

Aims

The national curriculum for computing aims to ensure that all pupils:

- A Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.
- A Can analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.
- A Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident, and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply, and understand the matters, skills and processes specified in the relevant programme of study. Schools are not required by law to teach the example content in [square brackets].

Key stage 1

Pupils should be taught to:

- ♣Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- ♣ Create and debug simple programs.
- ♣ Use logical reasoning to predict the behaviour of simple programs.
- ♣ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- * Recognise common uses of information technology beyond school.
- * Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.



Key stage 2

Pupils should be taught to:

- ♣ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- . Use sequence, selection, and repetition in programs, work with variables and various forms of input and output.
- ♣ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- ♣ Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.
- * Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- A Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.
- ♣ Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.



Cycle A

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Project Evolve	Mini Mash	Purple Mash	Mini Mash	Purple Mash	Mini Mash
Online Safety – Online	2Design and Make	Pictograms 1.3	2Beat	Lego Builders 1.4	2Connect
Relationships and	Express Arts – Creating		Communication and		Understanding the
Privacy	with Materials		Language – Listening,		World – The Natural
			Attention and		World
			Understanding		
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning
objectives	objectives	objectives	objectives	objectives	objectives
• To learn how the	To understand how	To understand what	• To login to Purple	To understand that	To login to Purple
internet is used to	to login to Purple	a pictogram is.	Mash and find 2Beat.	computers work by	Mash and find
communicate.	Mash.	 To understand what 	 To explore the 	following instructions.	2Connect.
To understand how I	 To understand what 	data is.	different instruments	 To understand that 	 To understand that
might use the internet	a username and	 To gather simple 	on 2Beat.	an algorithm is a set of	we can use 2Connect
in school and at home.	password are.	information and facts	 To listen to the 	instructions that a	to create mind maps.
 To understand to ask 	 To know where to 	using 2Count.	different instruments	computer follows.	 To create a simple
permission to use	find programmes on	• To look at what is the	on 2Beat and talk	 To understand that 	mind map about the
technology and the	Purple Mash and Mini	same and what is	about what they can	computers can go	seven continents.
internet.	Mash.	different about the	hear.	wrong if the	 To give the mind
 To understand to be 	 To find 2Design and 	information and facts.	 To use 2Beat to 	instructions are not	map a title and give the
kind to people online.	Make and follow	 To present data in a 	create simple rhythms.	correct.	title a colour.
• To understand not to	instructions to create a	pictogram using	 To make some of the 	 To understand that 	• To learn what a node
post things online	3D model.	2Connect.	sounds loud and some	we can debug a	is and how to create
without permission.	 To change the colour 	 To add and delete 	of the sounds quiet	computer to fix a	one to add concepts to
To understand what	and design of the 3D	objects in the	and talk about them to	problem.	the mind map.
age restrictions are and	model using the	pictogram.	their peers.	 To use 2Paint to 	• To learn how to print
why we have them.	appropriate tools.			follow instructions and	and save their mind
				understand the	maps.



 To begin to learn key 	To save work in	To learn key	• To make a beat to go	importance of	 To learn and apply
vocabulary relating to	Purple Mash.	vocabulary relating to	with a well-known	following them step by	key vocabulary.
online safety.	 To begin to learn 	pictograms.	story.	step.	
	simple vocabulary		 To learn and use key 	 To learn and use key 	
	relating to ICT.		vocabulary.	vocabulary relating to	
				algorithms.	
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
EYFS – Communication	EYFS – Expressive Arts	EYFS – Mathematics	EYFS – Communication	EYFS – Communication	EYFS – Understanding
and Language	and Design		and Language	and Language	the World
		KS1 - Use technology			
Understanding the	KS1 - Use technology	purposefully to create,	Expressive Arts and	Mathematics	KS1 - Use technology
World	purposefully to create,	organise, store,	Design		purposefully to create,
	organise, store,	manipulate and		KS1 - Understand what	organise, store,
KS1 - Recognise	manipulate and	retrieve digital content.	KS1 - Use technology	algorithms are; how	manipulate and
common uses of	retrieve digital content.		purposefully to create,	they are implemented	retrieve digital content.
information technology			organise, store,	as programs on digital	
beyond school.			manipulate and	devices; and that	
			retrieve digital content.	programs execute by	
Use technology safely				following precise and	
and respectfully,				unambiguous	
keeping personal				instructions.	
information private;					
identify where to go for				Create and debug	
help and support when				simple programs.	
they have concerns					
about content or				Use logical reasoning	
contact on the internet				to predict the	
or other online				behaviour of simple	
technologies.				programs.	



