

Eaton Primary School

Progression of Learning

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Progression of Knowledge and Skills

How this document works:

This is a whole school overview, demonstrating progression in knowledge and skills.

<u>Page 1:</u> Demonstrates what a typical learner will look like at the end of each phase, combining the key skills and knowledge they will require.

<u>Page 2 onwards:</u> Demonstrates progression in knowledge and skills objectives for each phase, with key vocabulary, and also 'key indicators' which identify intended learning outcomes.

Foundation/ EYFS	KS1	LKS2	UKS2
Data Handling	Data Handling	Data Handling	Data Handling
Children are	Children make genuine links between their	Children learn to collect more data linked	The KS2 culminate their skills in Data Handling
introduced to	computing and Maths when grouping and	to weather to create their own reports.	with a final Skills Showcase involving the Mars
the idea of	creating pictograms to understand and	They build on previous skills to advance	Rover Project. This is opportunity to
logging simple	handle data.	their abilities.	demonstrate the learning and skill developed
data. Links are	Programming	Programming	over the past years.
made between	In KS1 children are introduced to basic	In LKS2 children progress from Scratch Jnr	Programming
Maths and	programming - both on screen and	to Scratch, learning about how to add	Children in KS2 build on previous work in
Science to	unplugged. They program bee-Bots to	inputs to the programs they have	programming and begin to learn the global
create	move around maps, go through mazes and	created. They build on the work done on	programming language Python. This is a great
meaningful	follow instructions to move around the	inputs in LKS2 and are given more	way to prepare the future minds of tomorrow.
lessons. The	floor. Children are introduced to Scratch	complex problems to solve. Having learnt	Computer systems and networks
children are	Jnr and have opportunity to build on what	about inputs in previous year groups,	Once the top-secret home of the codebreakers,
able to identify	they learnt in their previous year about	children are taught how to loop	now the subject of our final year students end
information	algorithms, they use the app and the	instructions that introduce repetition to	task. We understand the importance of
from the data	programming skills to develop and create	the actions they program. These	networks and search engines and the hard work
collected.	simple quizzes and animations.	techniques are used in a variety of	that our computing predecessors achieved.
Programming	Computer systems and networks	projects.	Creating Media
Children are	They learn about what information	Computer systems and networks	They have further opportunity to be creative
introduced with	technology is, how it makes a difference to	As part of their work on learning about	when they complete their stop animation units.
links made to	our lives and how we can use it	how networks function, children go on	Children will be able to build their own sets
early Maths	responsibly. Throughout their time	tours of the school identifying the parts	when completing this unit.
about simple	computing they also learn about the	of the school network and they discuss	
instructions and	importance of kindness and of rules when	how these all work together. Children are	
directional	working online ensuring and online safe	introduced to desktop publishing tools to	
language. This is	presence.	combine text and images to	
done using	Creating Media	communicate. During LKS2 children begin	
programable	Children In KS1, learn about how	collaboratively learning via Microsoft	
BeeBots.	photographs can be manipulated when	Teams, unlocking further skills for their	
Computer	they study digital photography, using apps	futures in education and beyond.	
systems and	to edit their own photos and manipulate	Creating Media	
networks	text	Children investigate how to produce	
Children in EYFS		simple video trailers they plan and map	
begin their		out their vision before filming and	
journey into the		editing. Later on, they begin to build and	

	world of		advance on their understanding creating	
	computing by		and using HTML.	
	first			
	understanding			
	the components			
	of computers			
	and the			
	equipment that			
	is available to			
	them. These are			
	often seen in			
	provision. The			
	children are			
	able to log on to			
	a computer and			
	use a mouse			
	with much			
	success.			
	Creating Media			
Year Group	EYFS	KS1	LKS2	UKS2
		D	ata Handling	
	T=	I=		I
<u>Knowledge</u>	To know that	To know how that charts and pictograms	To know that a database is a	To know that Mars Rover is a motor vehicle that
	sorting objects	can be created using a computer	collection of data stored in a	collects data from space by taking photos and
	into various		logical, structured, and orderly	examining samples of rock.
	categories can	To understand that a branching database is	manner.	
	help you locate	a way of clarifying a group of objects		To know what numbers using binary code look
	information	T. I	To know that computer	like and be able to identify how messages can
		To know that computers understand	databases can be useful for	be sent in this format.
	To know that	different types of 'input'.	sorting and filtering data.	To and out and that BANA's Boards or
	using yes/no	T	To be a short difference of	To understand that RAM is Random
	questions to	To understand that you can enter simple	To know that different visual	Access Memory and acts as the computer's
	find an answer	data into a spreadsheet	representations of data can be	working memory.
	is known as a	To a decide of the total	made on a computer.	
		To understand what steps,		
	branching	-		
	branching database	you need to create an algorithm.	To know that computers can use different forms of input to sense	To know what simple operations can be used to calculate bit patterns.

	To know that a	To know what data to use to answer	the world around them so that	To know the difference between mobile
	pictogram is a	certain questions	they can record and respond to	data and WiFi.
	way of showing		data ('sensor data').	
	information	To know that computers		To know that devices or that are not updated
		can be used to monitor	To know that a weather machine	are most vulnerable to hackers.
		supplies	is an automated machine that	
			respond to sensor data	To know that data can become corrupted within a network but this is less likely to happen if it is
			To understand that weather	sent in 'packets'.
			forecasters use specific language,	
			expression and pre-prepared scripts to	To know that data is often encrypted so that
			help create weather forecast films.	even if it is stolen it is not useful to the thief.
				To know that Radio Frequency Identification (RFID) is a more private way of transmitting data.
				To know that infrared waves are a way of transmitting data.
				To know that data contained within barcodes
				and QR codes can be used by computers
Skills	Exploring	Learning where keys are located on the	Using logical thinking to explore	To know that Mars Rover is a motor
<u> </u>	branch	keyboard.	more complex software, predicting,	vehicle that collects data from space by
	databases		testing and explaining what it does.	taking photos and examining samples of
	through physical	Recognising that some devices are input		rock.
	games.	devices and others are output devices.	Understanding the vocabulary associated	
	J	·	with databases: field, record, data.	To know what numbers using binary
	Representing	Learning how to explore and tinker with	, ,	code look like and be able to identify
	data through	hardware to find out how it works.	Learning about the pros and cons	how messages can be sent in this
	sorting and		of digital versus paper databases	format.
	categorising	Developing control of the mouse through		
	objects in	dragging, clicking and resizing of images to	Sorting and filtering databases to	To understand that RAM is Random
	unplugged	create different effects.	easily retrieve information.	Access Memory and acts as the
	scenarios.			computer's working memory.
		Developing understanding of different	Creating and interpreting charts	
	Representing	software tools.	and graphs to understand data.	To know what simple operations can be
	data through			used to calculate bit patterns.
	pictograms.		Understanding that weather	

Recognising devices that are connected to stations use sensors to gather To know that data contained within and record data which predicts barcodes and QR codes can be used by the internet. the weather computers. Understanding that technology can be used to represent data in different ways. Using tablets or digital cameras To know that infrared waves are a way to film a weather forecast. of transmitting data. Using data representations to answer Using keywords to effectively To know that Radio Frequency questions about data. Identification (RFID) is a more private search for information on the Using software to explore and create internet. way of transmitting data. pictograms and branching databases. Designing a device which gathers To know that data is often encrypted so and records sensor data. that even if it is stolen it is not useful to Developing confidence with the keyboard the thief. and the basics of touch typing. Understanding that data is used To know that data can become to forecast weather. Sorting data using corrupted within a network but this is. less Creating and labelling images. the 'sort by...' option likely to happen if it is sent in 'packets'. Recording data in a spreadsheet Collecting and inputting data into a spreadsheet. Interpreting data from a independently I know that devices or that are not spreadsheet. updated are most vulnerable to hackers. Learning how computers are used To know the difference between mobile in the wider world. Databases. data and WiFi. Developing confidence with the keyboard and the basics of touch typing. Creating and labelling images. Collecting and inputting data into a spreadsheet. interpreting data from a spreadsheet.

Learning how computers are used in the

wider world

Key		approximate	Algorithm	Barcode
vocabulary		• Computer	Automated machine	Big data
		Computer program	Calculate	Binary image
		• Create	Categorise	• Bit
		• Data	Climate	Bluetooth
		Digital content	• Data	Boolean
		• e-document	• Database	• CAD
		experiment	• Device	Commuter
		• folder	• Fields	Compression file
		interactive map	• Filter	Computer simulation
		• interpret	• Forecast	Corrupt data
		• laboratory	Graph	• CPU
		• list	Information	Data privacy
		• monitor	Log data	• Encode
		• satellite	• Predict	• GPS
		• save	• Record	Infrared waves
		Sensor	• Sensor	• JPEG
		Sequence	• Sort	•Memory
		• share	• Source	• Pixels
		• spreadsheet	 Spreadsheet 	• RFID
		• survival	 Temperature 	• RGB
		• thermometer	• Weather	• SI
Key	To know	To know how that charts and pictograms	To know that a database is a collection of	To know that Mars Rover is a motor
<u>indicators</u>	that sorting	can be created using a computer.	data stored in a	vehicle that collects data from
	objects into		logical, structured and orderly manner.	space by taking photos and
	various	To understand that a branching database is		examining samples of rock.
	categories	a way of classifying a group of objects.	To know that computer databases can be	
	can help		useful for	To know what numbers using
	you locate	To know that computers understand	sorting and filtering data.	binary code look like and be able to
	information	different types of 'input'.		identify how messages can be sent
			To know that different visual	in this format.
	To know	To understand that you can enter simple	representations of data can	
	that using	data into a	be made on a computer.	To understand that RAM is Random
	yes/no	spreadsheet.		Access Memory and acts as the
	questions to		To know that computers can use different	computer's working memory.
	find an	To understand what steps you need to take	forms of input	
	answer is a	to create an	to sense the world around them so that	To know what simple operations
	branching	algorithm.	they can record	can be used to calculate bit

