

EYFS	Communication and Language - Learn new vocabulary. Use t	talk to help work out problems and organise th	inking and activities. Offer explanations for why
	things might happen using recently introduced vocabulary		
	Personal, Social and Emotional Development - Show persev	erance and resilience in the face of challenge.	Explain the reasons for rules and know right from
	wrong.		
	Physical Development - Develop small motor skills so that th	ey can use a range of tools effectively. Use the	eir core muscles to achieve a good posture when
	sitting at a table. Use a range of small tools, including, scissor	rs, paintbrushes and cutlery	
	Mathematics - Continue, copy and create repeating patterns	. Have a deep understanding of numbers to 10)
	Understanding the World- Know some similarities and differ	ences between the natural world and the wor	ld around them and contrasting environments.
	Nat	tional Curriculum	
KS1 (Acorn class)	 understand what algorithms are; how they are 	KS2	 design, write and debug programs that
	implemented as programs on digital devices; and that	(Oak Class)	accomplish specific goals, including
	programs execute by following precise and unambiguous		controlling or simulating physical systems:
	instructions		solve problems by decomposing them into
	• create and debug simple programs		smaller narts
	• create and debug simple programs		a use sequence, selection, and repetition in
	• use logical reasoning to predict the behaviour of simple		• use sequence, selection, and repetition in
	programs		programs; work with variables and various
	 use technology purposefully to create, organise, store, 		forms of input and output
	manipulate and retrieve digital content		 use logical reasoning to explain how some
	 recognise common uses of information technology 		simple algorithms work and to detect and
	beyond school		correct errors in algorithms and programs
	 Use technology safely and respectfully, keeping personal 		 understand computer networks including the
	information private; identify where to go for help and		internet; how they can provide multiple
	support when they have concerns about content or		services, such as the world wide web; and the
	contact on the internet or other online technologies.		opportunities they offer for communication
			and collaboration
			• use search technologies effectively
			approxists how results are selected and
			appreciate now results are selected did
			rankeu, and be discerning in evaluating digital
			content



		 select (incluidigita) prograccor analy inforr Use to response to the response	t, use and combine a variety of software iding internet services) on a range of al devices to design and create a range of rams, systems and content that inplish given goals, including collecting, sing, evaluating and presenting data and mation echnology safely, respectfully and onsibly; recognise otable/unacceptable behaviour; identify ge of ways to report concerns about ent and contact.
	<u>-</u>	Cycle A 2024/25	
	KS1 (Acorn Class) U	nits, Knowledge, Skills & Vocabulary	
Unit	Progression steps		
	Skills	Knowledge	Vocabulary
Autumn	 Identify technology Identify the toolbar and use bold and change font and size 	 Know what a computer is and what its main parts are called. know how to use a keyboard and how to edit using 	Computer, mouse/trackpad, draw, click, double-click, click and drag Input device, keyboard, Shift, space bar, capital letter, full stop Safely
Technology Around Us	 type capital letters I can use the space bar find letters on a keyboard to type words I can insert a picture from a picture box 	 the delete key Know how to use technology purposefully. Know I can change the keyboard output to upper and 	responsibly, technology
Information	follow rules for using technology responsibly	lowercase letters.	
Around us	Kecognise the uses and features of information technology: describing some uses of computers and	Know using different fonts and sizes changes the appearance of my work	
	examples of computers.	Know what information technology is and how it	
	Identify information technology in school and at	helps people at home, in school and in the wider	



	 home and say what it is used for. Explain the benefits of IT and how devices work together. Recognise how to use IT responsibly and that rules are in place to keep me safe and help me. 	 world. Know that devices are often linked and work together. know that networks are connected systems know rules that help keep us safe and healthy in and beyond the home when using technology 	
Spring Digital Painting Digital Photography	 draw lines and make marks on a screen and explain which tools I used make marks with the square and line tools use the shape and line tools effectively use the shape and line tools to recreate the work of an artist explain why I have chosen specific tools Capture a digital photograph and talk about how to take a photograph. Take a photograph in landscape or portrait and explain why one or other might look better. Identify what is wrong with a photograph and reframe it. To decide how photographs can be improved by using light. Use editing to change my photograph, experimenting with colour and filters. Identify if an image is real or if it has been changed. 	 Know how to create an image using a programme. Know how to select different tools to create different effects. know how to take a photograph, thinking about light and composition, know how to edit my photograph 	sort, font, size, toolbar, shift, bold, italic, shape, line, tools, space bar, insert, device, camera, photograph, capture, image, digital, landscape, portrait, horizontal, vertical, field of view, narrow, wide, format, Framing, focal point, subject matter, compose, natural lighting, artificial lighting, flash, focus, background, foreground Editing, tools, colour, images, Pixlr, lighting, filter, changed, real
Summer	use a start block in a program	• Know that an algorithm is a set of instructions used to	sequence, program, debug, challenge,
Moving a robot Robot Algorithms	 use more than one block by joining them together compare left and right turns experiment with turn and move commands to move a physical computer 	 solve a problem or achieve an objective. Know that an algorithm written for a computer is called a program. Know finding errors in an algorithm is called debugging. 	instructions, event, action, object, block, command, clear, unambiguous, algorithm, order, prediction, artwork, design, route, mat,



	 select appropriate background artwork for a project Choose a series of words that can be enacted as a sequence. Create different algorithms for a range of sequence using the same commands and show the difference outcomes between two sequences that have the same command. Predict the outcome of my algorithm and compare this with what did happen. Explain that programming projects can have code a artwork. Design a specific algorithm to meet my goal and explain what it should achieve. create and debug a program that I have written 	• know different code blocks have different purp s in	oses
Digital Literacy	 Speak to a trusted adult if I feel scared, frightened of embarrassed about something I see while using technology. identify a range of ways to report concern about content (trusted adult, report functions) 	 Know I need to use technology safely and respectfully, keeping personal information privies. Know where to go for help and support when concerns about what I have seen on the interration another digital device. Understand the importance of keeping information such as my usernames and passwords private. I know how to report inappropriate behaviour content to a trusted adult. 	technology, notification, tools, username, password, open, save, retrieve, report, concern, safety, personal information ation, s and
	KS2 (Oak Class)	Units, Knowledge, Skills & Vocabulary	
Unit	Progression steps		
	Skills	Knowledge	Vocabulary