Cycle B

EYFS/Y1					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	Mini Mash
Online Safety 1.1	Grouping and Sorting	Maze Explorers 1.5	Animated Stories 1.6	Coding 1.7	Outdoor Scene
	1.2				
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning
objectives	objectives	objectives	objectives	objectives	objectives
 To login safely and understand why it is important to do so. To understand where to save work so that it is kept private. To understand not to share passwords or personal information online. To find messages from the teacher and understand when it safe to open messages and when it was not. 	 To understand vocabulary relating to the unit. To understand how to find a 'To Do' task and complete it. To describe and sort shapes. To complete and save work to the appropriate place. To log off safely to protect privacy. 	 To login in safely to Purple Mash and find 2Go. To learn how to use the direction arrows in 2Go to move forwards, backwards, left, and right. To learn how to undo their last move. To learn how to move diagonally. To create an algorithm. 	 To understand the difference between animated traditional books and e-books. To explore 2Create a Story and understand the different tools. To learn appropriate vocabulary relating to the program. To add animation to a picture. To add sound effects, a voice recording, and music to the book. 	 To recall what instructions are. To recall what an algorithm is. To create a simple program on 2Code using code blocks. To use event, object, and action code blocks. To begin to understand how code executes when a program is run. To learn how to edit a scene by adding, deleting, and moving objects. To learn how to change the size of objects. 	 To learn how to go to the outdoor scene on Mini Mash and complete different activities. To create a character in the outdoor role play area by taking a picture with the iPad and then writing a speech bubble for the character. To learn how to save work to a folder. To use 2Paint a Picture in the painting area to create a background scene for your character. To use 2Beat in the music area to compose a simple beat to



			• To learn how to change the font style and size.		accompany their created character. • To share their creations with their peers and talk about what they have done using basic ICT vocabulary.
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
EYFS – Communication and Language	EYFS – Communication and Language	EYFS – Communication and Language	EYFS – Communication and Language	EYFS – Communication and Language	EYFS – Communication and Language
Understanding the World	Mathematics	Mathematics	Literacy	Mathematics	Understanding the World
	KS1 - Use technology	KS1 - Understand what	KS1 - Use technology	KS1 - Understand what	
KS1 - Recognise	purposefully to create,	algorithms are; how	purposefully to create,	algorithms are; how	Expressive Arts and
common uses of	organise, store,	they are implemented	organise, store,	they are implemented	Design
information technology	manipulate and	as programs on digital	manipulate and	as programs on digital	
beyond school.	retrieve digital content.	devices; and that programs execute by	retrieve digital content.	devices; and that programs execute by	KS1 - Use technology purposefully to create,
Use technology safely		following precise and	Recognise common	following precise and	organise, store,
and respectfully,		unambiguous	uses of information	unambiguous	manipulate and
keeping personal		instructions.	technology beyond	instructions.	retrieve digital content.
information private;			school.		
identify where to go for		Create and debug		Create and debug	
help and support when		simple programs.		simple programs.	
they have concerns about content or		Use logical reasoning		Use logical reasoning	
contact on the internet		to predict the		to predict the	
or other online		behaviour of simple		behaviour of simple	
technologies.		programs.		programs.	