	database.		and respond to data. This is called 'sensor	patterns.
	ualdDdSE.	To know what data to use to answer certain	data'.	patterns.
	Talesau		uala.	To know that data contained within
	To know	questions.	T-	
	that a		To know that a weather machine is an	barcodes and QR codes can be used
	pictogram is	To know that computers can be used to	automated	by computers.
	a way of	monitor	sensor data.	
	showing	supplies.		To know that infrared waves are a
	information		To understand that weather forecasters	way of transmitting data.
			use specific	
			language, expression and pre-prepared	To know that Radio Frequency
			scripts to help	Identification (RFID) is a more
			create weather forecast	private way of transmitting data.
			films.	
				To know that data is often
				encrypted so that even if it is stolen
				it is not useful to the thief.
				To know that data can become
				corrupted within a network but this
				is less likely to happen if it is sent in
				'packets'. I know that devices or
				that are not updated are most
				vulnerable to hackers.
				To know the difference between mobile data
				and WiFi.
	•		Programming	
<u>Knowledge</u>	To know that	To understand that an algorithm is when	To understand that you can remix and	To understand the use of random
	being able to	instructions	adapt existing code.	numbers and remix Python code.
	follow and give	are put in an exact order		
	simple		To understand how decomposition is used	To know that nested loops are loops
	instructions in	To know that input devices get information	in	inside of loops.
	important in	into a computer and that output devices	programming	·
	computing	get information out of a computer		To know that there are text-based
	- 2	S-1 Sat Si a sompatei	To understand how to use loops to	programming languages such as Logo
	To understand	To understand that decomposition means	improve programming.	and Python.
	that it is	breaking	improve programming.	and tython.
	important for	a problem down into manageable chunks	To know that Scratch is a programming	To know what tochniques to use to
	•	_	To know that Scratch is a programming	To know what techniques to use to
	instructions to	and that it	language and some	create a program for a specific purpose

be in the right order	is important in computing	of its basic functions.	(including decomposition).
oraci	To know that an error in an algorithm is	To understand that a variable is a value	To understand and recognise coding
To understand	called a 'bug' and	that can change (depending on	structures including variables
why a set of	fixing it is called 'debugging'	conditions) and know that you can create	Structures including variables
instructions	Invitig it is called debugging	them in Scratch.	To know that Micro:bit uses a block
may have gone	To understands the basic functions of a	them in scratch.	coding language similar to Scratch.
wrong	Bee-Bot.	To know what a conditional statement is	County language similar to scratch.
WIONE		in programming.	To know that a Micro:bit is a programmable
To know that	to know that you can use a camera/tablet	in programming.	device.
	to know that you can use a camera/tablet	To understand that variables can belo you	device.
you can	to make simple	To understand that variables can help you	To lynguy boyy to adopt their may air while
program a	videos.	to create a quiz on Scratch.	To know how to adapt their music while
BeeBot with			performing.
some	To know that algorithms move a Bee-Bot	To know that combining computational	
simple	accurately to a	thinking skills can help you to solve a	To understand that using loops can
commands	chosen destination.	problem.	make the process of writing music
			simpler and more effective.
to understand	To understand what machine learning is	To understand that pattern recognition	
that debugging	and how it enables	means identifying patterns to help them	To know that a soundtrack is music for
means how to	computers to make predictions	work out how the code works.	a film/video and that one way of
fix some simple			composing these is on programming
programming	To know that loops in programming are	To understand that algorithms can be	software.
errors	where you	used for a number of purposes e.g.	
	set a certain instruction (or instructions) to	animation, games design etc.	
to understand	be repeated		
that an	multiple times.		
algorithm is a			
set of clear and	To know that abstraction is the removing		
precise	of unnecessary detail to help solve a		
instructions.	problem.		
	To know that coding is writing in a special		
	language so that		
	the computer understands what to do.		
	To understand that the character in		
	ScratchJr is controlled by the programming		
	blocks.		

