

Computing



*Kapow
Primary™*

National curriculum
coverage

Introduction

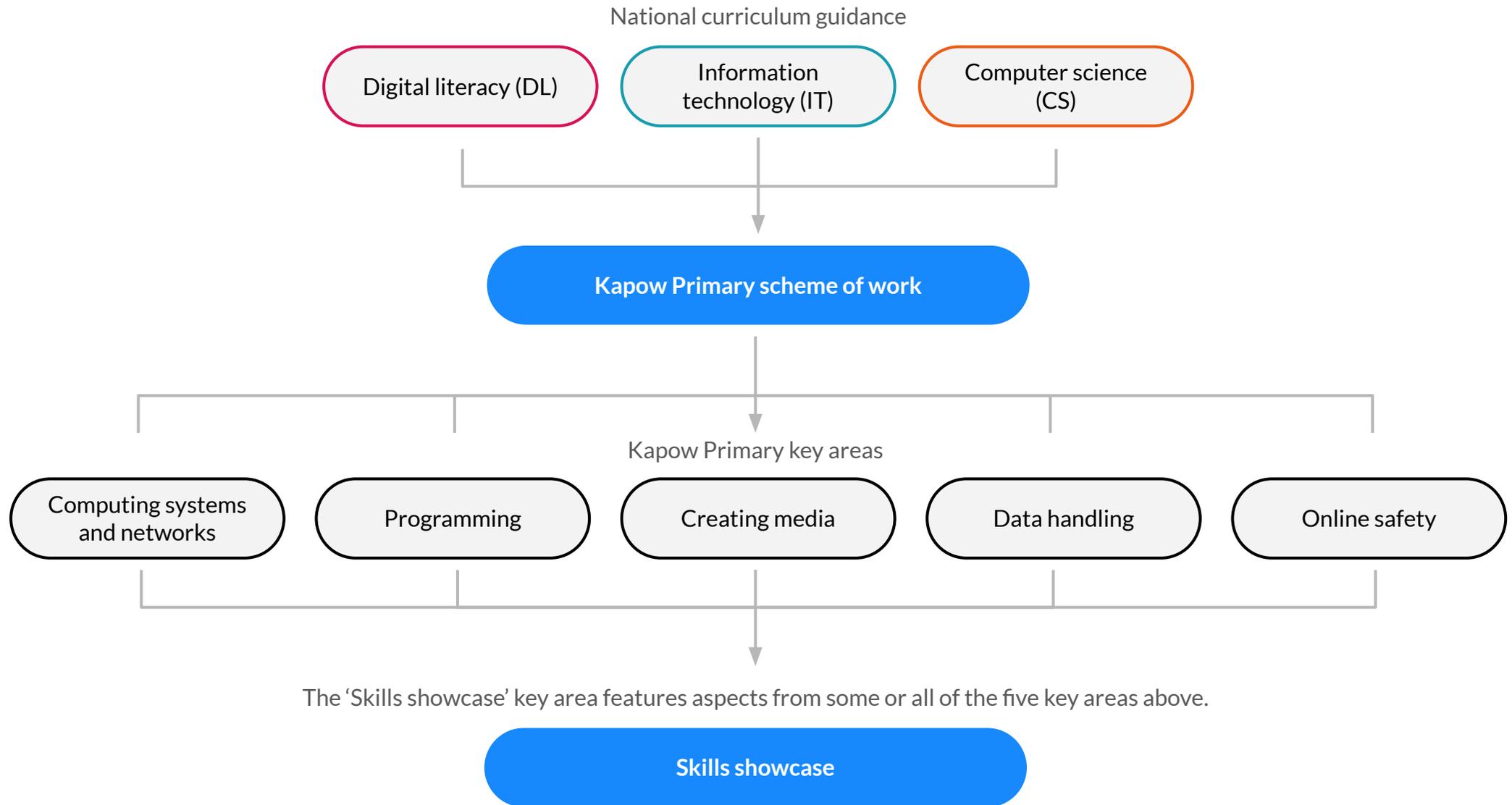
Kapow Primary offers full coverage of the KS1 and KS2 Computing curriculum. This document details how the Kapow units support pupils to achieve the end of key stage statements for Year 2 and Year 6.

