close up, mid range, long shot, moving subject, side by side, high angle, low angle, normal angle

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Spring 2	Flat-file Databases	(database icon)	This unit looks at how a flat-file database can be used to organise data in records. Children use tools within a database to order and answer questions about data. They create graphs and charts from their data to help solve problems. They use a real-life database to answer a question, and present their work to others.	In Year 3, you developed your understanding of what a branching database is and how to create one. In year 4, you found out about the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment.	Database, data, field, record, sort, order
Summer 1	Programming Selection in physical computing	(code icon)	In this unit, children will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. Children will be introduced to a microcontroller (Crumble controller) and learn how to connect and program components (including output devices- LEDs and motors) through the application of their existing programming knowledge. Children 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).	In Year 3, you explored Scratch and how to move a sprite. In Year 4, you used LOGO to create programs by planning, modifying, and testing commands to create shapes and patterns.	Microcontroller, components, connection, infinite loop, crumble
Summer 2	Programming Selection in Quizzes	(code icon)	In this unit, children 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. They represent this 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.	Last half term, you explored how to crumble software to light an LED. In Year 3, you explored Scratch and how to move a sprite. In Year 4, you used LOGO to create programs by planning, modifying, and testing commands to create shapes and patterns.	Selection, condition, true, false, outcomes, conditional statement (the linking together of a condition and outcomes), algorithm, program, debug

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Foxes Cycle B	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of previous learning	Key vocabulary
Autumn 1	Computing systems and networks – Communication		In this unit, the class will learn about the World Wide Web as a communication tool. First, they will learn how we 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. They will then investigate different methods of communication, before focusing on internet-based communication. Finally, they will evaluate which methods of internet communication to use for particular purposes.	In Year 4, you learnt that the WWW was part of the internet. In Year 5, you developed your understanding of computer systems and how information is transferred between systems and devices	Index, crawler, bot, search engine
Autumn 2	Creating Media – 3D Modelling		During this unit, learners will develop their knowledge and understanding of using a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, including combining 3D objects to make a house and examining the differences between working digitally with 2D and 3D graphics. Learners will progress to making accurate 3D models of physical objects, such as a pencil holder, which include using 3D objects as placeholders. Finally, learners will examine the need to group 3D objects, then go on to plan, develop, and evaluate their own 3D model of a photo frame.	You have explored photography and making shapes before in Year 4. This will be building on those skills and now thinking about applying your knowledge of 2D and 3D shapes in Maths.	2D, 3D, 3D object, 3D space, view Dimensions, placeholder, hole, group, ungroup
Spring 1	Creating Media – Web Page Creation		This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process learners pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths.	In Year 5, you learnt how information is transferred between systems. In year 3, you were introduced to networks and how they work. In Year 4, you learnt how to keep networks secure and how the WWW was part of the internet.	Web page, website, logo, layout, header, media, purpose

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Spring 2	Data & Information Spreadsheets		This unit introduces the learners to spreadsheets. They will be supported in organising data into columns and rows to create their own data set. Learners will be taught the importance of formatting data to support calculations, while also being introduced to formulas and will begin to understand how they can be used to produce calculated data. Learners will be taught how to apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. Learners will use spreadsheets to plan an event and answer questions. Finally, learners will create graphs and charts, and evaluate their results in comparison to questions asked.	This will be the first-time using spreadsheets. However, you have explored charts and graphs in Maths previously. You have thought about data and what that actually is when you were collected it using data loggers.	Formula, calculation, data, spreadsheet, input, output. cells, cell reference
Summer 1	Programming Variables in Games		This unit explores the concept of variables in programming through games in Scratch. First, pupils will learn what variables are, and relate them to real-world examples of values that can be set and changed. Pupils will then use variables to create a simulation of a scoreboard. In Lessons 2, 3, and 5, which follow the Use-Modify-Create model, pupils will experiment with variables in an existing project, then modify them, then they will create their own project. In Lesson 4, pupils will focus on design. Finally, in Lesson 6, pupils will apply their knowledge of variables and design to improve their game in Scratch.	You used Scratch to programme in Year 4 and also applied this to LOGO and Crumble in Year 5.	Variable, name, value, set, change
Summer 2	Programming Sensing		This unit is the final KS2 programming unit and brings together elements of all the four programming constructs: sequence from year 3, repetition from year 4, selection from year 5 and variables, introduced in year 6, programming A. It offers learners the opportunity to use all of these constructs in a different, but still familiar environment whilst also utilising a physical device - the micro:bit. The unit begins with a simple program which learners build in and test in the programming environment before transferring it to their micro:bit. Learners then take on three new projects in lessons 2, 3 and 4, with each lesson adding more depth. https://www.consortiumeducation.com/micro-bit-starter-kit-37968	You learnt how to sequence in year 3, repetition in year 4, selection in year 5 and variables, introduced in year 6, last half term.	Selection, condition, if then else, variable, random

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