expl tink	rning how to lore and er with dware to	create a musical instrument or tell a joke Learning how to explore and tinker with hardware to find out how it works.	Using decomposition to explore the code behind an animation	To know that a soundtrack is music for a
expl tinks hard	rning how to lore and er with dware to	Learning how to explore and tinker with hardware to find		
expl tinke hard	lore and er with dware to	hardware to find		
tinko harc	er with dware to		hehind an animation	
hard	dware to	out how it works.	berning an animation	film/video and that one way of composing
				these is on programming software.
l l deve			Using logical reasoning to explain how	
	•	Recognising that some devices are input	simple algorithms work.	To understand that using loops can make the
	,	devices and others		process of writing music simpler and more
		are output devices.	Explaining the purpose of an Algorithm.	effective
	evant			
voca	abulary	Learning that decomposition means	Forming algorithms independently	To know how to adapt their music while
		breaking a problem		performing.
		down into smaller parts.	Using logical thinking to explore more	
	soning to		complex software; predicting, testing and	To know that a Micro:bit is a programmable
	lerstand	Using decomposition to solve unplugged	explaining what it does.	device.
simp	•	challenges.	to comparation to another and a many	To be any that Naiseachit was a block as disc.
	ructions and	Developing the chille associated with	Incorporating loops to make code more	To know that Micro:bit uses a block coding
		Developing the skills associated with	efficient	language similar to Scratch.
Out	come	sequencing in unplugged activities.	Continuing existing code.	To understand and recognise coding structures
Follo	owing	Following a basic set of instructions.	Continuing existing code.	including variables.
	ructions as	Tollowing a basic set of first actions.	Making reasonable suggestions for how	including variables.
		Assembling instructions into a simple	to debug their own and others' code.	To know what techniques to use to create a
	vities and	algorithm.	to debug their own and others code.	program for a specific purpose (including
gam		algoritim.	Using decomposition to solve a problem	decomposition).
Bann	ics.	Programming a floor robot to follow a	by finding out what code was used.	accomposition,.
Lear	rning to give	planned route.	ay mang out mat code was ascar	To know that there are text-based
simp			Using decomposition to understand the	programming languages such as Logo and
11	ructions.	Learning to debug instructions when	purpose of a script of code.	Python.
		things go wrong.		, , ,
Expe	erimenting		Creating algorithms for a specific	To know that nested loops are loops inside of
with	_	Using programming language to explain	purpose.	loops.
		how a floor robot		•
Bee-	e-bot/ Blue-	works	Coding a simple game.	To understand the use of random numbers and
bot	and learning			remix Python code.
how	v to give	Learning to debug an algorithm in an	Incorporating variables to make code	
simp	ple	unplugged scenario.	more efficient.	
com	nmands.			

		Recognising that buttons cause effects, and	Remixing existing code	
	Learning to	that technology	Nemaning Calbring Code	
	debug	follows instructions.		
	instructions,	Tonows Instructions.		
	with the help of	Explain what an algorithm is.		
	an adult, when	11.		
	things go	Using software (and unplugged means) to		
	wrong	create story animations.		
		diffiduotis.		
		Developing word processing skills,		
		including altering text,		
		copying, and pasting and using keyboard		
		shortcuts.		
		Using loop blocks when programming to		
		repeat an		
		instruction more than once.		
		Heiner on algorithms to write a basis		
		Using an algorithm to write a basic		
		computer program.		
		Using logical thinking to explore software,		
		predicting,		
		testing and explaining what it does.		
		incorporating loops within algorithms.		
		Learning that programs execute by		
		following precise		
		instructions.		
		Creating a clear and precise algorithm.		
		Fall accident an alreadale of		
1/		Following an algorithm.	Audino ati au	Camanahan
<u>Key</u> vocabulary		Abstraction	Animation	Computer command
vocabulary		Algorithm Animation	Application Code	Emulator Hex file
		Artificial intelligence	Code Code block	Import
		Artificial fifteingence	Code block	illiport

Bug	Collaboration	Indentation
Code	Conditional statement	Live loop
Correct	Content	MICRO: BIT
Debug	copyright	Nested loop
Decompose	Create CSS	pedometer
Error	Debug	Pitch
Explain	Decompose	Remix
Explore	Design	Systematic
Icon	Direct	Variable
Imitate	Embed	Zip fil
Instructions	Feature	
	Feature	
Key features	Hacker	
Loop Predict	Header	
Repeat	Hex code	
Scratch JR	HTML	
Bee-Bot • Sequence • Tinker • unnecessary	Hyperlink	
• Video	Icon Insert	
Video	Interface	
	Internace Internet browser	
	Loop	
	Online	
	Orientation	
	Permission	
	Plan	
	Position	
	Predict	
	Program	
	Program web	
	Project	
	Remixing code	
	Repetition code	
	Review	
	Scratch	
	Script	
	Sprite	
	Tab	
	Tinker	
	URL	
	OILE .	