For EYFS, the document shows the Early Learning Goals and Development Matters statements that each unit covers.

The final pages of the document show cross-curricular links between our Computing scheme and other National curriculum subjects.

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How is the Computing scheme of work organised?



Early years outcomes in Kapow Primary units

<p>Early Years Foundation Stage</p> <p>Kapow Primary units</p>	<p>Early years outcomes: Prime Areas Development Matters 2021 statements</p> <p>Early Learning Goals</p>	<p>Early years outcomes: Specific Areas Development Matters 2021 statements</p> <p>Early Learning Goals</p>	<p>Characteristics of effective learning</p>
<p>Computing systems and networks 1: Using a computer</p>	<p>Physical Development</p> <ul style="list-style-type: none"> -Develop their small motor skills so that they can use a range of tools competently, safely and confidently. 	<p>Literacy</p> <ul style="list-style-type: none"> -Spell words by identifying the sounds and then writing the sounds with letter/s. -Re-read what they have written to check that it makes sense. <p>Mathematics</p> <ul style="list-style-type: none"> -Link the number symbol (numeral) with its cardinal number value. 	<ul style="list-style-type: none"> ✓ Playing and exploring. ✓ Active learning.
<p>Programming 1: All about instructions</p>	<p>Communication and Language</p> <ul style="list-style-type: none"> -Understand how to listen carefully and why listening is important. -Describe events in some detail. -Use talk to help work our problems and organise thinking and activities, and to explain how things work and why they might happen. <p>Personal, Social and Emotional Development</p> <ul style="list-style-type: none"> -ELG: Self-Regulation> Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. -ELG: Managing Self> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. -ELG: Building Relationships> Work and play cooperatively and take turns with others. <p>Physical Development</p> <ul style="list-style-type: none"> -Know and talk about the different factors that support their overall health and wellbeing. -Further develop the skills they need to manage the school day successfully. 		<ul style="list-style-type: none"> ✓ Active learning. ✓ Creating and thinking critically.

Early years outcomes in Kapow Primary units

Early Years Foundation Stage	Early years outcomes: Prime Areas Development Matters 2021 statements Early Learning Goals	Early years outcomes: Specific Areas Development Matters 2021 statements Early Learning Goals	Characteristics of effective learning
Kapow Primary units			
Computing systems and networks 2: Exploring hardware	<p>Communication and Language</p> <ul style="list-style-type: none"> -Learn new vocabulary. -Use new vocabulary throughout the day. -Ask questions to find out more and to check they understand what has been said to them. -Articulate their thoughts and ideas in well-formed sentences. -Use talk to help work out problems and organise thinking and activities and to explain how things work and why they might happen. <p>Personal, Social and Emotional Development</p> <ul style="list-style-type: none"> -See themselves as a valuable individual. <p>Physical Development</p> <ul style="list-style-type: none"> -Develop their small motor skills so that they can use a range of tools competently, safely and confidently. -Confidently and safely use a range of large and small apparatus indoors and outside, alone and in a group. 	<p>Literacy</p> <ul style="list-style-type: none"> -Spell words by identifying the sounds and then writing the sounds with letter/s. -Write short sentences with known letter-sound correspondences using a capital and full stop. <p>Understanding the World</p> <ul style="list-style-type: none"> -Describe what they see, hear and feel whilst outside. 	<ul style="list-style-type: none"> ✓ Playing and exploring. ✓ Active learning.
Programming 2: Programming Bee-Bots	<p>Personal, Social and Emotional Development</p> <ul style="list-style-type: none"> ELG: Managing Self> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. 	<p>Mathematics</p> <ul style="list-style-type: none"> -Count objects, actions and sounds. -Link the number symbol (numeral) with its cardinal number value. -Count beyond 10. 	<ul style="list-style-type: none"> ✓ Playing and exploring. ✓ Active learning. ✓ Creating and thinking critically.