		Use technology	
		purposefully to create,	
		organise, store,	
		manipulate and	
		retrieve digital content	



Cycle A

Year 2/3							
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash		
Online Safety 2.2	Coding 2.1	Spreadsheets 2.3	Touch Typing 3.4	Effective Searching 2.5	Presenting Ideas 2.8		
Key learning objectives	Key learning objectives	Key learning objectives	Key learning objectives	Key learning objectives	Key learning objectives		
To build on prior	To build on prior	To understand what	To learn what touch	To understand key	To understand how		
learning and understand	knowledge and	a spreadsheet is and	typing is and when it is	vocabulary associated	we can use ICT to		
when and how we use	understand what an	what we can use them	used.	with searching on the	present ideas.		
the internet.	algorithm is.	for.	 To learn what a 	internet.	 To understand how 		
 To learn how to refine 	• To create a	• To use 2Calculate to	keyboard is called and	To deepen	we are going to		
searches using the	computer program	create a spreadsheet.	why.	understanding of	present a story in		
search tool.	using an algorithm.	• To use a spreadsheet	 To understand and 	searching on the	different ways.		
 To learn not to click on 	To create a program	for money	learn what the correct	internet.	 To build on prior 		
anything that we do not	using a given design.	calculations.	posture to adopt is	 To understand and 	knowledge and use		
know, and the risks	 To understand that 	 To learn what the 	when touch typing.	use Kiddle to search	2Connect to create a		
involved in doing this.	an algorithm follows a	image, lock, move cell,	 To learn what each 	safely on the internet.	mind map for their		
 To understand how 	sequence.	speak, and count tools	of the three rows on a	 To understand that 	story.		
things that we post can	 To design an 	do.	keyboard are called.	in school we would	 To use 2Quiz to 		
be shared and leave a	algorithm that follows	 To make a counting 	 To learn what the 	search for information,	create a quiz about		
digital footprint or trail.	a timed sequence.	machine using these	starting position is	images, videos, and	their chosen story.		
 To share work on 	 To understand that 	tools.	when touch typing.	maps to support our	 To create a fact file 		
Purple Mash to	different objects have	 To use the totalling 	 To practise typing 	learning.	on a non-fiction topic		
communicate with	different properties.	tools.	with the left hand and	 To create a leaflet 	that we are learning		
others.	To understand	• To use the 2Calculate	the right hand and	using the search	about.		
 To understand how to 	functions of buttons in	tools to check	understand what keys	features to gather	• To make a		
communicate with	a program.	calculations.	each hand touches.	information on a topic.	presentation to the		
others online and the					class using 2Publish.		
safe way to do this.							



	To understand and debug simple	To use 2 Calculate to collect data and			
	programs.	produce a graph.			
	programs.	produce a grapii.			
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
KS1 - Use technology	KS1 - Understand what	KS1 - Use technology	KS1 - Use technology	KS1 - Use technology	KS1 - Use technology
safely and respectfully,	algorithms are; how	purposefully to create,	purposefully to create,	purposefully to create,	purposefully to create,
keeping personal	they are implemented	organise, store,	organise, store,	organise, store,	organise, store,
information private;	as programs on digital	manipulate and	manipulate and	manipulate and	manipulate and
identify where to go for	devices; and that	retrieve digital	retrieve digital content	retrieve digital content	retrieve digital
help and support when	programs execute by	content.			content.
they have concerns	following precise and		Recognise Common	Use technology safely	
about content or contact	unambiguous	Recognise common	uses of technology	and respectfully,	KS2 - Select, use, and
on the internet or other	instructions.	uses of information	beyond school.	keeping personal	combine a variety of
online technologies.		technology beyond		information private;	software (including
	Create and debug	school.	KS2 - Use sequence,	identify where to go	internet services) on a
Recognise Common uses	simple programs.		selection, and	for help and support	range of digital devices
of technology beyond		KS2 - use sequence,	repetition in programs,	when they have	to design and create a
school.	Use logical reasoning	selection, and	work with variables	concerns about	range of programs,
	to predict the	repetition in programs,	and various forms of	content or contact on	systems and content
KS2 - use technology	behaviour of simple	work with variables	input and output.	the internet or other	that accomplish given
safely, respectfully, and	programs.	and various forms of		online technologies.	goals, including
responsibly; recognise		input and output.			collecting, analysing,
acceptable/unacceptable	KS2 - use sequence,			KS2 - Understand	evaluating, and
behaviour; identify a	selection, and	Select, use, and		computer networks	presenting data and
range of ways to report	repetition in programs,	combine a variety of		including the internet;	information.
concerns about content	work with variables	software (including		how they can provide	
and contact.	and various forms of	internet services) on a		multiple services, such	
	input and output.	range of digital devices		as the world wide web;	
		to design and create a		and the opportunities	
	Use logical reasoning	range of programs,		they offer for	
	to explain how some	systems and content			



simple algorithms	that accomplish given	communication and	
work and to detect and	goals, including	collaboration.	
correct errors in	collecting, analysing,		
algorithms and	evaluating, and	Use search	
programs.	presenting data and	technologies	
	information.	effectively, appreciate	
		how results are	
		selected and ranked,	
		and be discerning in	
		evaluating digital	
		content.	



Cycle B

Year 2/3	Year 2/3							
Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B			
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash			
Online Safety 3.2	Email 3.5	Spreadsheets 3.3	Branching Databases	Questioning 2.4	Presenting 3.9			
			3.6					
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning			
objectives	objectives	objectives	objectives	objectives	objectives			
To know what we use	To consider and	• To build on prior	• To learn what a	To build on prior	To understand what			
passwords for and how	discuss how and why	knowledge and learn	branching database is.	knowledge and	PowerPoint is and			
to create a safe	we use ICT to	how to use more tools	To learn relevant key	deepen understanding	what it is used for.			
password.	communicate.	when creating a	vocabulary.	of data handling tools.	• To learn key tools in			
To understand not to	To understand what	spreadsheet.	To understand what	• To use yes/no	PowerPoint and create			
let anyone know or use	an email is and when	 To use the symbols 	a yes/no questions are	questions to separate	a page in a			
your passwords.	we would write one.	more than, less, than,	and how these are	information.	presentation.			
 To learn methods for 	• To open an email.	and equal to, to	used in branching	• To construct a binary	• To learn key			
keeping passwords safe.	 To respond to an 	compare values.	databases.	tree to identify items.	vocabulary about			
• To learn what a blog is	email.	 To use 2Calculate to 	• To use 2Question to	 To use 2Question to 	PowerPoint.			
and how it can be used	• To learn what an	collect data and create	make a branching	answer questions.	 To add media, 			
to communicate with a	email address book is	a bar chart.	database.	 To use a database to 	animations, and			
wider audience.	and how to store	 To use 2Calculate to 	To gather data using	answer more complex	timings to a			
To consider the truth	contacts.	produce a pictogram	yes/no questions and	search questions.	presentation.			
of the content of a	To learn how to use	to show data in a	create their own	 To use the search 	 To use the skills 			
website.	email safely.	different way.	branching database.	tool to find	learnt to design and			
To learn about the	To add an	 To use the advanced 	• To work with peers	information.	create a presentation			
meaning of age	attachment to an	mode of 2Calculate to	to complete each		about a topic we are			
restrictions symbols on	email and understand	learn about cell	other's branching		learning.			
digital media and	the importance of only	references.	database.		• To learn how to save			
devices.	opening safe	 To print graphs and 			a file in PowerPoint.			
	attachments.	charts to show data						



	• To explore a	collections and			
	simulated email	analysis.			
	scenario and discuss.				
	 To secure key 				
	vocabulary relating to				
	emails.				
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
KS1 - Use technology	KS1 - Use technology	KS1 - Use technology	KS1 - _Use logical	KS1 - Use technology	KS1 - Use technology
safely and respectfully,	purposefully to create,	purposefully to create,	reasoning to predict	purposefully to create,	purposefully to create,
keeping personal	organise, store,	organise, store,	the behaviour of	organise, store,	organise, store,
information private;	manipulate and	manipulate and	simple programs.	manipulate and	manipulate and
identify where to go for	retrieve digital	retrieve digital		retrieve digital	retrieve digital
help and support when	content.	content.	Use technology	content.	content.
they have concerns			purposefully to create,		
about content or contact	Recognise common	Understand what	organise, store,	KS2 - Design, write and	Recognise common
on the internet or other	uses of information	algorithms are; how	manipulate and	debug programs that	uses of information
online technologies.	technology beyond	they are implemented	retrieve digital	accomplish specific	technology beyond
	school.	as programs on digital	content.	goals, including	school.
KS2 - Use technology		devices; and that		controlling or	
safely, respectfully, and	KS2 - Understand	programs execute by	Recognise common	simulating physical	KS2 - Use search
responsibly; recognise	computer networks	following precise and	uses of information	systems; solve	technologies
acceptable/unacceptable	including the internet;	unambiguous	technology beyond	problems by	effectively, appreciate
behaviour; identify a	how they can provide	instructions.	school.	decomposing them	how results are
range of ways to report	multiple services, such			into smaller parts.	selected and ranked,
concerns about content	as the world wide web;	Create and debug	KS2 - Select, use, and		and be discerning in
and contact.	and the opportunities	simple programs.	combine a variety of	Use sequence,	evaluating digital
	they offer for	Use logical reasoning	software (including	selection, and	content.
	communication and	to predict the	internet services) on a	repetition in programs,	
	collaboration.	behaviour of simple	range of digital devices	work with variables	Select, use, and
		programs.	to design and create a	and various forms of	combine a variety of
			range of programs,	input and output.	software (including
			systems and content		internet services) on a



	KS2 - Use sequence,	that accomplish given	range of digital devices
	selection, and	goals, including	to design and create a
	repetition in programs,	collecting, analysing,	range of programs,
	work with variables	evaluating, and	systems and content
	and various forms of	presenting data and	that accomplish given
	input and output.	information.	goals, including
			collecting, analysing,
	Select, use, and		evaluating, and
	combine a variety of		presenting data and
	software (including		information.
	internet services) on a		-
	range of digital devices		
	to design and create a		
	range of programs,		
	systems and content		
	that accomplish given		
	goals, including		
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	Use logical reasonina		
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	•		
	collecting, analysing, evaluating, and presenting data and information. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		



Cycle A

Y4/5/6					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash
Online Safety 4.2	Coding 4.1	Writing for Different	Spreadsheets 4.3	Animation 4.6	Effective Searching 4.7
		Audiences 4.4			
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning
objectives	objectives	objectives	objectives	objectives	objectives
To understand what	 To recap on key 	To learn relevant key	To extend prior	 To look at examples 	To build on prior
online identify theft is.	coding vocabulary.	vocabulary.	knowledge of	of animated films and	knowledge of
To learn how you can	 To begin to 	• To use 2Publish Plus to	spreadsheets by	cartoons and discuss	searching by locating
protect yourself from	understand selection in	explore font styles and	learning how to	what makes it good.	information on a
online identify theft.	computer	sizes and understand	format cells.	 To learn how 	search results page.
To build on prior	programming.	how this can have an	 To use 2Calculate to 	animations are created	• To use Google to find
knowledge and	 To learn that an IF 	impact of the type of	format cells as	by hand and look at	answers to specific
understand that a	statement is a	writing being published.	currency, percentage,	examples of stop	questions.
digital footprint or trail	decision-making	 To explore examples 	decimal to different	motion animation.	To create questions
can aid identify theft.	statement based on	where the font styles	decimal places, and	 To explore how 	for peers to find the
 To understand that 	specified criteria.	and sizes are tailored to	fraction.	animation can be	answers to using a
copying the work of	 To understand how 	the purpose of the text.	 To use the formula 	created the same way	search engine.
others is called	to use co-ordinates in	To learn what a format	wizard to calculate	by using computers.	• To learn how
plagiarism and	computer	is and how we use this	averages.	 To make simple 	companies can pay to
understand what the	programming.	to lay out a type of	 To combine tools to 	animations using both	appear in top internet
consequences of	 To understand the 	writing depending on its	make a times tables	paper and computer	searches but how they
plagiarism are.	'repeat until'	purpose.	spreadsheet activity.	software.	are not always true
 To identify the 	command.	 To learn how to alter 	• To use a	 To use 2Animate to 	and reliable.
positive and negative	 To understand how 	font by using	spreadsheet to model	learn how to create a	• To assess whether an
influences of	an IF/ELSE statement	appropriate tools.	a real-life situation.	simple animation and	information source is
technology on health	works.		• To add a formula in	learn key vocabulary.	true and reliable.
and the environment.			a cell to automatically		