			Variable	
			Web page	
			Website	
			www	
<u>Key</u>	To know that	To understand that an algorithm is when	To know that Scratch is a programming	To know that a soundtrack is music for a
<u>indicators</u>	being able to	instructions	language and some of its basic functions.	film/video and that one way of composing
	follow and give	are put in an exact order.		these is on programming software.
	simple		To understand how to use loops to	
	instructions is	To know that input devices get information	improve programming.	To understand that using loops can make
	important in	into a computer		the process of writing music simpler and
	computing.	and that output devices get information	To understand how decomposition is	more effective.
		out of a computer.	used in programming.	
	To understand			To know how to adapt their code while
	that it is	To understand that decomposition means	To understand that you can remix and	performing their music.
	important for	breaking	adapt existing code.	
	instructions to	a problem into manageable chunks and		To know that a Micro:bit is a programmable
	be in the right	that it is important	To understand that a variable is a value	device.
	order.	in computing.	that can change (depending on	
			conditions) and know that you can	To know that Micro:bit uses a block coding
	To understand	To know that we call errors in an algorithm	create them in Scratch.	language similar to Scratch.
	why a set of	'bug' and fixing		
	instructions may	these 'debugging'.	To know what a conditional statement is	To understand and recognise coding
	have gone		in programming.	structures including variables.
	wrong.	To understand the basic functions of a		
	To know that	Bee-Bot.	To understand that variables can help	To know what techniques to use to create a
	you can		you to create a quiz on Scratch.	program for a specific purpose (including
	program a Bee	To know that you can use a camera/tablet		decomposition).
	Bot with some	to make simple	To know that combining computational	
	simple	videos.	thinking skills	To know that there are text-based
	commands.		(sequence, abstraction, decomposition	programming languages such as Logo and
		To know that algorithms move a bee-bot	etc) can help you to solve a problem.	Python.
	To understand	accurately to a		
	that debugging	chosen destination.	To understand that pattern recognition	To know that nested loops are loops inside
	means how to		means identifying	of loops.
	fix some simple	To understand what machine learning is	patterns to help them work out how the	
	programming	and how that	code works.	To understand the use of random numbers
	errors.	enables computers to make predictions.		and remix Python code

	To understand	To know that loops in programming are	To understand that algorithms can be	
	that an	where you	used for a number of purposes e.g.	
	algorithm is a	set a certain instruction (or instructions) to	animation, games design etc.	
	set of clear and	be repeated		
	precise	multiple times.		
	instructions.			
		To know that abstraction is the removing		
		of unnecessary detail to help solve a		
		problem.		
		•		
		To know that coding is writing in a special		
		language so that		
		the computer understands what to do.		
		and computer understands what to do.		
		To understand that the character in		
		ScratchJr is controlled by the programming blocks.		
		DIOCKS.		
		To know that you can write a program to		
		create a musical instrument or tell a joke.		
		Compute	r Systems and Network	
		I = 1	T=	I
<u>Knowledge</u>	To be able to	To know that "copy and paste" is a quick	To understand what a network is and	To know how search engines work.
	understand	way of duplicating	how a school network might be	
		text.	organised.	To understand that anyone can create a
	what a			website and therefore we should take
	computer	To know that I can make text a different	To know that a server is central to a	steps to check the validity of websites.
	keyboard is and	style, size, and colour.	network and responds to requests made.	
	recognise some		To know how the internet uses networks	To know that web crawlers are
	letters and	To know that touch typing is the fastest	to share files.	computer programs that crawl through
	numbers	way to type.		the internet.
			To know that a router connects us to the	
	To know that a	To know the difference between a desktop	internet.	To understand what copyright is.
	mouse can be	and laptop computer.		., 5
	used to click,		To know what a packet is and why it is	To understand the importance of
	drag and create	To know that people control technology.	important for website data transfer.	having a secure password and what
	simple drawings		To know that cyberbullying is bullying	"brute force hacking" is.
			using electronics such as a computer or	State force flucking 15.
			phone.	To know that the first computers were
			priorie.	To know that the hist computers were

	To know that to	To know that a computer and mouse can		created at Bletchley Park to crack the
	use a computer	be used to click, drag, Fill and select and	To understand that emails should contain	Enigma code to help the war effort in
	you need to log	also add backgrounds, text, layers,	appropriate and respectful content.	World War 2.
	in to it and then	shapes and clipart	To know that an attachment is an extra	
	log out at the	·	file added to an email.	To know about some of the historical
	end of your	To know that passwords are		figures that contributed to technological
	session	important for security	To understand that email stands for 'electronic mail.'	advances in computing
	To know that	To know that often computers		To understand what techniques are
	different types	can work together	To know what a tablet is and how it is	required to create a presentation using
	of technology		different from a laptop/desktop	appropriate software
	can be found at		computer.	
	home and in			
	school		To know what some of the different	
			components inside a computer are e.g.	
	To know that		CPU, RAM, hard drive, and how they	
	you can take		work together.	
	simple			
	photographs		To know the roles that inputs and	
	with a camera		outputs play on computers.	
	or an iPad		To understand that software can be used	
			collaboratively online to work as a team.	
	To know that			
	you must hold		To know what type of comments and	
	the camera still		suggestions on a collaborative document	
	to ensure the		can be helpful	
	subject is in the		can be neiprui	
	shot to take the			
	phot			
Skills	Recognising and	Tinker with hardware to find out how it	Recognising what appropriate behaviour	To understand what techniques are
<u>SKIIIS</u>	identifying	works.	is when collaborating with others online.	required to create a presentation using
	familiar	Works	is when conducting with others offine.	appropriate software
	letters and	Learning where keys are located on the	Understanding that software can be used	app. opriace softmare
	numbers on	keyboard.	collaboratively online to work as a team	To know about some of the historical
	a keyboard.	ney source.	dended a team	figures that contributed to technological
	a Reyboara.	Using a basic range of tools within graphic	Using software to work collaboratively	advances in computing.
	Developing	editing	with others	advances in companing.
	basic mouse	software.	With others	To know that the first computers were
	basic mouse	Joitwale.		created at Bletchley Park to crack the
			1	created at Dietcriley Park to Crack the

skills such as	Developing control of the mouse through	Use online software for documents,	Enigma code to help the war effort in World
moving	dragging,	presentations, forms and spreadsheets	War 2.
and clicking.	clicking and resizing of images to create		
	different effects.	Understanding that computer networks	To understand the importance of having a
Using a simple		provide multiple services, such as the	secure password and what "brute force
online	Developing understanding of different	World Wide Web, and	hacking" is
paint tool to	software tools.	opportunities for communication and	
create		collaboration.	To know that web crawlers are computer
digital art.	Recognising devices that are connected to		programs that crawl through the internet.
	the internet.	Learning that not all emails are genuine,	
Learning to log		recognising when an email might be fake	To know what copyright is
in and	Logging in and out and saving work on	and what to do about it	To understand that anyone can create a
log out	their own account.		website and therefore we should take steps
		Learning about cyberbullying.	to check the validity of websites
	Understanding what a computer is and		
	that it's made	Understanding the purpose of emails.	
	up of different components.	- , ,	
		Replying to an email.	
	Recognising that buttons cause effects, and	. , .	
	that technology follows instructions.	Sending an email with an attachment.	
	Learning how we know that technology is	Writing an email including a subject,	
	doing what we	'to' and 'from'	
	want it to do via its output.		
		Learning to log in and out of an email	
	Using greater control when taking photos	account.	
	with cameras,		
	tablets or computers.	Using decomposition to explain the parts	
		of a laptop computer.	
	Learning how computers are used in the		
	wider world.	Learn how data is transferred	
	Widel World	Learn now data is transferred	
	Creating and labelling images • Using word	Recognising links between networks and	
	processing	the internet. Identifying the key	
	software to type and reformat	components within a network,	
	text.	including whether they are wired or	
	icht.	wireless.	
		wil Cicss.	

			The decorate of the second sec	
		eveloping word processing skills,	Understanding how networks work and	
			their purpose.	
	and	nd using keyboard shortcuts		
			Learning about the role of packets	
			Understanding that websites & videos	
			are files that are shared from one	
			computer to another.	
			Understanding the role of the key	
			components of a network.	
			Drawing comparisons across different	
			types of computers.	
			Learning about the purpose of routers.	
			I lo do sato o disco o do at the a different	
			Understanding what the different	
			components of a computer do and how	
.,			they work together	
<u>Key</u>		ccount	Abstraction	Acrostic code
<u>vocabulary</u>		ackspace	Algorithm design	Background noise
		attery	BCC	Brute force hacking
		uttons	CC	Byte
		ipart	Code	Caesar cipher
		•	Code blocks	Chip and pin system
		ppyright	Computational thinking	Cipher
		elete	Computer	Data privacy
		esktop	CPU	Date shift cipher
		evice	Cyberbully	Encrypt
		ectricity	Data	Fake news
		nage	Decompose	Inaccurate information
		•	Desktop	Index
	I	•	Domain	Keyword
	_ ·	•	DSL	Nth letter cipher
		vention	edit	Page rank
		eyboard	e-document	Pigpen cipher
		aptop	email	ROM
	Lo	og off	File	TASK