Early years outcomes in Kapow Primary units

Early Years Foundation Stage	Early years outcomes: Prime Areas Development Matters 2021 statements Early Learning Goals	Early years outcomes: Specific Areas Development Matters 2021 statements Early Learning Goals	Characteristics of effective learning
Kapow Primary units			
Data handling: Introduction to data	<p>Communication and Language</p> <ul style="list-style-type: none"> -Articulate their thoughts and ideas in well-formed sentences. -Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <p>-ELG: Listening, Attention and Understanding> Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.</p> <p>-ELG: Listening, Attention and Understanding> Make comments about what they have heard and ask questions to clarify their understanding.</p> <p>-ELG: Speaking> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</p>	<p>Mathematics</p> <p>-ELG: Numerical Patterns> Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</p> <ul style="list-style-type: none"> -Count objects, actions and sounds. -Subitise. -Count beyond 10. -Compare numbers. -Understand the 'one more than/ one less than' relationship between consecutive numbers. -Continue, copy and create repeating patterns. -Compare length, weight and capacity. 	<ul style="list-style-type: none"> ✓ Playing and exploring. ✓ Active learning. ✓ Creating and thinking critically.

National curriculum by Kapow Primary themes and units

Key stage 1: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Key stage 1: Year 1						
		Programming 1: <u>Option 1: *New*</u> <u>Commands</u> <u>unplugged</u> <u>Option 2:</u> <u>Algorithms</u> <u>unplugged</u>	Programming 2: <u>Option 1: *New*</u> <u>Bee- Bots</u> <u>Option 2: *New*</u> <u>Digital Bee-Bots</u> <u>Option 3:</u> <u>Bee-Bot</u> <u>Option 4: Virtual</u> <u>Bee-Bot</u>	Creating media: <u>Digital</u> <u>imagery</u>	Data handling: <u>Introduction to</u> <u>data</u>	Skills showcase: <u>Rocket to the</u> <u>moon</u>	Computing systems and networks: <u>Improving</u> <u>mouse skills</u>	Online safety: <u>Year 1</u>
Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.	CS	✓	✓					
Create and debug simple programs.	CS	✓	✓					
Use logical reasoning to predict the behaviour of simple programs.	CS	✓	✓	✓				
Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	DL			✓	✓	✓	✓	
Recognise common uses of information technology beyond school.	IT			✓	✓		✓	✓
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.	DL			✓			✓	✓

National curriculum by Kapow Primary themes and units

Key stage 1: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Key stage 1: Year 2						
		Computing systems and networks 1: What is a computer?	Introduction to block coding Programming 2: Option 1: MakeCode Option 2: ScratchJr	Programming 1: Algorithms and debugging	Data handling: International Space Station	Online Safety: Year 2	Computing systems and networks 2: Word processing	Creating media: Stop motion Option 1: Using tablets Option 2: Using desktops/laptops
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	CS	✓	✓	✓	✓			
Create and debug simple programs.	CS		✓	✓				
Use logical reasoning to predict the behaviour of simple programs.	CS		✓	✓				
Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	DL		✓		✓	✓	✓	✓
Recognise common uses of information technology beyond school.	IT	✓				✓		✓
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.	DL					✓	✓	

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary Computing strands	Kapow Primary topics Lower key stage 2: Year 3						
		Computing systems and networks 3: Journey inside a computer	Programming: Scratch Option 1: *New* Scratch Option 2: Scratch	Computing systems and networks 1: Networks	Online safety: Year 3	Creating media: Video trailers	Computing systems and networks 2: Emailing G / M	Data handling: Comparison cards databases
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	CS	✓	✓					
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	CS		✓					
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	CS	✓	✓					
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.	DL IT	✓		✓	✓	✓		

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Lower key stage 2: Year 3						
		Computing systems and networks 3; Journey inside a computer	Programming: Scratch Option 1: *New* Scratch Option 2: Scratch	Computing systems and networks 1: Networks	Online safety: Year 3	Creating media: Video trailers	Computing systems and networks 2: Emailing G/M	Data handling: Comparison cards databases
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	DL IT		✓	✓	✓	✓		
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.	CS IT		✓	✓		✓	✓	✓
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	DL				✓		✓	

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Lower key stage 2: Year 4						
		Skills showcase: HTML	Programming 2: Option 1 *New* Computational thinking Option 2: Computational thinking	Programming 1: Option 1: *New* Further coding with Scratch Option 2: Further coding with Scratch	Data handling: Investigating weather	Computing systems and networks: Collaborative learning	Creating media: Website design G / M	Online safety: Year 4
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	CS	✓	✓	✓				
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	CS	✓	✓	✓	✓			
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	CS	✓	✓	✓				
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.	DL IT					✓		

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Lower key stage 2: Year 4						
		Skills showcase: HTML	Programming 2: Option 1 *New* Computational thinking Option 2: Computational thinking	Programming 1: Option 1: *New* Further coding with Scratch Option 2: Further coding with Scratch	Data handling: Investigating weather	Computing systems and networks: Collaborative learning	Creating media: Website design G / M	Online safety: Year 4
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	DL IT						✓	✓
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.	CS IT	✓	✓	✓	✓	✓	✓	
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	DL	✓			✓		✓	✓

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Upper key stage 2: Year 5							
		Programming 2: BBC Micro:bit Option 1	Programming 2: BBC Micro:bit Option 2	Programming 1: Music Option 1 Option 2	Creating media: Stop motion animation - Stop Motion Studio	Computing systems and networks: Search engines	Data handling: Mars Rover 1	Online safety 5	Skills showcase: Mars Rover 2
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	CS	✓	✓	✓	✓				
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	CS	✓	✓	✓	✓				
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	CS	✓	✓	✓					
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.	DL IT		✓			✓	✓		

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Upper key stage 2: Year 5							
		Programming 2: BBC Micro:bit Option 1	Programming 2: BBC Micro:bit Option 2	Programming 1: Music Option 1 Option 2	Creating media: Stop motion animation - Stop Motion Studio	Computing systems and networks: Search engines	Data handling: Mars Rover 1	Online safety 5	Skills showcase: Mars Rover 2
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	<div style="background-color: #d62728; color: white; padding: 5px; border-radius: 5px; display: inline-block;">DL</div> <div style="background-color: #17becf; color: white; padding: 5px; border-radius: 5px; display: inline-block;">IT</div>					✓		✓	
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.	<div style="background-color: #ff7f0e; color: white; padding: 5px; border-radius: 5px; display: inline-block;">CS</div> <div style="background-color: #17becf; color: white; padding: 5px; border-radius: 5px; display: inline-block;">IT</div>		✓	✓			✓	✓	✓
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	<div style="background-color: #d62728; color: white; padding: 5px; border-radius: 5px; display: inline-block;">DL</div>					✓		✓	

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Computing systems and networks: Bletchley Park and the history of computers	Computing systems and networks: Exploring AI	Kapow Primary topics Upper key stage 2: Year 6				
				Data handling: Big Data 1	Programming: Intro to Python	Data handling 1: Big data 2	Skills showcase: Inventing a product	Online safety: Year 6
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	CS	✓			✓		✓	
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	CS	✓			✓		✓	
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	CS	✓			✓		✓	
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.	DL IT		✓	✓		✓	✓	✓

National curriculum by Kapow Primary themes and units

Key stage 2: National curriculum Computing subject content	Kapow Primary's Computing strands	Kapow Primary topics Upper key stage 2: Year 6						
		Computing systems and networks: Bletchley Park and the history of computers	Computing systems and networks: Exploring AI	Data handling: Big Data 1	Programming: Intro to Python	Data handling 1: Big data 2	Skills showcase: Inventing a product	Online safety: Year 6
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	DL IT	✓					✓	✓
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.	CS IT	✓	✓	✓	✓	✓	✓	
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	DL	✓		✓			✓	✓

Cross-curricular links: Year 1

National curriculum subjects	Kapow Primary topics Key stage 1: Year 1								
	Computing systems and networks: Improving mouse skills	Programming 1: Option 1: *New* Commands unplugged	Programming 1: Option 2: Algorithms unplugged	Skills showcase: Rocket to the moon	Programming 2: Option 1 *New* Bee-Bots Option 2: *New* Digital Bee-Bots	Programming 2: Bee-Bot	Creating media: Digital imagery	Data handling: Introduction to data	Online safety: Year 1
English	Reading: discussing key scenes from a story.	Spoken Language: Listening and responding to commands and instructions. Participating in collaborative discussions. Giving well structured descriptions	Writing: writing algorithms (instructions), revising algorithms to make more precise. Spoken language: following instructions given.	Reading: discussing the sequence of events.	Spoken Language: giving and following instructions, explaining ideas and joining in with group discussions.	Spoken language: explaining how to use a Bee-bot, giving and following verbal instructions accurately. Reading: retelling a story with a floor robot.	Reading: enjoying and discussing picture books, predicting what might happen next.		Writing: writing an online safety guide. Spoken language: role-playing online situations.
Maths	Rotating shapes and images, naming and drawing shapes.		Drawing 2D shapes.	Measuring in cm, sorting data into a table.	Describing position and movement, using the language of rotation and using quarter turns.	Describing the direction of a Bee-Bot.		Representing data, answering questions about data, creating a pictogram.	
Science				Considering materials for a design.				Classifying animals using branching databases.	

Cross-curricular links: Year 1 continued.

National curriculum subjects	Kapow Primary topics Key stage 1: Year 1								
	Computing systems and networks: Improving mouse skills	Programming 1: Option 1: *New* Commands unplugged	Programming 1: Option 2: Algorithms unplugged	Skills showcase: Rocket to the moon	Programming 2: Option 1 *New* Bee-Bots Option 2: *New* Digital Bee-Bots	Programming 2: Bee-Bot	Creating media: Digital imagery	Data handling: Introduction to data	Online safety: Year 1
Art and design	Creating digital artwork, considering famous artwork, creating a self-portrait.	Using drawing, to develop and share their ideas, experiences and imagination.	Creating a picture from shapes, describing position and movement.				Taking and editing photographs, creating a collage.		Designing an animal mask, designing an online safety poster.
D&T				Designing a rocket, considering materials.				Designing an invention to gather data.	
Geography			Using compass directions and directional language when using maps.		Using locational and directional language when programming Bee-Bot.	Using locational and directional language when programming Bee-Bot.			
History				Learning about Apollo 11.					
RSE/PSHE	Considering why we need passwords.						Practising safe searching and what to do if they find something inappropriate.		Considering how we treat each other online and how online use affects emotions.

Cross-curricular links: Year 2

National curriculum subjects	Kapow Primary topics Key stage 1 - Year 2							
	Computing systems and networks 1: What is a computer?	Programming 1: Algorithms and debugging	Computing systems and networks 2: Word processing	Introduction to block coding Programming 2: Option 1: MakeCode	Introduction to block coding Programming 2: Option 2: ScratchJr	Creating media: Stop motion Option 1/2	Data handling: International Space Station	Online safety: Year 2
English	Spoken language: building vocabulary around computers, role-playing examples of computers in the real world.	Spoken language: discussing with a partner how a game works, role-playing a game, giving and following verbal instructions. Writing: writing instructions and editing to improve.	Writing: finding the different letters quickly on a keyboard, typing sentences with a capital letter and full stop, creating a newspaper article. Reading: recalling the main events of a story, appreciating poetry.	Spoken language: discussing and predicting how software works.	Spoken language: discussing and predicting how software works. Reading: retelling the Three Little Pigs in an animation.	Spoken language: working as a group to plan and create an animation.		
Maths		Describing position and movement.			Describing position and movement.		Reading temperatures on a thermometer, interpreting and comparing data.	
Science	Identifying and classifying technology.						Knowing the basic needs of plants and animals and the importance of exercise.	