Autumn Connecting computers Systems & searches	 Classify input and output devices; design a digital device and model a simple process. Recognise similarities and differences between using digital devices and non-digital tools. Explain how a computer network can be used to share information and that messages pass through multiple connections. Explain how digital devices can be connected and what the role of a switch, server and wireless access point is. recognise the physical components of a network and how they are connected Explain how computers are connected together to form systems. Explain the role that computers have in our lives and how information is transferred over the internet. Work collectively on a shared project online. Evaluate different ways of working together online. 	 know digital devices and change the way we work Know what a computer network is and how it works in the school setting. know what a switch, server and wireless access point are Know that connect devices can allow is to access shared files stored online. Know that sharing information online lets people in different places work together. 	Digital device, input, output, process, program, connection, network, network switch, network switch, server, wireless access point (WAP), system, digital, protocol, address, packet, chat, explore, slide deck, reuse, remix, collaboration
Spring Stop frame animation Video productions	 explain that animation is a sequence of drawings or photographs Create a stop frame animation and predict what it will look like. Break down a story into setting, characters and events to create a storyboard. Evaluate the quality of my animation and review a series of frames to check my work. To review and improve an animation explaining how I will improve it. 	 Know how to create a stop frame animation. Know how to add media to my animation. Know how to use 'onion skinning.' Explain that a video can hold visual and audio media. Know how to use Windows Movie Maker and I can edit my video to improve it. Know how to add audio, set my video to music, add a title and credits and change the transition method and length between sections or stills. 	Animation, flip book, stop frame animation, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency evaluation, delete, media, import, transition, Video, audio, AV, recording, capture, zoom, storage, digital, tape, save, videographer, technique, pan, tilt, content, light, camera, angles, lighting, computer, split, edit, timeline, special effects, title screen, end credits, export, constructive, feedback.



Summer	 evaluate the impact of adding other media to my animation Plan a video using a storyboard. Make a recording taking into account light and angles. reshoot, edit and improve my video and include special effects, title screen and end credits Explore a new programming environment, including attributes, projects, blocks, commands, 	 Know how to write a program, run and debug it. know how to create a sequence of music within 	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion,
Sequencing sounds Selection in physical computing	 codes, staging and backdrops. identify that each sprite is controlled by the commands I choose Create a sequence of connected commands and decide where and how my program will start. Combine sound commands and order notes into a sequence to create a musical instrument. To change the appearance of my project To create a project from a task description Control a simple circuit connected to a computer; including a microcontroller (crumble), an infinity loop and an LED light. Connect more than one output device to a microcontroller, deciding which output device I control with a count-controlled loop. Experiment with a 'do until' loop. Use selection (an 'ifthen' statement) to direct the flow of a program. Make a physical drawing/model of a physical computing project. 	my program • Know how to create algorithms for physical computing using loops and sequences. • Know the importance of planning and designing a project in order to follow a plan and make adjustments where necessary.	turn, point in direction, go to, glide, Sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, Microcontroller, Crumble controller, components, switch, motor, LED, Sparkle, crocodile clips, connect, battery box, program, condition, true, false, input, output devices, selection, action, repetition, microcontroller, design, repetition, debug, evaluate



	coordinates and text inputs.Using crumble or 2code a game linked to our topics.		
Digital Literacy	 Recognise what a good password is and why I should keep passwords safe. Explain what is meant by the term 'online identity'. identify the age restrictions on games and apps to work out whether they are suitable for me Understand that there is more than one way to report unacceptable content and contact. 	 Know the importance of having a secure password and not sharing this with anyone else. know that not all information on the internet is correct I know that being on the internet or playing games can alter my emotions. 	internet, age range, identity, privacy

<u>Cycle B 2025/26</u>				
	KS1 (Acorn Class	s) Units, Knowledge, Skills & Vocabulary		
Unit	Progression steps			
	Skills	Knowledge	Vocabulary	
Autumn 1 Grouping Data (Y1)	 Describe objects using labels and match objects to a group. Count groups of objects and describe their properties. count and group objects with the same properties Compare groups of objects and answer questions about them. 	• I know how to group objects by their properties.	Group, object, property, value, label, colour, data set, more, less, most, least, fewest, the same, More than, less than, most, least, organise,	
Autumn 2 Pictograms (Y1)	 I can count and compare objects (data) using tally charts, comparing totals. I can enter data on a computer and view that data in a different format: 	 Explain that we can present information using a computer and that sometimes it is this data should not be shared. 	tally chart, votes, total Pictogram, enter, compare, objects, count, explain, more common, least common Attribute, same, different, sharing,	



	Use a pictogram to answer simple questions	Know how to create a pictogram from collected	
	about the data.	data in a tally chart.	
	 Use a tally chart to create a pictogram. 	 Know how to search for specific information or 	
	 Answer 'more than'/'less than' and 'most/least' 	data.	
	questions about an attribute.	 know that I shouldn't share personal information 	
	 Create a pictogram to arrange objects by 	online	
	attributes.		
	 Create a pictogram to compare people by a 		
	common attribute.		
	 explain that we can present information using a 		
	computer and that sometimes it is this data		
	should not be shared		
Spring 1	 draw lines and make marks on a screen and 	 Know how to create an image using a 	sort, font, size, toolbar, shift, bold, italic, shape,
	explain which tools I used	programme.	line, tools, space bar, insert
Digital Painting (Y1)	 make marks with the square and line tools 	 Know how to select different tools to create 	
	 use the shape and line tools effectively 	different effects.	
	• use the shape and line tools to recreate the work		
	of an artist		
	 explain why I have chosen specific tools 		
Spring 2	 Capture a digital photograph and talk about how 	 know how to take a photograph, thinking about 	device, camera, photograph, capture, image,
	to take a photograph.	light and composition,	digital, landscape, portrait, horizontal, vertical,
Digital Photography	 Take a photograph in landscape or portrait and 	 know how to edit my photograph 	field of view, narrow, wide, format, Framing,
(12)	explain why one or other might look better.		focal point, subject matter, field of view,
	 Identify what is wrong with a photograph and 		format, compose, natural lighting, artificial
	reframe it.		lighting, flash, focus, background, foreground
	• To decide how photographs can be improved by		Editing, tools, colour, filter, images, Pixir,
	using light.		ingritting, rocus, inter, criangeo, real
	 Use editing to change my photograph, 		
	experimenting with colour and filters.		
	 Identify if an image is real or if it has been 		
	changed.		



Summer 1	• Compare different programming tools and find and use commands to move a sprite.	 Know that an algorithm is a set of instructions used to achieve an objective. 	ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area, block,
Programming Animations (Y1)	 Use a start block in a program and I can join blocks together. 	 Know that an algorithm written for a computer is called a program and finding errors in an 	joining, start block, run, background, delete, reset, algorithm, predict, effect, change, value,
	 Explain what happens when I change a value. 	algorithm is called debugging.	Instructions, delete, algorithm, appropriate,
	 Add blocks to my sprite and delete a sprite. 		
	 Create an algorithm for each sprite to control 		
	movement.		
	 Test the programs I have created and alter my 		
	designs.		
Summer 2	 Identify that a program needs to be started and I 	 Know how write and algorithm to my design. 	Sequence, command, program, run, program,
Drogramming	can identify the start of a sequence.	 Know how to debug and improve my designs. 	start, outcome, predict, blocks, sprite,
Quizzes	 Change the outcome of a sequence of 		algorithm, design, actions, project, blocks,
	commands; can match two sequences with the		design, modify, change, design, build, match,
	same outcome and predict an outcome.		compare, debug, realures, evaluate
	 Create a design and decide which blocks I need, 		
	which background I will use and choose		
	characters. I can create an algorithm, debug and		
	improve by adding features		
Digital Literacy	 Speak to a trusted adult if I feel scared, frightened or embarrassed about something I see while using technology. 	 Know I need to use technology safely and respectfully, keeping personal information private. 	technology, notification, tools, username, password, open, save, retrieve, report, concern, safety, personal information
	 identify a range of ways to report concern about content (trusted adult, report functions) 	 Know where to go for help and support when I have concerns about what I have seen on the internet, or another digital device. 	
		 Understand the importance of keeping 	
		information, such as my usernames and	
		passwords private.	
		 I know how to report inappropriate behaviours 	
		and content to a trusted adult.	
	1		1



	KS2 (Oak Class) Units, Knowledge, Skills & Vocabulary			
Unit	Progression steps			
Autumn 1	Skills	Knowledge	Vocabulary	
Data Logging (y4)	 Explain that data gathered can be used to answer a given question and I can suggest questions to be asked of the data. Use a data logger to collect data and that the data logger collects 'data points' from sensors over a given time. Use collected data to answer questions and draw conclusions. 	 Know how to use a data logger to collect data. Know that sensors are the input devices and that the data is recorded. 	Data, table, input device, sensor, data logger, data point, interval, analyse, data set, import, export, logged, collection, review, conclusion.	
Autumn 2 Introduction to spreadsheets (Y6)	 I can create a formula in a spreadsheet for simple conversions e.g. cm to m and use formulas to calculate the perimeter of a rectangle. Work collaboratively to solve a problem using spreadsheets. I can use simple formulae to solve calculations including =sum and other statistical functions. Present data visually using graphs in2calculate and/or Excel. Decide which keys are more suitable to perform a task. E.g. Numerical keys when typing long numbers. 	 Know how to format cells to perform a function and that spreadsheets can be used to present data visually. Know to credit sources when inserting media from websites and to check their validity. know data can be presented numerically or visually, each for different purposes 	Spreadsheet, data, data heading, data set, cells, columns and rows, object, spreadsheet application, format, common attribute, formula, calculation, cell reference, operation, range, duplicate, sigma Propose, question, organised, graph, chart, evaluate, results, comparison, questions, software, tools, data	
Spring 1 Audio Production (Y4)	 Identify digital devices that can record sound and play it back and that a range of sounds can be recorded. Plan and record a podcast, saving it as a file. Discuss how to improve my podcast and edit 	 Know what a podcast is. 	Audio, record, playback, microphone, speaker, headphones, input, output, sound, start, stop, pause, save, file, edit, section, mixing, time shift.	