		Monitor	GPU	Web crawler
		Mouse	Hard disk drive	
		Output	icon	
		Password	insert	
		Paste	Instructions	
		Redo	Internet	
		Resize	link	
		Screen	Log off	
		Space bar	Log on	
		Technology	Network	
		Touch typing	Network map	
		username	Network switch	
		Word processing	Password	
			Pattern recognition	
			Presentation	
			presentation software	
			Problem	
			QR code	
			RAM	
			Reviewing comments	
			ROM	
			Router	
			Sequence	
			Server	
			Share	
			Spam	
			Spreadsheet	
			Submarine	
			The cloud	
			Trackpad	
			Transition	
			Username	
<u>Key</u>	To be able to	To know that "log in and log out" means to	To know what a tablet is and	To know how search engines work.
<u>indicators</u>	understand	begin	how it is different from a	
	what a	and end a connection with a computer.	laptop/desktop computer.	To understand that anyone can create
	computer			a website and therefore we should take
	keyboard is and	To know that a computer and mouse can	To understand what a network is	steps to check the validity of websites.
	recognising	be used to	and how a school network might	
	some letters		be organised.	

and nun	nbers.	click, drag, fill and select and also add		To know that web crawlers are computer
		backgrounds, text, layers, shapes and clip	To know that a server is central to a	programs that crawl through the internet.
To know	that a	art.	network and responds to requests made.	
mouse o	can be		·	To understand what copyright is.
used to	click,	To know that passwords are important for	To know how the internet uses networks	1, 5
drag and	d create	security.	to share files.	To know the difference between ROM
simple		,		and RAM'
drawing	S.	To know that when we create something	To know that a router connects us to the	
		on a computer it can be more easily saved	internet.	To understand the importance of
To know	that to	and shared than a paper version.		having a secure password and what
	mputer	and an	To know what a packet is and why it is	"brute force hacking" is.
you nee	-	To know some of the simple graphic design	important for website	
	ind then	features of a piece	data transfer.	To know that the first computers were
log out a		reactives of a prese	data transferr	created at Bletchley Park to crack the
end of y		To know the difference between a desktop	To know the roles that inputs and	Enigma code to help the war effort in
session.		and laptop computer.	outputs play on computers.	World War 2.
3633.61		and taptop compater.	outputs play on computers.	
To know	that	To know that people control technology.	To understand that email stands	To know about some of the historical
differen		To know that people control techniciosy.	for 'electronic mail.'	figures that contributed to technological
of techn		To know that buttons are a form of input	ror electronic mail.	advances in computing.
	ound at	that give a computer an instruction about	To know that an attachment is an extra	davances in companing.
home ar		what to do (output).	file added to an email.	To understand what techniques are
school.		πιας το αυ (σατρατή.	me daded to an emain	required to create a presentation using
Jenoon.		To know that computers often work	To understand that emails should	appropriate software
To know	w that	together.	contain appropriate and respectful	appropriate software
you can		together.	content.	
simple	take	To know that touch typing is the fastest	Content	
photogr	anhs	way to type.	To know what some of the different	
with a ca	-	way to type.	components inside a computer are e.g.	
or iPad.	arricra	To know that I can make text a different	CPU, RAM, hard drive, and how they	
or ir au.		style, size and colour. To know that "copy	work together.	
To know	w that	and paste" is a quick way of	WOIN together.	
you mus		duplicating text		
the cam		duplicating text	To understand that software can be used	
and ens			collaboratively online to work as a team.	
			Conadoratively offille to work as a team.	
subject			To know what two of comments	
shot to t	lake d		To know what type of comments	
photo.			and suggestions on a collaborative	
			document can be	