Cross-curricular links: Year 2 continued.

National curriculum subjects	Kapow Primary topics Key stage 1 - Year 2							
	Computing systems and networks 1: What is a computer?	Programming 1: Algorithms and debugging	Computing systems and networks 2: Word processing	Introduction to block coding Programming 2: Option 1: MakeCode	Introduction to block coding Programming 2: Option 2: ScratchJr	Creating media: Stop motion Option 1/2	Data handling: International Space Station	Online safety: Year 2
Art and design						Creating a flip-book animation.		
D&T	Designing a robot and invention.							
Geography		Looking at maps of the UK and identifying features.						
Music					Designing a musical instrument.			
RSE/PSHE			Knowing what is safe to share online.					Knowing you need to give/receive permission for online sharing.

Cross-curricular links: Year 3

National curriculum subjects	Kapow Primary topics Key stage 2: Year 3						
	Computing systems and networks 1: Networks	Programming: Scratch Option 1/ Option 2	Computing systems and networks 2: Emailing G / M	Computing systems and networks 3: Journey inside a computer	Creating media: Video trailers	Data handling: Comparison cards databases	Online safety: Year 3
English	Spoken language: Building vocabulary around computer networks, role-playing a file's journey and how a website works.	Spoken language: discussing how software works when tinkering. Writing: practising storytelling by completing a story animation.	Writing: proofreading emails.		Reading: appreciating books by creating a book trailer. Writing: planning text for book trailers.	Spoken language: building vocabulary around data.	Reading: considering the language used in online adverts.
Maths						Comparing numbers, interpreting and representing data in charts and graphs.	
D & T				Developing an understanding of the workings of technology.			
Geography							
History							
Music		Using loops to create music.					
RSE/PSHE		Considering copyright.	Learning how to be responsible digital citizens; addressing cyberbullying; recognising fake emails.				Knowing the internet can affect mood; knowing the rules of social media.

Cross-curricular links: Year 4

National curriculum subjects	Kapow Primary topics Key stage 2: Year 4						
	Computing systems and networks: Collaborative learning	Programming 1: Further coding with Scratch Option 1/Option 2	Creating media: Website design G/M	Skills showcase: HTML	Programming 2: Computational thinking Option 1/Option 2	Data handling: Investigating weather	Online safety
English	Writing: suggesting improvements to others' work through collaborative working tools.	Spoken language: discussing while tinkering with code.	Reading: reviewing books. Writing: using organisational devices (headings etc.) on web page, adding information text, evaluating writing.	Writing: planning and writing a news story.	Spoken language: working with a partner to solve problems.	Spoken language: giving a weather forecast. Writing: preparing a script for a weather forecast.	
Maths	Interpreting and presenting data.	Describing position and direction using coordinates; recalling multiplication and division facts.			Solving maths problems; drawing shapes; considering angles.	Knowing different units of measurement.	
Science						Learning about the water cycle and changes in state; observing and measuring weather.	

Cross-curricular links: Year 4 continued.

National curriculum subjects	Kapow Primary topics Key stage 2: Year 4						
	Computing systems and networks: Collaborative learning	Programming 1: Further coding with Scratch Option 1/Option 2	Creating media: Website design G / M	Skills showcase: HTML	Programming 2: Computational thinking Option 1/Option 2	Data handling: Investigating weather	Online safety
Art and design			Designing a web page.				
Geography						Understanding climate and weather; designing weather stations to measure weather; considering extreme weather and how it affects people.	
PE					Breaking down a dance to learn it and practise decomposition.		
RSE/PSHE	Recognising respectful ways to interact online.			Developing awareness of hacking and copyright.			Considering healthy levels of screen time.

