



Nourishing the fitrah of each unique child

Computing Policy

“It is He, Who has created you with hearing, sight and hearts”
(Saheeh Bukhari: 23:78)

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Computing Policy

In an increasingly digital world, computing plays a crucial role in developing skills, improving communication, sharing information and of course, enhancing learning.

At Unique Academy, it is our aim to help prepare our children for life in a world where technology plays an ever more significant role.

Aims

We aim for children to:

- Enjoy working with computing
- Be able to express themselves and their learning using technology
- Have the opportunity to use computing to enhance and support learning
- Be able to communicate confidently using computing
- Be helped to develop practical computing skills and the ability to apply these skills
- Use computing to develop independent and collaborative skills
- Recognise the power and importance of computing in the world around them
- Understand risks and how to stay safe online
- Have opportunities to use computing resources across the curriculum.
- Learn to respect and look after the equipment available to them and how to store it safely.

We believe that as teachers and support staff, it is our responsibility to:-

- Make our children aware of the benefits and opportunities of using technology, especially to communicate and undertake research
- Enhance and develop our own computing capabilities and knowledge
- Use computing to enhance the quality of teaching and learning across the whole curriculum
- Select and use computing resources appropriately
- Use computing to release any constraints on a pupil's creativity
- Understand the role computing will play in our pupils' lives in the future
- Highlight online risks and model responsible online behaviour

Intent

At Unique Academy, our computing curriculum offers structured lessons to ensure that pupils acquire the knowledge and skills that they need to meet the aims of the national curriculum. Our curriculum content allows for a broad, deep understanding of computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology.

Implementation

Our computing lessons ensure that there is opportunity for revision, analysis and problem-solving. Through our sequence of lessons, we intend for pupils to be inspired and see computing as the future. Cross-curricular links between computing and other subject disciplines are also important in supporting other areas of learning.

Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges, which increase as they transition from EYFS, followed by Key Stage 1, Lower Key Stage 2 and then Upper Key Stage 2.

Key vocabulary is used to show progression of the specific language involved in children's learning so that teachers can also assess understanding and progress through vocabulary.

Computing aims to develop children to become digital citizens (who are safe and responsible), digital communicators (who are digitally literate) and digital creators (who are logical and creative).

Impact

We aim for computing to help our pupils develop a range of knowledge and skills. Pupils will use digital and technological vocabulary, alongside a progression in their technical skills. They will be confident using a range of hardware and software and will produce high-quality purposeful products. Children will see the digital world as part of their world, extending beyond school, and understand that they have choices to make. We aim for our pupils to understand the importance of being respectful digital citizens and leading healthy digital lives, now and in the future.

National Curriculum

UA aims to embed computing into the curriculum, and although some skills are taught separately, most will develop through the use of computing in other curricular activities. Our computing long-term objectives are mainly taken from the Computing Scheme of Work overview. These are mapped across each year-group to ensure that any skills taught are progressive. Basic skills are monitored using non-negotiables given to each class, displayed in class and incorporated into lessons.

Assessment outcomes and Record Keeping

Teachers use Target Tracker, which forms the basis for Assessment outcomes and progress tracking every half term and exemplar projects or pieces of assessed work are kept for moderation purposes.

Resources

Unique Academy has laptops in the classroom to support pupils in carrying out Computing in class.

Health and Safety issues

All hardware within the school undergoes regular PAT testing. Hardware is monitored to ensure that they are in good and safe working order.

All staff and pupils must adhere to the Unique Academy's Acceptable Use policy.

The school administrator also keeps a list of children who are not permitted to be photographed.

Security

The school administrator will be responsible for regularly updating antivirus software.

The use of ICT and computing will be in line with the school's 'acceptable use policy as well as 'Online safety policy'.

Parents will be made aware of the schools 'acceptable use policy, which outlines the schools rules for responsible ICT use, the internet as well as the consequences of misuse. This information is detailed in the school's home school agreement.

Cross curricular links

Computing should be incorporated into all subjects, where possible. Computing should be used to support learning in other core and foundation subjects as well as develop computing skills.

Parental involvement

Parents are encouraged to support the implementation of computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks and through the school website. They will be made aware of e-safety and encouraged to promote this at home.



Computing Curriculum Map

Class	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
EYFS	Digital Literacy Technology around us	Digital Literacy Hardware IT Keyboard skills	Digital Literacy Safety and Privacy IT Drawing skills	Computer Science Robots IT Quizzes	Information Technology Sounds Digital Literacy Using Purple Mash with an individual login	Information Technology Photography
Cycle A Year 1 / 2	Digital Literacy Unit 1.1 Online Safety & Exploring Purple Mash Programs – Various	Digital Literacy Unit 2.5 Effective Searching Programs – Browser Computer Science Unit 1.4 Lego Builders Programs – 2DIY	Digital literacy Unit 1.9 Technology outside school Programs – Various Computer Science Unit 1.2 Grouping & Sorting Programs – 2DIY IT Unit 2.6 Creating Pictures Programs – 2PaintAPicture	IT Unit 2.6 Creating Pictures Programs – 2PaintAPicture IT Unit 1.8 Spreadsheets Programs – 2Calculate	Computer Science Unit 1.7 Coding Programs – 2Code	Computer Science Unit 2.1 Coding Programs – 2Code
Cycle B Year 1 / 2	Digital literacy Unit 1.1 Online Safety & Exploring Purple Mash Programs – Various	Compter science Unit 1.5 Maze Explorers Programs – 2Go IT Unit 2.4 Questioning Programs – 2 Question, 2Investigate	IT Unit 2.4 Questioning Programs – 2 Question, 2Investigate Digital literacy Unit 2.2 Online Safety Programs – Various	IT Unit 1.6 Animated Story Books Programs – 2Create A Story	IT Unit 2.3 Spreadsheets Programs – 2Calculate IT Unit 1.3 Pictograms Programs – 2Count	IT Unit 2.8 Presenting Ideas Programs – Various
Cycle A Year 3 / 4	Computer science Coding Programs – 2Code	Digital literacy Unit 3.2 Online safety Programs – Various IT Unit 3.3 Spreadsheets Programs – 2Calculate	IT Unit 3.4 Touch Typing Programs – 2Type	Digital literacy Unit 3.5 Email (including email safety) Programs – 2Email, 2Connect, 2DIY	IT Unit 3.6 Branching Databases Programs – 2Question	IT Unit 3.7 Simulations Programs – 2Simulate, 2Publish IT Unit 3.8 Graphing Programs – 2Graph
Cycle B Year 3 / 4	Computer Science Coding Programs – 2Code	Digital literacy Unit 4.2 Online safety Programs – Various IT Unit 4.3 Spreadsheets Programs – 2Calculate	IT Unit 4.3 Spreadsheets Programs – 2Calculate IT Unit 4.4 Writing for different audiences Programs – 2Email, 2Connect, 2DIY	IT Unit 4.4 Writing for different audiences Programs – 2Email, 2Connect, 2DIY Computer science Unit 4.5 Logo Programs – Logo	Computer science Unit 4.5 Logo Programs – Logo IT Unit 4.6 Animation Programs – 2Animate	IT Unit 4.7 Effective Search Programs – Browser Computer science Unit 4.8 Hardware Investigators
Cycle A Year 5 / 6	Computer science Coding (Purple Mash) Programs – 2Code	Digital literacy Unit 5.2 Online safety Programs - Various	IT Unit 5.3 Spreadsheets Programs – 2Calculate	IT Unit 5.4 Databases Programs – 2Question, 2Investigate	Computer science Unit 5.5 Game Creator Programs – 2DIY 3D	IT Unit 5.6 3D Modelling Programs – 2Design and Make