sections of an audio recording. • Reopen my recording and add sound, using editing tools to rearrange sections of audio. • Record a podcast, editing tools to rearrange sections of audio. • Record a podcast, editing too make improvements and add sound.Spring 2 (Yé)• Explore a webpage and identify the different types of media that are used in its construction and its common features. • Pina a design for a webpage that suits my purpose. • Find suitable images and consider the ownership of these images. • Add content to my page, make edits and preview it on a different device. • Make multiple pages and link them using hyperlinks. • Evaluate my user's experience of a website.• Know how to create a program with an object that repeats actions.Website, web page, browser, media, Hypertext Mark-up Language (HTML), Website, web page, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use.Summer 1 Repetition in shapes (Y4)• Create a code snippet for a given purpose, for example controlling a turtle. • Design a program that has a count-controlled loop. • debug my program• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled loop, a debug my program• I know how to design my game, write the algorithm, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.Summer 2 (Y6)• Define a 'variable' as something that is a place holder in memory for a single value. e. Explain why a va				
Summer 1 Repetition in shapes (Y4)• Reopen my recording and add sound, using editing tools to rearrange sections of audio. • Record a podcast, editing to make improvements and add sound.• Know how to plan and create a web page, adding content and hyperlinks.Website, web page, browser, media, Hypertext Mark-up Language (HTML), Website, web page, bradarum trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use.Summer 1 Repetition in shapes (Y4)• Explore a vebpage and identify the different types of media that are used in its construction and its common features. • Plan a design for a webpage that suits my purpose. • Find suitable images and consider the ownership of these images. • Add content to my page, make edits and preview it on a different device. • Make multiple pages and link them using hyperlinks. • Evaluate my user's experience of a website.• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop. • Ureae, adebug my program• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, use, count-controlled, loop, trace, debug.Variables in games (Y6)• Define a 'variable' as something that is changeable, variable's acon hold numbers or letters.• I know how to design my game, write the algorithm, adebug, improve, evaluate, share.Variables in games (Y6)• Explain why a variable is used in a program; it is a place holder in memory for a single value. e. Exp		sections of an audio recording.		
editing tools to rearrange sections of audio. • Record a podcast, editing to make improvements and add sound. Spring 2 • Explore a webpage and identify the different types of media that are used in its construction and its common features. • Know how to plan and create a web page, adding content and hyperlinks. Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertext Mark-up Laguage (HTML), Website, web page, browser, media, Hypertink, subpage, evaluate, implications, external link, embed, copyright, fair use. Summer 1 • Create a code snippet for a given purpose, for example controlling a turtle. • I know how to create a program with an object that repeats actions. program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, patter the analgorithm for a given outcome, including repetition. • I know how to design my game, write the algorithm, code, task, artwork, lest, and geby, logo, and cease hold numbers or iters. • I know how to design my game, write the algorithm, code, task		 Reopen my recording and add sound, using 		
• Record a podcast, editing to make improvements and add sound. • Report a webpage and identify the different types of media that are used in its construction and its common features. • Know how to plan and create a web page, adding content and hyperlinks. Website, web page, browser, media, Hypertext Mark-up Language (HTML), Website, web page, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright (Y6) • Find suitable images and consider the ownership of these images. • Know how to plan and create a web page, adding content and hyperlinks. Website, web page, browser, media, Hypertext Mark-up Language (HTML), Website, web page, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use. Summer 1 • Create a code snippet for a given purpose, for example controlling a turtle. • I know how to create a program with an object including repetition. • I know how to create a program with an object that repeats actions. program, turtle, commands, code, snippet, adgorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop. • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, evaluate, share. Variables in games (Y6) • Lypiain why a variable is used in a program; it is a place holder in memory for a single value. • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, program, debug, improve, evaluate, share.		editing tools to rearrange sections of audio.		
Spring 2 • Explore a webpage and identify the different (Yep) • Know how to plan and create a web page, adding content and hyperlinks. Web Page Creation (Yep) Web Page Creation (Yep) • Web page for a webpage that suits my purpose. • Know how to plan and create a web page, adding content and hyperlinks. Web Page (http:///website, web page, browser, media, Hypertext, subpage, evaluate, implications, external link, embed, copyright, fair use. • Find suitable images and consider the ownership of these images. • Add content to my page, make edits and preview it on a different device. • Now how to create a program with an object • Repetition in shapes (Y4) • Create a code snippet for a given purpose, including repetition. • I know how to create a program with an object including repetition. • I know how to create a program with an object hat repeats actions. program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, • debug my program Summer 2 Variables in games (Y6) • Define a 'variable' as something that is a place holder in memory for a single value. • Choose how to improve a game by using • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		 Record a podcast, editing to make 		
Spring 2 Explore a webpage and identify the different types of media that are used in its construction and its common features. Plan a design for a webpage that suits my purpose. Find suitable images and consider the ownership of these images. Add content to my page, make edits and preview it on a different device. Make multiple pages and link them using hyperlinks. Evaluate my user's experience of a website. Verate a algorithm for a given outcome, including repetition. Design a program that has a count-controlled loop. debug my program I know how to design my game, write the algorithms, and create the artwork, test and debug. I know how to design my game, write the algorithms, and create the artwork, test and debug. I know how to design my game, write the algorithms, and create the artwork, test and debug. 		improvements and add sound.		
Web Page Creation (Y6)types of media that are used in its construction and its common features.content and hyperlinks.Mark-up Language (HTML), Website, web page, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use.• Plan a design for a webpage that suits my purpose.• Find suitable images and consider the ownership of these images.• know that some images have copyrightMark-up Language (HTML), Website, web page, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use.Summer 1 Repetition in shapes (Y4)Create a code snippet for a given outcome, including repetition.• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled loop, • debug my program• I know how to design my game, write the algorithm, and create the artwork, test and debug.Variable, sname, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.	Spring 2	 Explore a webpage and identify the different 	• Know how to plan and create a web page, adding	Website, web page, browser, media, Hypertext
Web Page Creation (Y6) and its common features. • Now that some images have copyright breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use. • Find suitable images and consider the ownership of these images. • Add content to my page, make edits and preview it on a different device. • Now that some images have copyright breadcrumb trail, navigation, hyperlink, subpage, evaluate, implications, external link, embed, copyright, fair use. Summer 1 • Create a code snippet for a given purpose, for example controlling a turtle. • I know how to create a program with an object that repeats actions. program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, obesign a program Summer 2 • Design a program • I know how to design my game, write the changeable' as something that is changeable', variable's can hold numbers or letters. • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		types of media that are used in its construction	content and hyperlinks.	Mark-up Language (HTML), Website, web page,
 Plan a design for a webpage that suits my purpose. Find suitable images and consider the ownership of these images. Add content to my page, make edits and preview it on a different device. Make multiple pages and link them using hyperlinks. Evaluate my user's experience of a website. Summer 1 Create a code snippet for a given purpose, for example controlling a turtle. Write an algorithm for a given outcome, including repetition. Design a program that has a count-controlled loop. debug my program I know how to design my game, write the algorithms, and create the artwork, test and debug. Variables in games (Y6) Variables in games (Y6) Explain why a variable is used in a program; it is a place holder in memory for a single value. Choose how to improve a game by using 	Web Page Creation	and its common features.	 know that some images have copyright 	breadcrumb trail, navigation, hyperlink,
purpose.purpose.embed, copyright, fair use.• Find suitable images and consider the ownership of these images.• Add content to my page, make edits and preview it on a different device.• Add content to my page, make edits and preview it on a different device.• Make multiple pages and link them using hyperlinks.• Program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, • debug my program• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, • debug my programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters. • Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithm, sond create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.	(10)	 Plan a design for a webpage that suits my 		subpage, evaluate, implications, external link,
 Find suitable images and consider the ownership of these images. Add content to my page, make edits and preview it on a different device. Make multiple pages and link them using hyperlinks. Evaluate my user's experience of a website. Summer 1 Create a code snippet for a given purpose, for example controlling a turtle. Write an algorithm for a given outcome, including repetition. Design a program that has a count-controlled loop. debug my program I know how to design my game, write the algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, program Summer 2 Define a 'variable' as something that is changeable, variables can hold numbers or letters. Explain why a variable is used in a program; it is a place holder in memory for a single value. Choose how to improve a game by using I know how to my comparing that is change holder in memory for a single value. Choose how to improve agame by using 		purpose.		embed, copyright, fair use.
ownership of these images. • Add content to my page, make edits and preview it on a different device. • Make multiple pages and link them using hyperlinks. • Evaluate my user's experience of a website.I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters.• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		 Find suitable images and consider the 		
 Add content to my page, make edits and preview it on a different device. Make multiple pages and link them using hyperlinks. Evaluate my user's experience of a website. Summer 1 Create a code snippet for a given purpose, for example controlling a turtle. Write an algorithm for a given outcome, including repetition. Design a program that has a count-controlled loop. debug my program Summer 2 Variables in games (Y6) Define a 'variable' as something that is changeable, variables can hold numbers or letters. Explain why a variable is used in a program; it is a place holder in memory for a single value. Choose how to improve a game by using 		ownership of these images.		
preview it on a different device.• Make multiple pages and link them using hyperlinks.• Evaluate my user's experience of a website.Summer 1 Repetition in shapes (Y4)• Create a code snippet for a given purpose, for example controlling a turtle.• Verite an algorithm for a given outcome, including repetition.• Design a program that has a count-controlled loop. • debug my programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.(Y6)		 Add content to my page, make edits and 		
• Make multiple pages and link them using hyperlinks. • Make multiple pages and link them using hyperlinks. • Evaluate my user's experience of a website. • I know how to create a program with an object example controlling a turtle. program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop. • Design a program that has a count-controlled loop. • I know how to design my game, write the changeable, variable' as something that is changeable, variable's as one hold numbers or letters. • I know how to design my game, write the algorithm, code, task, artwork, grogram, debug, improve, evaluate, share. (Y6) • Explain why a variable is used in a program; it is a place holder in memory for a single value. • I know how to design my game, write the algorithm, code, task, artwork, program, debug, improve, evaluate, share.		preview it on a different device.		
hyperlinks. • Evaluate my user's experience of a website.• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters.• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		 Make multiple pages and link them using 		
• Evaluate my user's experience of a website.• I know how to create a program with an object that repeats actions.program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters.• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		hyperlinks.		
Summer 1 Create a code snippet for a given purpose, for example controlling a turtle. Write an algorithm for a given outcome, including repetition. Design a program that has a count-controlled loop. debug my program I know how to create a program with an object that repeats actions. I know how to create a program with an object that repeats actions. Program, turtle, commands, code, snippet, algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, program Summer 2 Define a 'variable' as something that is changeable, variable is used in a program; it is a place holder in memory for a single value. Choose how to improve a game by using I know how to design my game, write the artwork, test and debug. 		 Evaluate my user's experience of a website. 		
Repetition in shapes (Y4)example controlling a turtle. • Write an algorithm for a given outcome, including repetition. • Design a program that has a count-controlled loop. • debug my programthat repeats actions.algorithm, design, debug, logo, command, pattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters. • Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.	Summer 1	• Create a code snippet for a given purpose, for	• I know how to create a program with an object	program, turtle, commands, code, snippet,
Repetition in shapes (Y4)• Write an algorithm for a given outcome, including repetition. • Design a program that has a count-controlled loop. • debug my programpattern, repeat, repetition, count controlled loop, value, count-controlled, loop, trace, decompose, procedure, debug, programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters. • Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		example controlling a turtle.	that repeats actions.	algorithm, design, debug, logo, command,
shapes (Y4) including repetition. Ioop, value, count-controlled, loop, trace, decompose, procedure, debug, program • Design a program that has a count-controlled loop. • debug my program • I know how to design my game, write the algorithms, and create the artwork, test and debug. • Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share. Variables in games (Y6) • Explain why a variable is used in a program; it is a place holder in memory for a single value. • I know how to design my game, write the algorithms, and create the artwork, test and debug. variables in games by using	Repetition in	 Write an algorithm for a given outcome, 		pattern, repeat, repetition, count controlled
• Design a program that has a count-controlled loop. • debug my program decompose, procedure, debug, program • debug my program • Define a 'variable' as something that is changeable, variables can hold numbers or letters. • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share. (Y6) • Explain why a variable is used in a program; it is a place holder in memory for a single value. • I know how to design my game, write the algorithms, and create the artwork, test and debug. Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.	snapes (14)	including repetition.		loop, value, count-controlled, loop, trace,
loop. • debug my programloop. • debug my programloop. • debug my programSummer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters. • Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		 Design a program that has a count-controlled 		decompose, procedure, debug, program
• debug my program• l know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.Variables in games (Y6)• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.Variables in games (Y6)• Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		loop.		
Summer 2 Variables in games (Y6)• Define a 'variable' as something that is changeable, variables can hold numbers or letters. • Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using• I know how to design my game, write the algorithms, and create the artwork, test and debug.Variable, change, name, value, set, change, event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.		 debug my program 		
Variables in games (Y6)changeable, variables can hold numbers or letters.algorithms, and create the artwork, test and debug.event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.Variables in games (Y6)• Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by usingalgorithms, and create the artwork, test and debug.event, design, algorithm, code, task, artwork, program, debug, improve, evaluate, share.	Summer 2	 Define a 'variable' as something that is 	 I know how to design my game, write the 	Variable, change, name, value, set, change,
Variables in games (Y6) letters. debug. program, debug, improve, evaluate, share. • Explain why a variable is used in a program; it is a place holder in memory for a single value. debug. program, debug, improve, evaluate, share. • Choose how to improve a game by using • Choose how to improve a game by using debug. program, debug, improve, evaluate, share.		changeable, variables can hold numbers or	algorithms, and create the artwork, test and	event, design, algorithm, code, task, artwork,
• Explain why a variable is used in a program; it is a place holder in memory for a single value. • Choose how to improve a game by using	Variables in games	letters.	debug.	program, debug, improve, evaluate, share.
 a place holder in memory for a single value. Choose how to improve a game by using 	(10)	• Explain why a variable is used in a program; it is		
Choose how to improve a game by using		a place holder in memory for a single value.		
		 Choose how to improve a game by using 		



	variables.		
	• Design a project that builds on a given example:		
	choosing artwork and creating the algorithm.		
	 To use my design to create a project, testing 		
	the code that I have written.		
	 o evaluate my project 		
Digital Literacy	 Identify the risks and the benefits of apps and software that broadcast location and can turn this function on/off as required. Clearly explain appropriate behaviour online and report any behaviours than make me feel uncomfortable. explain how and why some people may explain opinions as facts and how I may encounter these online through advertising and ad-targeting 	 B aware that some games, apps and websites etc. Have age restrictions and this is for my safety and the safety of others. Know that too much 'screen time' can be detrimental to my health and know ways in which to access devices safely. Understand the value in preserving privacy when online for my own and other people's safety. 	gender, bullying, age related content, impact, app permissions, reporting content, alert

<u>Cycle C 2026/27</u>			
	KS1 (Acorn Cla	ass) Units, Knowledge, Skills & Vocabula	ry
Unit	Progression steps		
	Skills	Knowledge	Vocabulary
Autumn 1 Technology Around Us	 Identify technology Identify the toolbar and use bold and change font and size type capital letters I can use the space bar find letters on a keyboard to type words I can insert a picture from a picture box follow rules for using technology responsibly 	 Know what a computer is and what its main parts are called. know how to use a keyboard and how to edit using the delete key Know how to use technology purposefully. Know I can change the keyboard output to upper and lowercase letters. Know using different fonts and sizes changes 	Computer mouse/trackpad, draw, click, double- click, click and drag Input device, computer, keyboard, mouse Shift, space bar, capital letter, full stop Safely, responsibly, computer, technology



		the appearance of my work.	
		•	
Autumn 2	Recognise the uses and features of information	Know what information technology is and how	
	technology: describing some uses of computers	it helps people at home in school and in the	
Information	and eventiles of computers	wider world	
Technology	and examples of computers.		
Around us	 Identity information technology in school and 	Know that devices are often linked and work	
	at home and say what it is used for.	together.	
	• Explain the benefits of IT and how devices work	 know that networks are connected systems 	
	together.	• know rules that help keep us safe and healthy	
	Recognise how to use IT responsibly and that	in and beyond the home when using	
	rules are in place to keep me safe and help me	technology	
		technology	
Spring 1	draw lines and make marks on a screen and	• Know how to create an image using a	sort, font, size, toolbar, shift, bold, italic, shape,
	explain which tools Lused	programme	line, tools, space bar, insert
Digital Painting	• make marks with the square and line tools	• Know how to coloct different tools to create	
	use the shape and line tools effectively	different effects.	
	 use the shape and line tools to recreate the 	•	
	work of an artist		
	 explain why I have chosen specific tools 		
Spring	Capture a digital photograph and talk about	• know how to take a photograph, thinking about	device, camera, photograph, capture, image,
	how to take a photograph.	light and composition.	digital, landscape, portrait, horizontal, vertical.
Digital Painting	• Take a photograph in landscape or portrait and	• know how to edit my photograph	field of view, narrow, wide, format, Framing, focal
0 0	evaluation why and an other might look better		point, subject matter, compose, natural lighting
Digital	explain why one or other might look better.		artificial lighting flash focus background
Photography	 Identify what is wrong with a photograph and 		foreground Editing tools colour images Divir
FILUTORIAPITY	reframe it.		lighting filter changed real
			lighting, liiter, changed, real



Summer 1 Moving a robot	 To decide how photographs can be improved by using light. Use editing to change my photograph, experimenting with colour and filters. Identify if an image is real or if it has been changed. use a start block in a program use more than one block by joining them together compare left and right turns experiment with turn and move commands to 	 Know that an algorithm is a set of instructions used to solve a problem or achieve an objective. Know that an algorithm written for a computer is called a program. Know finding errors in an algorithm is called 	sequence, program, debug, challenge, instructions, event, action, object, block, command, , clear, unambiguous, algorithm, order, prediction, artwork, design, route, mat,
	 move a physical computer use event, action and object code blocks select appropriate background artwork for a project 	debugging.know different code blocks have different purposes	
Summer 2 Robot Algorithms	 Choose a series of words that can be enacted as a sequence. Create different algorithms for a range of sequences using the same commands and show the difference in outcomes between two sequences that have the same command. Predict the outcome of my algorithm and compare this with what did happen. Explain that programming projects can have code and artwork. Design a specific algorithm to meet my goal and explain what it should achieve. create and debug a program that I have written 	 Know computers require simple, precise instructions to perform. Know how to identify and correct some simple errors (debugging). begin to understand that computer networks provide access to the internet etc. 	instruction, sequence, clear, unambiguous, algorithm, program, sequence, order, algorithm, commands, prediction, artwork, design, route, mat, debugging



Digital Literacy	 Speak to a trusted adult if I feel scared, frightened or embarrassed about something I see while using technology. identify a range of ways to report concern about content (trusted adult, report functions) 	 Know I need to use technology safely and respectfully, keeping personal information private. Know where to go for help and support when I have concerns about what I have seen on the internet, or another digital device. Understand the importance of keeping information, such as my usernames and passwords private. Know how to report inappropriate behaviours 	technology, notification, tools, username, password, open, save, retrieve, report, concern, safety, personal information
		and content to a trusted adult.	
	•		
<u>Cycle C 2026/27</u>			
	KS2 (Oak Class	s) Units, Knowledge, Skills & Vocabulary	
Unit	Progression steps		
	Skills	Knowledge	Vocabulary
Autumn 1 The Internet (Y4)	 Explain how the internet is made up of connected networks. Explain how websites are stored on the www, what types of media can be shared and how to access websites on the WWW. Explain that that content of the www is created by people. Evaluate the consequences of unreliable content. Name the different parts of a desktop computer and know what the function of the 	I know computers are made from hardware, software and components. I know that websites and their contents are created by people and that some information that I find online may not be honest, accurate or legal.	internet, network, router, network, security, switch, server, wireless, access point (WAP), web page, web address, links, files, content, download, sharing, ownership, permission, information, accurate, honest, adverts, legal.



