

Key Vocabulary	E-safety and technology	Programming	Data handling	Multimedia
Year 1	Rules, Online, Private information	Instructions, Buttons, Robots, Patterns, program	Photographs, Video, Sound, Data, Pictogram, Digitally	Videos, Camera stills, Sounds, Image bank, Word bank, Space bar
Year 2	Appropriate/inappropriate sites, Cyber-bullying, Digital footprint, Keyword searching,	Forward, Backward, Right-angle turn, Algorithm, Sequence, Debug, Predict	Capturing moments, Magnified images, Questions, Data collection, Graphs, Charts, Save, Retrieve	Paint effects, Templates, Animation, Documents, Index finger typing, Enter/return, Caps lock, Backspace
Year group	Year 1		Year 2	
<p>E-safety and technology</p> <p>Computing systems and networks – Technology around us</p>	<p>Keep my password private. Say what personal information is. Tell an adult when something unexpected or worrying is seen online. Talk about why it's important to be kind and polite. Recognise an age-appropriate website. Agree and follow sensible e-Safety rules. Recognise the ways we use technology in our classroom. Recognise ways that technology is used in my home and community. Use links to websites to find information. Begin to identify some of the benefits of using technology.</p> <p>Computing systems and networks – Technology around us To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type on a computer To use the keyboard to edit text To create rules for using technology responsibly</p> <p>Possible cross-curricular links: National curriculum links</p> <ul style="list-style-type: none"> Recognise common uses of information technology beyond school Use technology purposefully to create, organise, store, manipulate, and retrieve digital content 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>Education for a Connected World links</p>		<p>Explain the need to keep passwords and personal information private. Describe the things that happen online that must be told to an adult. Talk about why we should go online for a short amount of time. Talk about why it is important to be kind and polite online and in real life. Know that not everyone is who they say they are on the Internet. Say why we use technology in the classroom. Say why we use technology in my home and community. Start to understand that other people have created the information I use. Identify benefits of using technology including finding information, creating and communicating. Talk about the differences between the Internet and things in the physical world.</p> <p>Computing systems and networks – Technology around us To recognise the uses and features of information technology To identify the uses of information technology in the school To identify information technology beyond school To explain how information technology helps us To explain how to use information technology safely To recognise that choices are made when using information technology</p> <p>Possible cross-curricular links: National curriculum links</p> <ul style="list-style-type: none"> 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>Health, well-being and lifestyle</p> <ul style="list-style-type: none"> • I can identify rules that help keep us safe and healthy in and beyond the home when using technology • I can give some simple examples <p>Copyright and ownership</p> <ul style="list-style-type: none"> • I know that the work I create belongs to me • I can name my work so that others know it belongs to me <p>E-safety key question: What would you do if you came across something online that upset you?</p> <p>Accessibility:</p>	<p>Education for a Connected World links</p> <p>Health, well-being, and lifestyle</p> <ul style="list-style-type: none"> • I can identify rules that help keep us safe and healthy in and beyond the home when using technology <p>I can give some simple examples</p> <p>E-safety key question: Always, sometimes, never. Is it ok to go on a device without our grown-ups knowing?</p> <p>Accessibility:</p>
<p>Programming</p> <p>Programming A – Moving a robot</p>	<p>Robots</p> <p>Suggested hardware: beebots</p> <p>To explain what a given command will do To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make sequences To plan a simple program To find more than one solution to a problem</p> <p>E-safety key question: Always, sometimes, never.</p> <p>Accessibility:</p>	<p>Programming A – Robot algorithms</p> <p>Suggested hardware: beebots</p> <p>Suggested software: beebot app</p> <p>To describe a series of instructions as a sequence To explain what happens when we change the order of instructions To use logical reasoning to predict the outcome of a program (series of commands) To explain that programming projects can have code and artwork To design an algorithm To create and debug a program that I have written</p>
<p>Programming B – Introduction to animation</p>	<p>Animations</p> <p>Suggested software: Scratch junior</p> <p>To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has its own instructions To design the parts of a project To use my algorithm to create a program</p> <p>E-safety key question: Always, sometimes, never.</p> <p>Accessibility:</p>	<p>National curriculum links</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 <p>E-safety key question: Always, sometimes, never.</p> <p>Accessibility:</p> <p>Programming B – An introduction to quizzes</p> <p>Suggested software: Scratch junior</p> <p>To explain that a sequence of commands has a start</p>