		IT Unit 5.3 Spreadsheets Programs – 2Calculate	IT Unit 5.4 Databases Programs – 2Question, 2Investigate	Computer science Unit 5.5 Game Creator Programs – 2DIY 3D	IT Unit 5.6 3D Modelling Programs – 2Design and Make 12	IT Unit 5.7 Concept Maps Programs – 2Connect
Cycle B Year 5 / 6	Computer science Coding Programs – 2Code	Digital literacy Unit 6.2 Online safety Programs - Various IT Unit 6.3 Spreadsheets Programs – 2Calculate	Digital literacy Unit 6.4 Blogging Programs – 2Blog	Computer science Unit 6.5 Text Adventures Programs – 2Code, 2Connect	Computer science Unit 6.6 Networks	IT Unit 6.7 Quizzing Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate



Progression Map

EYFS			
Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Remember rules without needing an adult to remind them.
	Physical Development		<ul style="list-style-type: none"> Match their developing physical skills to tasks and activities in the setting.
	The World		<ul style="list-style-type: none"> Explore how things work.
Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> -sensible amounts of 'screen time'.
	Physical Development		<ul style="list-style-type: none"> Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Expressive Arts and Design		<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Key Stage 1 National Curriculum Expectations	Key Stage 2 National Curriculum Expectations
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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; • 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.

Multimedia text and images			Multimedia motion and sound		
KS1	LKS2	UPKS2	KS 1	LKS 2	UPKS2
<p>Children begin to understand the particular purposes technology can be used for and that by adding text and images you can communicate with technology. Children develop their skills in typing, selecting tools and organising information.</p> <p>KS1 Computing National Curriculum Children use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Children can:</p> <ul style="list-style-type: none"> a add text strings, text boxes and show and hide objects and images, manipulating the features; b use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape; c use applications and devices in order to communicate ideas, work, messages and demonstrate control; d save, retrieve and organise work; e use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, 	<p>Children develop their skills of formatting using keyboard commands, organising their work to demonstrate effect. In LKS2, they will have the opportunity to express themselves more through digital technology, art, PowerPoint and posters. Children should continue to demonstrate control when operating tools as in KS1.</p> <p>KS2 Computing National Curriculum Children 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. They 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a create different effects with different technological tools, demonstrating control; b use appropriate keyboard commands to amend text on a device; c use applications and devices in order to communicate ideas, work, and messages; d save, retrieve and evaluate 	<p>Children begin to look at new software, creating 3D models and learning how to orbit, zoom and develop their editing skills further. They become more confident in inserting links, images and formatting text to create effect.</p> <p>KS2 Computing National Curriculum Children 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use the skills already developed to create content using unfamiliar technology; b select, use and combine the appropriate technology tools to create effect; c review and improve their own work and support others to improve their work; d save, retrieve and evaluate their work, making amendments; e insert a picture/text/graph/h 	<p>Children begin to develop their creativity using technology through recording sound. Children will also begin to develop their editing skills and control of the tools.</p> <p>KS1 Computing National Curriculum Children use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use software to record sounds; b change sounds recorded; c save, retrieve and organise work; d use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound. 	<p>Children develop their editing skills further by cropping, organising and arranging film clips. They are able to share work and offer feedback and ideas for improvement with animation and film, giving their opinion on which software to use. In LKS2, children also look at the history of animation and reflect upon the changes over time.</p> <p>KS2 Computing National Curriculum Children 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use software to record, create and edit sounds and capture still images; b change recorded sounds, volume, duration and pauses; c use software to capture video for a purpose; d crop and arrange clips to create a short film; e plan an animation and move items within each animation for playback; f use key vocabulary to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still 	<p>Children begin to look more into multimedia broadcasting, learning new skills including recording jingles, podcasts and narration. They become more confident in post-production with editing, trimming and refining their work based on plans they have made.</p> <p>KS2 Computing National Curriculum Children 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a collect audio from a variety of resources including own recordings and internet clips; b use a digital device to record sounds and present audio; c trim, arrange and edit audio levels to improve quality; d publish their animation and use a movie editing package to edit/refine and add titles; e use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record,