	different parts of a computer is. E.g. make a leaflet labelling a computer.		
Autumn 2 Flat File Databases (Y5)	 Create a database, using fields which hold and record the data. Search a database using 'and' and 'or.' Apply filters and select an appropriate chart or graph to visually compare data. Apply my knowledge of a database to ask questions that will need more than one field to answer. 	 Know how to create a database. Know that a databases is a program that is used to store information (attributes) and that you can ask questions (search) a database for answers. know that you can create graphs and charts to represent your answers 	Database, data, information, record, field, sort, order, group, search, criteria, graph, chart, axis, compare, filter, presentation
Spring 1 Desktop Publishing (Y3)	 Recognise how text and images convey information clearly and that there are some advantages and disadvantages to using them. Change the text layout, including font style, size and colour. Choose appropriate page settings: generating a template to meet my needs with placeholders. Add content to a desktop publishing publication, including adding text and pasting pictures. Change the layout to suit different purposes. To consider the benefits of desktop publishing and identify its use in the real world. 	 Know how to create a template, add text and images. Know how to change text layout, including font size and colour. know how to alter the layout to suit my purpose 	Text, images, advantages, disadvantages, communicate, font, font style, template, landscape, portrait, orientation, placeholder, desktop publishing, copy, paste, layout, purpose, benefits
Spring 2 Selection in Quizzes (Y5)	 explain how selection is used in a program and identify conditions and how to modify them Create a program with different outcomes using selection and identify the condition and outcome is an if then else statement. explain how selection directs the flow of a program 	 Know how to use scratch to create a quiz. Know how to add a loop. 	Selection, condition, true, false, outcomes, conditional statement - the linking together of a condition and outcomes-algorithm, program, debug, Task, design, algorithm, input, program, selection, condition, outcomes, test, run, implement, share, evaluate, constructive



Summer 1 Events & Actions in programmes (Y3)	 Design and create a program which uses selection: creating the algorithms, running the program and debugging. explain how a sprite moves in an existing project create a program to move a sprite in four directions adapt a program to a new context develop my program by adding features identify and fix bugs in a program design and create a maze-based challenge 	 know how to make my sprite move and I can select keys to do this (up, down, left, right) Know how to add blocks and use function such as pen down. 	Motion, event, sprite, algorithm, logic, move, resize, algorithm Extension block, pen up, set up, pen, design, actions, debugging, errors, setup
Summer 2 Vector Drawing (Y5)	 Use drawing tools to produce different outcomes and for different purposes. Create a vector drawing by combining shapes and I can move, resize, rotate and duplicate them. Use tools to achieve a desired effect, for example using the zoom tool to add detail to my drawing. Create layers bring objects to the front or the back. Evaluate my vector drawing and say how I might improve it. 	 know how to create an image using vector drawing. know how to use a range of tools with in the program. 	vector, drawing tool, shapes, object, icon, toolbar, move, resize, colour, rotate, duplicate/ copy, organise, zoom, select, alignment grid, handles, consistency, modify, layers, front, back, order, copy, paste, group, ungroup, improvement, evaluate, alternatives, vector drawing.
Digital Literacy	I can explain how identity online can be copied, modified or altered. I can demonstrate responsible choices about my online identity, depending on context. I can refer to SMART choices. I can think critically about what I share online and the digital footprint I create. I can explain how I would report online bullying on	 Understand the difference between online misinformation (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead). Have a secure knowledge of common online safety rules and can apply this by 	online identity block, misinformation, dis- information, sceptical, SMART, ad targeting, cite, opinions, facts, influence, manipulation, persuasion, false, valid, reliable



the apps and platforms that I use and know how to block abusive users I can describe the helpline services who can support me and what I would say and do if I needed their help (e.g., Child line) I can explain how and why some people may present 'opinions' as 'facts'. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting'). I can explain key concepts including: fact, opinion belief, true, false, valid, and reliable.	demonstrating the safe and respectful use of a few different technologies and online services. know how to relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others	
---	---	--

<u>Cycle D 2027/28</u>			
	KS1 (Acorn Cl	ass) Units, Knowledge, Skills & Vocabulary	
Unit	Progression steps		
	Skills	Knowledge	Vocabulary
Autumn 1 Grouping Data (Y1)	 Describe objects using labels and match objects to a group. Count groups of objects and describe their properties. count and group objects with the same properties Compare groups of objects and answer questions about them. 	• I know how to group objects by their properties.	Group, object, property, value, label, colour, data set, more, less, most, least, fewest, the same, More than, less than, most, least, organise,
Autumn 2 Pictograms (Y1)	 I can count and compare objects (data) using tally charts, comparing totals. I can enter data on a computer and view that data in a different format: 	 Explain that we can present information using a computer and that sometimes it is this data should not be shared. 	tally chart, votes, total Pictogram, enter, compare, objects, count, explain, more common, least common Attribute, same, different, sharing,



	 Use a pictogram to answer simple questions 	• Know how to create a pictogram from collected data	
	about the data.	in a tally chart.	
	 Use a tally chart to create a pictogram. 	• Know how to search for specific information or data.	
	 Answer 'more than'/'less than' and 'most/least' questions about an attribute. 	know that I shouldn't share personal information online	
	 Create a pictogram to arrange objects by attributes. 		
	 Create a pictogram to compare people by a common attribute. 		
	explain that we can present information using a computer and that sometimes it is this data should not be shared		
Spring 1	 draw lines and make marks on a screen and 	• Know how to create an image using a programme.	sort, font, size, toolbar, shift, bold, italic, shape,
	explain which tools I used	• Know how to select different tools to create	line, tools, space bar, insert
Digital Painting (Y1)	 make marks with the square and line tools 	different effects.	
	 use the shape and line tools effectively 		
	 use the shape and line tools to recreate the 		
	work of an artist		
	explain why I have chosen specific tools		
Spring 2	 Capture a digital photograph and talk about 	 know how to take a photograph, thinking about 	device, camera, photograph, capture, image,
Disital Dhata such a	how to take a photograph.	light and composition,	digital, landscape, portrait, horizontal, vertical,
(Y2)	 Take a photograph in landscape or portrait and explain why one or other might look 	know how to edit my photograph	field of view, narrow, wide, format, Framing, focal point, subject matter, field of view, format, compose, natural lighting, artificial
	better.		lighting flash focus background foreground
	 Identify what is wrong with a photograph and 		Editing, tools, colour, filter, images, Pixlr.
	reframe it.		lighting, focus, filter, changed, real
	To decide how photographs can be improved		
	by using light.		



	 Use editing to change my photograph, experimenting with colour and filters. Identify if an image is real or if it has been changed. 		
Summer 1 Programming Animations (Y1)	 Compare different programming tools and find and use commands to move a sprite. Use a start block in a program and I can join blocks together. Explain what happens when I change a value. Add blocks to my sprite and delete a sprite. Create an algorithm for each sprite to control movement. Test the programs I have created and alter my designs 	 Know that an algorithm is a set of instructions used to achieve an objective. Know that an algorithm written for a computer is called a program and finding errors in an algorithm is called debugging. 	ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area, block, joining, start block, run, background, delete, reset, algorithm, predict, effect, change, value, Instructions, delete, algorithm, appropriate,
Summer 2 Programming Quizzes	 Identify that a program needs to be started and I can identify the start of a sequence. Change the outcome of a sequence of commands; can match two sequences with the same outcome and predict an outcome. Create a design and decide which blocks I need, which background I will use and choose characters. I can create an algorithm, debug and improve by adding features 	• Know how write and algorithm to my design. Know how to debug and improve my designs.	Sequence, command, program, run, program, start, outcome, predict, blocks, sprite, algorithm, design, actions, project, blocks, design, modify, change, design, build, match, compare, debug, features, evaluate
Digital Literacy	 Speak to a trusted adult if I feel scared, frightened or embarrassed about something I see while using technology. identify a range of ways to report concern about content (trusted adult, report functions) 	 Know I need to use technology safely and respectfully, keeping personal information private. Know where to go for help and support when I have concerns about what I have seen on the internet, or another digital device. Understand the importance of keeping information, 	technology, notification, tools, username, password, open, save, retrieve, report, concern, safety, personal information



		such as my usernames and passwords private. I know how to report inappropriate behaviours and	
	KS2 (Oak Class	Content to a trusted adult.	
Unit	Progression steps	j offics, knowledge, skins & vocabulary	
	Skills	Knowledge	Vocabulary
Autumn 1 Branching Databases (Y3)	 Create a branching database by grouping groups of objects separated by one attribute. Make up yes/no questions about these groups. To identify the object attributes needed to collect relevant data explain why it is helpful for a database to be well structured compare the information shown in a pictogram with a branching database 	• I know how to carefully structure a branching database, identifying attributes for grouping and yes/no questions.	Attribute, value, questions, table, objects, branching database, database, , equal, even, separate, order, organise, value, question, j2data, selecting, pictogram, compare, information, decision tree
Autumn 2 Internet Communication (Y6)	 Search the web for specific information and identify and compare results from different search engines. Explain that web crawlers are the digital bots that search the internet for index pages for web address. Explain web pages are ranked and how search engines make money. identify that there are different ways to communicate over the internet 	 Know how to search the internet and that I will get different results from different search engines. Know that web crawlers are digital bots that find what I am looking for. Know how to keep myself safe online and that I should not be sharing personal information. Know that if I am communicating online, that my conversations may not be private. 	Search, search engine, Google, Bing, Yahoo!, Swisscows, DuckDuckGo, refine Index, crawler, bot, search engine, ranking, search engine, search engine optimisation, links, web crawlers, selection, ranking, communication, internet, public, private, one-way, two-way, one to one, one to many, SMS, email, WhatsApp, blog, YouTube, Twitter, BBC Newsround
Spring 1 Sensing movement (Y6)	 create a program to run on a controllable device explain that selection can control the flow of a program update a variable with a user input 	• I know how to control multiple variables on a physical computing device.	Micro: bit, make code, input, process, output, flashing, USB, selection, condition, if then Else, variable, random, sensing, accelerometer, compass, direction, design, task, algorithm, step



	 use a conditional statement to compare a variable to a value design a project that uses inputs and outputs on a controllable device develop a program to use inputs and outputs on a controllable device 		counter, plan, code, test, debug.
Spring 2 3D Modelling (Y6)	 use a computer to create and manipulate three- dimensional (3D) digital objects compare working digitally with 2D and 3D graphics construct a digital 3D model of a physical object identify that physical objects can be broken down into a collection of 3D shapes design a digital model by combining 3D objects develop and improve a digital 3D mode 	 Know how to create a 3D object using a computer program. 	2D, 3D, 3D object, 3D space, view, resize, colour, lift, rotate, position, select, duplicate, dimension, placeholder, hole, group, ungroup, design, modify, evaluate, improve.
Summer 1 Repetition in games (Y4)	 Develop the use of count-controlled loops in a different programming environment, for example scratch. explain that in programming there are infinite loops and count controlled loops Develop a program which includes two or more loops which run at the same time. modify an infinite loop 	• Know how to add loops to a program.	scratch, programming, sprite, blocks, code, loop, repeat, value, forever, count controlled loop, costume, animate,
Summer 2 Photo Editing (Y4)	 Explain the effect that editing can have on an image. Change the composition of an image by selecting parts of it. Use editing tools on a photograph and can explain the effect these have. Evaluate how changing can improve an image. 	 Know how to edit an image. Know how to adjust, sharpen, brighten, alter and image. Know how to change hue, saturation, change colour or use settings such as sepia. 	image, edit, arrange, select, crop, undo, save, copyright, pixels, rotate, flip, adjustment, effects, colours, hue/ saturation, sepia, save, version, illustrator, vignette, retouch, edit, clone, recolour, image, fake, real, composite, cut, copy, paste, background, foreground.



	• Save and retrieve an image.		
Digital Literacy	 Identify possible risks of installing free and paid for software. Identify signs of a computer virus. Identify security symbols such as padlocks can help keep me safe online. Identify and am aware of the existence of scam websites. Explain what a digital footprint is and how it relates to identity theft. give examples of things that they would not want to be in their digital footprint 	 Know I should report inappropriate content found online to a trusted adult. Understand that not all information I find online has been fact checked. Know that malware is software that is specifically designed to disrupt, damage, or gain access to a computer. Know what a computer virus is. know it is healthy to limit screen time and have screen free activities, 	internet browser, spoof website, malware, copyright, phishing, online identity, digital footprint