Cross-curricular links: Year 5

National curriculum subjects	Kapow Primary topics Key stage 2: Year 5						
	Computing systems and networks: Search engines	Programming 1: Music Option 1/ Option 2	Data handling: Mars Rover 1	Creating media: Stop motion animation	Programming 2: BBC Micro:bit Option 1/ Option 2	Skills showcase: Mars Rover 2	Online safety
English		Reading: identifying themes in books to create a soundtrack.				Spoken language: discussing and hypothesising while tinkering.	
Maths			Converting units of measure to solve problems; carrying out binary calculations.				
Science			Learning about Mars and space exploration; learning about how sensors work.			Learning about Mars and space exploration.	

Cross-curricular links: Year 5 continued.

National curriculum subjects	Kapow Primary topics Key stage 2: Year 5						
	Computing systems and networks: Search engines	Programming 1: Music Option 1/ Option 2	Data handling: Mars Rover 1	Creating media: Stop motion animation	Programming 2: BBC Micro:bit Option 1/ Option 2	Skills showcase: Mars Rover 2	Online safety
Art & design	Designing a poster.			Creating an animation toy; designing a character.		Creating a pixelated image.	Designing a poster about app permissions.
D&T						Using CAD design software.	
History	Researching about explorers from the past.						
Music		Composing and performing music using programming software, including loops; considering the inter-related dimensions of music; evaluating compositions.					
RSE/PSHE	Knowing how information is shared online; considering sources of information critically.					Using an online community responsibly.	Learning about cyber-bullying and its impact; understanding the effect of technology on health.

Cross-curricular links: Year 6

National curriculum subjects	Kapow Primary topics Key stage 2: Year 6						
	Computing systems and networks: Bletchley Park and the history of computers	Computing systems and networks: Exploring AI	Data handling: Big Data 1	Programming: Intro to Python	Data handling: Big data 2	Skills showcase: Inventing a product	Online safety
English	<p>Writing: Creating an information text site about Bletchley Park, creating biography presentations about historical figures.</p> <p>Preparing a script for an audio advert.</p>					<p>Spoken language: preparing a pitch to persuade the headteacher how Big Data could improve school life.</p>	<p>Writing: using persuasive language to promote a product.</p>
Maths	Solving problems involving codes.		Representing data in different graphs; interpreting data in tables to solve problems.	Using knowledge of angles in 2D shapes to 'draw' shapes in Logo; describing coordinate positions.	Comparing data displayed in tables.		
Science			Learning about infrared and radio waves.				

Cross-curricular links: Year 6 continued.

National curriculum subjects	Kapow Primary topics Key stage 2: Year 6						
	Computing systems and networks: Bletchley Park and the history of computers	Computing systems and networks: Exploring AI	Data handling: Big Data 1	Programming: Intro to Python	Data handling: Big data 2	Skills showcase: Inventing a product	Online safety
Art and design				Creating Islamic art using loops, looking at the abstract art of Piet Mondrian.			
D&T	Design functional and appealing products.				Devising ways to make the school a 'smart' school.	Designing and programming a product, use CAD to design a product.	
Geography					Considering data analytics when town planning.		
History	Learning about how codes and codebreaking were useful during World War II; knowing about historical figures involved in the development of computers. Learning about the first computers.						
RSE/PSHE	Learning the importance of a strong password to deter brute force hacking.		Learning about the importance of keeping personal information (pin number) safe.		Being aware that data is tracked.		Reflecting on how online activity makes them feel; considering the risks of sharing online and leaving a digital footprint.

Version history

This page shows recent updates to this document.

Date	Update
04.09.23	Updated links to reflect refreshed units published on website.
30.04.24	Updated links to reflect refreshed units published on website.
20.08.24	Updated to reflect refreshed units published on the website
25.09.24	Updated to include new Year 2 MakeCode unit on p8 and p18
04.10.24	Updated to add in the new Exploring AI unit for Year 6.
21.11.24	Updated to add to the title of the Year 2 Programming 2 unit: Introduction to block coding.
28.03.25	Updated to add links to newly published units.
04.07.25	Updated to add links to newly published units.
07.08.25	Updated to add links to newly published units.
05.09.25	Updated to add links to newly published units.
23.10.25	Updated to add links to newly published units.