 To understand the 	 To understand what 	 To use 2Stimulate to 	make a calculation in	 To share their 	 To learn to not rely
importance of	a variable is in	produce a newspaper	that cell.	animations on the class	solely on one search
balancing screen and	programming.	report.		display board and by	engine for specific
game time with other	 To use a number 	 To use 2Stimulate to 		blogging.	information, e.g.,
parts of their life.	variable.	write for a community			Wikipedia.
	• To use code to create	campaign.			
	a playable game.				
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
KS2 - Use technology	KS2 - Design, write and	KS2 - Understand	KS2 - Use sequence,	KS2 - Use sequence,	KS2 - Use search
safely and respectfully,	debug programs that	computer networks	selection, and	selection, and	technologies
keeping personal	accomplish specific	including the internet;	repetition in	repetition in programs,	effectively, appreciate
information private;	goals, including	how they can provide	programs, work with	work with variables	how results are
identify where to go for	controlling or	multiple services, such	variables and various	and various forms of	selected and ranked,
help and support when	simulating physical	as the world wide web;	forms of input and	input and output.	and be discerning in
they have concerns	systems; solve	and the opportunities	output.	Πηραί απα σαίραί.	evaluating digital
about content or	problems by	they offer for	σαιραί.	Select, use, and	content.
contact on the internet	decomposing them into	communication and	Use logical reasoning	combine a variety of	content.
or other online	smaller parts.	collaboration.	to explain how some	software (including	Use technology safely
technologies.	sinulier pures.	conaboration.	simple algorithms	internet services) on a	and respectfully,
teennologies.	Use sequence,	Use search technologies	work and to detect	range of digital devices	keeping personal
	selection, and	effectively, appreciate	and correct errors in	to design and create a	information private;
	repetition in programs,	how results are selected	algorithms and	range of programs,	identify where to go for
	work with variables	and ranked, and be	programs.	systems and content	help and support when
	and various forms of	discerning in evaluating	p. e.g. ae.	that accomplish given	they have concerns
	input and output.	digital content.	Select, use, and	goals, including	about content or
		a.g	combine a variety of	collecting, analysing,	contact on the internet
	Use logical reasoning	Select, use, and combine	software (including	evaluating, and	or other online
	to explain how some	a variety of software	internet services) on a	presenting data and	technologies.
	simple algorithms work	(including internet	range of digital	information.	
	and to detect and	services) on a range of	devices to design and		
	correct errors in	digital devices to design	create a range of		
		and create a range of	programs, systems		



algorithms and	programs, systems and	and content that	
programs.	content that accomplish	accomplish given	
	given goals, including	goals, including	
	collecting, analysing,	collecting, analysing,	
	evaluating, and	evaluating, and	
	presenting data and	presenting data and	
	information.	information.	



Cycle B

Y4/5/6					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	PowerPoint
Online Safety 5.2	Coding 5.1	Word Processing 5.8	Spreadsheets 5.3	Text Adventures 6.5	
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning
objectives	objectives	objectives	objectives	objectives	Objectives
To gain a deeper	To begin to simplify	To learn what a	To recall prior	To understand that	To recall prior
understanding of the	code.	word processing tool	knowledge about	a text adventure is a	information about
impact sharing digital	To create a playable	is and what we use it	spreadsheets by	story that uses text	PowerPoint by
content can have.	game using code.	for.	discussing their	instead of graphics.	discussing key
 To review sources of 	To understand what	To learn relevant	purpose and tools.	To use 2Connect to	vocabulary and relevant
support when using	simulation is.	key vocabulary.	• To use formulae in a	plan a story	tools.
online technology.	To program a	To recall prior	spreadsheet to	adventure.	• To create a PowerPoint
 To review how to 	simulation using	information by	convert	• To make a story-	document
maintain secure	2Code.	opening a word	measurements of	based adventure using	understanding how to
passwords.	 To know what 	document and	length and distance.	2Create a Story.	name and save it.
 To understand the 	decomposition and	discussing what the	 To use the count 	• To learn that a	• To create a PowerPoint
advantages and	abstraction are in	different tools are	tool to answer	Sprite is a computer	presentation on a topic
disadvantages of altering	computer science.	used for.	hypothesis about	graphic which may be	unit being covered in
a digital image.	To take a real-life	 To create a word 	common letters in	programmed to move	Summer term 2.
 To understand 	situation, decompose	document and add	use.	on-screen.	 To use the internet
permissions needed to	it and think about the	and edit images to it.	• To use a	To introduce an	safely and securely to
alter a digital image.	level of abstraction.	• To know how to use	spreadsheet to model	alternative model for	research information to
• To be aware of	To understand how	word wrap with	a real-life problem.	a text adventure	be used in the
appropriate and	to use friction in code.	images and text.	 To use formulae to 	which has a less	PowerPoint
inappropriate text,	To begin to	 To change the look 	calculate area and	sequential narrative.	presentation.
photographs, and videos	understand what a	of a text within a	perimeter of shapes.	To use written plans	 To use the design tool
and the impact of	function is and how a	document.	To create formulae	to a map-based	to create slides.
sharing these online.			that use text variables.	adventure in 2Code.	



To understand how to ensure reliability when using different methods of online communication.	function works in code. • To understand what the different variable types are and how they are used differently. • To understand how to create a string. • To understand what concatenation is and how it works.	 To add features to a document to enhance its look and usability. To use tables within the document to present information. To introduce templates. To consider page layout by using headings and columns. 	To use a spreadsheet for a real-life purpose in school such as a fundraising event.	To fix a code if necessary to ensure that the code will run the way it is supposed to.	 To choose layouts on each slide relevant to the information being presented. To be aware of plagiarism when using information found on the internet. To include images, vide clips, and voice recordings in the presentation. To use the PowerPoint to present information
					to the class.
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
KS2 - Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	KS2 - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs, work with	KS2 - Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.	KS2 - Use sequence, selection, and repetition in programs, work with variables and various forms of input and output. Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of	KS2 - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs, work with	ks2 - Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and



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variables and various		programs, systems	variables and various	content that accomplish
forms of input and		and content that	forms of input and	given goals, including
output.		accomplish given	output.	collecting, analysing,
		goals, including	Use logical reasoning	evaluating, and
Use logical reasoning		collecting, analysing,	to explain how some	presenting data and
to explain how some		evaluating, and	simple algorithms	information.
simple algorithms		presenting data and	work and to detect	
work and to detect		information.	and correct errors in	Use technology safely,
and correct errors in			algorithms and	respectfully, and
algorithms and			programs.	responsibly; recognise
programs				acceptable/unacceptable
			Select, use, and	behaviour; identify a
			combine a variety of	range of ways to report
			software (including	concerns about content
			internet services) on a	and contact.
			range of digital	
			devices to design and	
			create a range of	
			programs, systems	
			and content that	
			accomplish given	
			goals, including	
			collecting, analysing,	
			evaluating, and	
			presenting data and	
			information.	



Cycle C

Y4/5/6					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash	Purple Mash
Online Safety 6.2	Coding 6.1	Blogging 6.4	Spreadsheets 6.9	Quizzing 6.7	Networks 6.6
Key learning	Key learning	Key learning	Key learning	Key learning	Key learning
Objectives	objectives	objectives	objectives	objectives	objectives
To recall prior	To recall prior	 To explore a range of 	To recall prior	 To learn key 	To learn who
knowledge and key	knowledge about	blogs and identify the	knowledge and	vocabulary relating to	invented the internet
vocabulary about online	coding and key	purpose of writing a	vocabulary about	online quizzes.	and what year it was
safety through	vocabulary through	blog.	spreadsheets.	 To understand what 	invented.
discussion.	discussion.	To identify the	 To use Google 	online quizzes can be	 To learn what the
 To identify benefits 	 To design a playable 	features of a successful	Sheets to create a	used for and how they	internet consists of.
and risks of mobile	game with a timer and	blog.	spreadsheet.	can reach target	 To find out what a
devices broadcasting the	score.	 To plan a theme and 	 To navigate Google 	audiences.	LAN and WAN are.
location of the	 To understand how 	content for a blog.	Sheets and enter data	 To create a picture- 	 To learn what a
user/device.	the launch button	 To understand how to 	in a cell.	based quiz for a	router is and how the
• To identify secure sites	works.	write a blog and a blog	 To introduce some 	specific target	internet is accessed at
by looking for privacy	 To use functions an 	post.	basic data formulae	audience.	school.
shields of approval.	understand why they	 To consider the effect 	for percentages,	 To build on prior 	 To learn what a
To identify the benefits	are useful.	upon the audience of	averages, and max	knowledge using	Hub/Switch is and
and risks of giving	 To understand how 	changing the visual	and min numbers.	2Quiz to create	what it is used for.
personal information.	functions are created	properties of a blog.	To demonstrate how	different style quiz	 To research
To review the meaning	and called.	 To understand how to 	the use of	questions.	information about the
of digital footprint.	 To use flowcharts to 	contribute to an existing	spreadsheets can save	 To explore the 	internet and how it
• To have a clear idea of	create and debug	blog.	time and effort when	grammar quizzes.	has evolved since it
appropriate online	code.	 To understand why 	performing	 To make a quiz that 	was first invented.
behaviour.	 To create simulation 	and how blog posts are	calculations.	requires the player to	 To hold a discussion
	of a room in which	approved by the		search a database.	about what the future
		teacher.			



To understand how	devices can be	To understand the	• To use a	To make a quiz to	might hold for the
information online can	controlled.	importance of	spreadsheet to model	test on younger pupils	internet and ICT.
persist.	 To understand how 	commenting on blogs.	a situation.	within the school.	
	user input can be used		To demonstrate how a		
	in a program.		spreadsheet can		
			complex data clear by		
			manipulating the way		
			it is presented.		
			To create a variety		
			of graphs in sheets.		
			• To apply		
			spreadsheet skills to		
			solving problems.		
Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives	Curriculum objectives
KS2 - Use technology	KS2 - Design, write	KS2 - Select, use, and	KS2 - Use sequence,	KS2 - Design, write	KS2 - Understand
safely, respectfully, and	and debug programs	combine a variety of	selection, and	and debug programs	computer networks
responsibly; recognise	that accomplish	software (including	repetition in	that accomplish	including the internet;
acceptable/unacceptable	specific goals,	internet services) on a	programs, work with	specific goals,	how they can provide
behaviour; identify a	including controlling	range of digital devices	variables and various	including controlling	multiple services, such
range of ways to report	or simulating physical	to design and create a	forms of input and	or simulating physical	as the world wide
concerns about content	systems; solve	range of programs,	output.	systems; solve	web; and the
and contact.	problems by	systems and content		problems by	opportunities they
	decomposing them	that accomplish given	Select, use, and	decomposing them	offer for
	into smaller parts.	goals, including	combine a variety of	into smaller parts.	communication and
		collecting, analysing,	software (including		collaboration.
	Use sequence,	evaluating, and	internet services) on a	Use sequence,	
	selection, and	presenting data and	range of digital	selection, and	
	repetition in	information.	devices to design and	repetition in	
	programs, work with		create a range of	programs, work with	
	variables and various	Use technology safely,	programs, systems	variables and various	
	forms of input and	respectfully, and	and content that	forms of input and	
	output.	responsibly; recognise	accomplish given	output.	



		acceptable/unacceptable	goals, including	Use logical reasoning	
Use	e logical reasoning	behaviour; identify a	collecting, analysing,	to explain how some	
to	explain how some	range of ways to report	evaluating, and	simple algorithms	
sii	imple algorithms	concerns about content	presenting data and	work and to detect	
wa	ork and to detect	and contact.	information.	and correct errors in	
and	d correct errors in			algorithms and	
	algorithms and			programs.	
	programs.				
				Understand computer	
				networks including the	
				internet; how they can	
				provide multiple	
				services, such as the	
				world wide web; and	
				the opportunities they	
				offer for	
				communication and	
				collaboration.	