			helpful.	
			To know that you can use images,	
			text, transitions and animation in	
			presentation slides.	
			Creating Media	
Knowledge	To know that	To understand that holding the	To know that a website is a collection of	To know that sound clips can be edited
	the mouse can	camera still and considering	pages that are all connected.	and trimmed.
	be used to click,	angles and light are important		
	drag, and	to take good pictures.	To know that websites usually have a	To know that sound clips can be recorded using
	create simple		homepage and subpages as well as	sound recording software.
	drawings	To know that you can edit,	clickable links to new pages, called	S .
]	crop and filter photographs.	hyperlinks.	To know that radio plays are plays where the
	To know that	To know how to search safely		audience can only hear the action so sound
	you can take	for images online.	To know that different types of camera	effects are important.
	photographs		shots can make my photos or videos look	,
	with a	To understand that an	more effective.	To know that editing is an important feature of
	camera or an	animation is made up of a		making and improving a stop
	iPad	sequence of photographs.	To know that I can edit photos and videos	motion animation
			using film editing software.	
	To know that	To know that small changes in		To understand that stop motion animation is an
	you	my frames will create a	To understand that I can add transitions	animation filmed one frame at a time using
	must hold a	smoother looking animation	and text to my video.	models, and with tiny changes between each
	camera		,	photograph.
	still and ensure	To understand what software	To know that websites should be	
	the subject is in	creates simple animations and	informative and interactive	To know that decomposition of an idea is
	the	some of its features e.g., onion		important when creating stop-motion
	shot to take a	skinning.		animations.
	photo			
Skills	Using a simple	Learning how to explore and tinker with	Using logical thinking to explore more	To know that decomposition of an idea
	online paint	hardware to find	complex software,	is important when creating stop-motion
	tool to create	out how it works.	predicting, testing, and explaining what it	animations.
	digital art.		does.	
		Learning where keys are located on the		To understand that stop motion animation is an
	Learning how to	keyboard.	Taking photographs and recording video	animation filmed one frame at a time using
	operate a		to tell a story.	models, and with tiny changes between each
	camera to take		,	photograph.

nhotographs of	Learning how to energies a semara to take	Using software to edit and enhance their	
photographs of meaningful	Learning how to operate a camera to take photos and	Using software to edit and enhance their video adding	To know that editing is an important feature of
_	videos.	_	- ,
creations or	videos.	music, sounds and text on screen with transitions.	making and improving a stop motion animation
moments	Davidaning the skills associated with	transitions.	To know that sound aline can be edited and
	Developing the skills associated with	Lieine cofficient to consider all about its also	To know that sound clips can be edited and
	sequencing in unplugged activities.	Using software to work collaboratively	trimmed
	Haine a basis ways of tools within swampin	with others.	
	Using a basic range of tools within graphic	He coline coftware for decomposite	To know that sound clips can be recorded using
	editing software	Use online software for documents,	sound recording software
	Tables and adition obstances	presentations, forms, and spreadsheets	To loo con the toronic order or order or the
	Taking and editing photographs.	Burinitary of the section of the section of	To know that radio plays are plays where the
		Designing and creating a webpage for a	audience can only hear the action so sound
	Developing control of the mouse through	given purpose.	effects are important.
	dragging,		
	clicking, and resizing of images to create	Building a web page and creating content	
	different effects.	for it.	
	Developing understanding of different		
	software tools.		
	Consider and the standard form		
	Searching and downloading images from		
	the internet safely.		
	When using the internet to search for		
	images, learning what to do if they come		
	across something online that worries them		
	or makes them feel uncomfortable.		
	Using greater control when taking photos		
	with cameras, tablets or computers.		
	Using logical thinking to explore software,		
	predicting, testing and explaining what it		
	does.		
	Using software (and unplugged means) to		
	create story		
	animations.		

<u>Key</u>	Animation	Application	Duplicate
<u>vocabulary</u>	Animator	Desktop	Illusion
	Camera	Digital device	Upload
	Contraption	Edit	Frame
	Crop	Film	Device
	Decompose	Film editing software	
	Delete	Graphics	
	Design	Import	
	Device	Key events	
	Download	Laptop	
	Drag and drop	Plan	
	Editing software	Recording	
	Film review	Sound effects	
	Filming	Time code	
	Image	Video	
	Import	voiceover	
	Import image		
	Photograph		
	Plan		
	Resize		
	Save as		
	Search engine		
	Sequence		
	Sketch		
	Smart device		
	Software		
	Stop motion		
	Storage		
	Storyboard		
	Upload		
	Visual effects		
<u>Key</u>	To understand that holding the camera still	To know that different types of camera	To understand that stop motion animation
<u>indicators</u>	and considering angles and light are	shots can make my photos or videos look	is an animation filmed one frame at a time
	important to take good pictures.	more effective.	using models, and with tiny changes
			between each photograph.
	To know that you can edit, crop and filter	To know that I can edit photos and videos	
	photographs.	using film editing software.	To know that decomposition of an idea is
			important when creating stop-motion
			animations.

To know how to search safely for images online.	To understand that I can add transitions and text to my video.	To know that editing is an important feature of making and improving a stop motion animation.
To understand that an animation is made	To know some of the features of web	
up of a sequence of photographs.	design software.	To know that radio plays are plays where the audience can only hear the action so
To know that small changes in my frames	To know that a website is a collection of	sound effects are important.
will create a smoother looking animation	pages that are all connected.	To know that sound clips can be recorded using
To understand what software creates simple animations and some of its features	To know that websites usually have a homepage and subpages as well as	sound recording software.
e.g. onion skinning.	clickable links to new pages, called hyperlinks.	To know that sound clips can be edited and trimmed.
	To know that websites should be informative and interactive.	