<p>screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.</p>	<p>e work, making amendments; insert a picture/text/graph/hyperlink from the internet or a personal file;</p> <p>f use key vocabulary to demonstrate knowledge and understanding in this strand: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.</p>	<p>yperlink from the internet or personal file; use key vocabulary to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide</p>		<p>image, thaumatrope, zoetrope, zoopraxiscope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.</p>	<p>edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.</p>
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Handling data			Technology in our lives		
KS1	LKS2	UPKS2	KS 1	LKS 2	UPKS2
	<p>Children begin to explore expressing information in tables, sorting and organising information for others to be able to understand.</p> <p>KS2 Computing National Curriculum Children 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a talk about the different ways data can be organised; b sort and organise information to use in other ways; c search a ready-made database to answer questions; d use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table. 	<p>Data Handling in UKS2 focuses on selecting the correct method to display data and using software such as spreadsheets. Children also learn how to check the accuracy of data and compare data for a specific purpose.</p> <p>KS2 Computing National Curriculum Children 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.</p> <p>Children can:</p> <ul style="list-style-type: none"> a construct data on the most appropriate application; b know how to interpret data, including spotting inaccurate data and comparing data; c use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets; d add data to an existing database; e. use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending. 	<p>Children begin to make links to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety.</p> <p>KS1 Computing National Curriculum Children recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p>Children can:</p> <ul style="list-style-type: none"> a recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping; b use links to websites to find information; c recognise age-appropriate websites; d use safe search filters; <p>use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.</p>	<p>Children refer to online safety rules when discussing technology in their lives. They are able to navigate between websites and use safe search terms on trusted search engines. They become more confident in using email for communication, including attaching and saving files from emails.</p> <p>KS2 Computing National Curriculum Children 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. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content.</p> <p>Children can:</p> <ul style="list-style-type: none"> a explain ways to communicate with others online; b describe the world wide web as the part of the internet that contains websites; c add websites to a favourites list; d use search tools to find and use an appropriate website and content; e use strategies to improve results when searching online; f use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media. 	<p>Children can use safe search terms on trusted search engines, and evaluate websites based on layout and information. They become more confident in understanding Google rankings, adverts and the reliability of websites.</p> <p>KS2 Computing National Curriculum Children 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. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content.</p> <p>Children can:</p> <ul style="list-style-type: none"> a search for information using appropriate websites and advanced search functions within Google; b use strategies to check the reliability of information (cross-check with another source such as books); c talk about the way search results are selected and ranked; d check the reliability of a website, including the photos on site; e tell you about copyright and acknowledge the sources of information; f. use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.



Coding and Programming			Online Safety		
KS1	LKS2	UPKS2	KS 1	LKS 2	UPKS2
<p>Children begin to understand their influence on technology by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them.</p> <p>KS1 Computing National Curriculum Children understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. They create, debug and use logical reasoning to predict the behaviour of simple programs.</p> <p>Children can:</p> <ul style="list-style-type: none"> a give commands one at a time to control direction and movement, including straight, forwards, backwards, turn; b control the nature of events: repeat, loops, single events and add and delete features; c give a set of instructions to follow and predict what will happen; d improve/change their sequence of commands by debugging; e use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink. 	<p>Children build on their programming skills by solving problems and programming commands to achieve a specific outcome. They begin to write programs, explain algorithms and identify errors in their work.</p> <p>KS2 Computing National Curriculum Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use logical thinking to solve an open-ended problem by breaking it up into smaller parts; b write a program, putting commands into a sequence to achieve a specific outcome; c give a set of instructions to follow and predict what will happen; d keep testing a program and recognise when it needs to be debugged; e use variables to create an effect, e.g. repetition, if, when, loop; f use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable. 	<p>Children build on their programming skills by using new systems such as a flowchart. They continue to break down problems and create algorithms to solve them. They are able to explain the outcome of an algorithm with confidence and accuracy.</p> <p>KS2 Computing National Curriculum Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use external triggers and infinite loops to demonstrate control; b follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols; c use conditional statements and edit variables; d decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program; e keep testing a program and recognise when it needs to be debugged; f use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, 	<p>Children begin to consider their activity on the internet and learn about ways to keep themselves safe and why it is important to do so. They also compare appropriate and inappropriate activity on the internet and decide what to do next.</p> <p>KS1 Computing National Curriculum Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p>Children can:</p> <ul style="list-style-type: none"> a identify what things count as personal information; b identify what is appropriate and inappropriate behaviour on the internet; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate how to safely open and close applications and log on and log off from websites; f use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet. 	<p>Children become more aware of their digital footprint by reflecting on their experience on the internet. They are able to understand more about age-appropriate websites and adverts and how adverts are used by companies. Children are also introduced to the concept of plagiarism and citation.</p> <p>KS2 Computing National Curriculum Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact.</p> <p>Children can:</p> <ul style="list-style-type: none"> a reflect on their own digital footprint and behaviour online; b identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate understanding of age-appropriate websites and adverts; f use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public. 	<p>Children are encouraged to identify online risks and share their knowledge of the risks and consequences for people online. They begin to think more critically about what they see online and look at the concept of fake news and false photographs.</p> <p>KS2 Computing National Curriculum Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concern about content and contact.</p> <p>Children can:</p> <ul style="list-style-type: none"> a protect their password and other personal information; b be a good online citizen and friend; c judge what sort of privacy settings might be relevant to reducing different risks; d seek help from an adult when they see something that is unexpected or worrying; e discuss scenarios involving online risk; g. use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.



smooth, flatten, raise.

Cycle A
Year 1\2 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
1.1	Online Safety & Exploring Purple Mash	4	Various
2.5	Effective Searching	3	Internet Browser
1.4	Lego Builders	3	2DIY
1.9	Technology outside school	2	Various
1.2	Grouping & Sorting	2	2DIY
2.6	Creating Pictures	5	2PaintAPicture
1.7	Coding	6	2Code
2.1	Coding	6	2Code

Cycle B
Year 1\2 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
1.1	Online Safety & Exploring Purple Mash	4	Various
1.5	Maze Explorers	3	2Go
2.4	Questioning	5	2Question, 2Investigate
2.2	Online Safety	3	Various
1.6	Animated Story Books	5	2Create A Story
2.7	Making Sounds	3	2Sequence
2.3	Spreadsheets	6	2Calculate
1.3	Pictograms	3	2Count



2.8	Presenting Ideas	4	Various
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Cycle A
Year 3\4 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
3.1	Coding	6	2Code
3.2	Online safety	3	Various
3.3	Spreadsheets	6	2Calculate
3.5	Email	6	2Email, 2Connect, 2DIY
3.6	Branching Databases	4	2Question
3.7	Simulations	3	2Simulate, 2Publish
3.8	Graphing	2	2Graph
3.10	micro:bits	4	Free code micro:bit

Cycle B
Year 3\4 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
4.1	Coding	6	2Code
4.2	Online safety	4	Various
4.4	Writing for different audiences	5	2Email, 2Connect, 2DIY
4.5	Logo	4	2Logo
4.6	Animation	3	2Animate
4.7	Effective Search	3	Internet Browser
4.8	Hardware Investigators	2	
3.9	Presenting (with Microsoft PowerPoint or Google Slides	5 or 6	MS PowerPoint or Google Slides



Cycle A
Year 5\6 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
5.1	Coding	6	2Code
5.2	Online safety	3	Various
5.3	Spreadsheets	6	2Calculate
5.4	Databases	4	2Investigate
5.5	Game Creator	5	2DIY 3D
5.6	3D Modelling	4	2Design and Make
5.7	Concept Maps	4	2Connect

Cycle B
Year 5\6 Schemes of Work

Unit Number	Title	No. of Lessons	Tools
6.1	Coding	6	2Code
6.2	Online safety	2	Various
6.4	Blogging	4	2Blog
5.9	Using External Devices	6	2Code Purple Chip
6.6	Networks	3	
6.7	Quizzing	6	2Quiz, 2DIY, Text Toolkit, 2Investigate, 2Survey