		<p>To explain that a sequence of commands has an outcome</p> <p>To create a program using a given design</p> <p>To change a given design</p> <p>To create a program using my own design</p> <p>To decide how my project can be improved</p> <p><u>National curriculum links</u></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 <p>E-safety key question: <i>Always, sometimes, never.</i></p> <p>Accessibility:</p>
Data handling	<p>Data and information – Grouping data</p> <p>Suggested software:</p> <p>To label objects</p> <p>To identify that objects can be counted</p> <p>To describe objects in different ways</p> <p>To count objects with the same properties</p> <p>To compare groups of objects</p> <p>To answer questions about groups of objects</p> <p>Possible cross-curricular links: <u>National curriculum links</u></p> <ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Use technology safely and respectfully <p><u>Education for a Connected World links</u></p> <p>Copyright and ownership</p> <ul style="list-style-type: none"> • I know that work I create belongs to me (Y1) • I can name my work so that others know it belongs to me (Y1) 	<p>Data and information – Pictograms</p> <p>Suggested software:</p> <p>To recognise that we can count and compare objects using tally charts</p> <p>To recognise that objects can be represented as pictures</p> <p>To create a pictogram</p> <p>To select objects by attribute and make comparisons</p> <p>To recognise that people can be described by attributes</p> <p>To explain that we can present information using a computer</p> <p>Possible cross-curricular links: <u>National curriculum links</u></p> <p>Computing</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content • 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

E-safety key question: Always, sometimes, never. Is it ok to put my name on somebody else's work?

Accessibility:

Maths

Building on Year 1 number and place value:

- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: 'equal to', 'more than', 'less than' ('fewer'), 'most', 'least'

Year 2

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data

Notes and guidance: Pupils record, interpret, collate, organise and compare information (for example, using many-to-one correspondence in pictograms with simple ratios 2, 5, 10).

[Education for a Connected World links](#)

Self image and identity

- I can recognise that I can say 'no'/'please stop'/'I'll tell'/'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset
- I can explain how this could be either in real life or online
- If something happens that makes me feel sad, worried, uncomfortable, or frightened I can give examples of when and how to speak to an adult I can trust

Health, wellbeing and lifestyle

- I can identify rules that help keep us safe and healthy in and beyond the home when using technology
- I can give some simple examples

Privacy and security

- I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location)

		<ul style="list-style-type: none"> • I can describe the people I can trust and can share this with; I can explain why I can trust them • I can recognise more detailed examples of information that is personal to me (e.g. where I live, my family's names, where I go to school) <p>E-safety key question: Always, sometimes, never. Is it ok to share personal information online?</p> <p>Accessibility:</p>
<p>Multimedia/ Digital literacy</p> <p>Creating media</p>	<p>Creating media – Digital painting Suggested software:</p> <p>To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture</p> <p>Possible cross-curricular links: National curriculum links</p> <p>KS1 Computing</p> <ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content <p>KS1 Art and Design Pupils should be taught:</p> <ul style="list-style-type: none"> • To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form, and space • About the work of a range of artists, craft makers, and designers, describing the differences and similarities between different practices and disciplines and making links to their own work <p>E-safety key question: Always, sometimes, never. Is it ok to paint a picture of anything you want on a computer?</p> <p>Accessibility:</p> <p>Creating media – Digital writing Suggested software:</p>	<p>Creating media – Digital photography Suggested software:</p> <p>To use a digital device to take a photograph To make choices when taking a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image To recognise that photos can be changed</p> <p>Possible cross-curricular links: National curriculum computing links</p> <p>Computing</p> <ul style="list-style-type: none"> • 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>Further national curriculum links</p> <p>Art and design</p> <ul style="list-style-type: none"> • To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form, and space <p>Education for a Connected World links</p> <ul style="list-style-type: none"> • To identify that some images are not real (fake) <p>E-safety key question: Always, sometimes, never. Is it ok to take a photo of somebody else?</p> <p>Accessibility:</p>

To use a computer to write
To add and remove text on a computer
To identify that the look of text can be changed on a computer
To make careful choices when changing text
To explain why I used the tools that I chose

Possible cross-curricular links: [National curriculum links](#)

- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
- Use technology safely and respectfully, keeping personal information private

[Further national curriculum links](#)

English – writing (Y1)

Write sentences by:

- saying out loud what they are going to write about
- composing a sentence orally before writing it
- sequencing sentences to form short narratives
- re-reading what they have written to check that it makes sense

[Education for a Connected World links](#)

Privacy and security

- I can give reasons why I should only share information with people I choose to and can trust. (Y1)

E-safety key question: **Always, sometimes, never. Is it ok to share information I write with other people?**

Accessibility:

Creating media – Making music

Suggested software:

To say how music can make us feel
To identify that there are patterns in music
To show how music is made from a series of notes
To show how music is made from a series of notes
To create music for a purpose
To review and refine our computer work

Possible cross-curricular links: [Computing national curriculum links](#)

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

[Music national curriculum links](#)

- Play tuned and untuned instruments musically
- Listen with concentration and understanding to a range of high-quality live and recorded music
- Experiment with, create, select, and combine sounds using the interrelated dimensions of music

[Education for a Connected World links](#)

Copyright and ownership

- I know that work I create belongs to me.

E-safety key question: **Always, sometimes, never. Is it ok to play somebody else's music?**

Accessibility: