

Year 1

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – Technology around us	<p>Recognise common uses of information technology beyond school;</p> <p>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content;</p> <p>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>	<p>Health, well-being and lifestyle</p> <p>I can identify rules that help keep us safe and healthy in and beyond the home when using technology</p> <p>I can give some simple examples</p> <p>Copyright and ownership</p> <p>I know that the work I create belongs to me</p> <p>I can name my work so that others know it belongs to me</p>
2	Creating media – Digital painting	<p>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</p>	
3	Creating media – Digital writing	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Use technology safely and respectfully, keeping personal information private</p>	<p>Privacy and security</p> <p>I can give reasons why I should only share information with people I choose to and can trust.</p>
4	Data and information – Grouping data	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Use technology safely and respectfully</p>	<p>Copyright and ownership</p> <p>I know that work I create belongs to me</p> <p>I can name my work so that others know it belongs to me</p>

5	Programming A – Moving a robot	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions;	
6	Programming B – Introduction to animation	Create and debug simple programs; Use logical reasoning to predict the behaviour of simple programs; Recognise common uses of information technology beyond school.	

Year 2

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – IT around us	<p>Recognise common uses of information technology beyond school;</p> <p>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content;</p> <p>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>	<p>Health, well-being and lifestyle</p> <p>I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</p> <p>I can give some simple examples.</p>
2	Creating media – Digital photography	<p>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content;</p> <p>Recognise common uses of information technology beyond school;</p> <p>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>	<p>To identify that some images are not real (fake)</p>
3	Creating media – Making music	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>I know that work I create belongs to me.</p>
4	Data and information – Pictograms	<p>use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Self-image and identity</p>

		<p>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>	<p>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 and I can explain how this could be either in real life or online</p> <p><u>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</u></p> <p>Health, wellbeing and lifestyle</p> <p><u>I can identify rules that help keep us safe and healthy in and beyond the home when using technology</u> <u>I can give some simple examples</u></p> <p>Privacy and security</p> <p><u>I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location)</u></p> <p>I can describe the people I can trust and can share this with; I can explain why I can trust them</p> <p>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>
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5	Programming A – Robot algorithms	Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions	
6	Programming B – An introduction to quizzes	Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs 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.	

Year 3

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – Connecting computers	<p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>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</p> <p>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>	
2	Creating media – Animation	<p>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>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Managing online information I can use key phrases in search engines. I can use search technologies effectively.</p> <p>Copyright and ownership I can explain why copying someone else’s work from the internet without permission can cause problems. I can give examples of what those problems might be. When searching on the internet for content to use, I can explain why I need</p>

			to consider who owns it and whether I have the right to reuse it.
3	Creating media – Desktop publishing	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>Managing online information</p> <p>I can use key phrases in search engines</p> <p>I can use search technologies effectively</p> <p>Copyright and ownership</p> <p>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it</p> <p>I can demonstrate the use of search tools to find and access online content which can be reused by others.</p>
4	Data and information – Branching databases	<p>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>Use technology safely, respectfully, and responsibly</p>	
5	Programming A – Sequence in music	Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	
6	Programming B – Events and actions		

		<p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs</p> <p>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>	
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Year 4

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – The Internet	<p>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</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	
2	Creating media – Audio editing	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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,</p>	<p>Copyright and ownership</p> <p>I can explain why copying someone else’s work from the internet without permission can cause problems (Y3)</p> <p>I can give examples of what those problems might be (Y3)</p>

		<p>including collecting, analysing, evaluating, and presenting data and information</p> <p>Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it (Y4)</p> <p>I can give some simple examples (Y4)</p>
3	Creating media – Photo editing	<p>Use search technologies effectively</p> <p>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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Self-image and identity I can describe ways in which people might make themselves look different online.</p> <p>Copyright and ownership When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</p>
4	Data and information – Data logging	<p>...work with various forms of input</p> <p>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>	
5	Programming A –		

	Repetition in shapes	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	
6	Programming B – Repetition in games	<p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>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>	

Year 5

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – Sharing information	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>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</p> <p>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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>I can assess and justify when it is acceptable to use the work of others</p> <p>I can give examples of content that is permitted to be reused</p>
2	Creating media – Vector drawing	<p>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,</p>	<p>Copyright and ownership</p> <p>I can explain why copying someone else’s work from the internet without permission can cause problems.</p>

		including collecting, analysing, evaluating, and presenting data and information.	
3	Creating media – Video editing	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Internet safety</p> <p>Recognise inappropriate content, contact, and conduct and know how to report concerns</p> <p>Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour</p> <p>Identify a range of ways to report concerns about content and contact</p> <p>Self-image and Identity</p> <p>I can explain how I can represent myself in different ways online</p> <p>Knowing this, I can describe the right decisions about how I interact with others and how others perceive me</p> <p>Online relationships</p> <p>I can recognise some ways in which the internet can be used to communicate</p> <p>I can give examples of how to be respectful to others online</p> <p>Online reputation</p> <p>I can search for information about an individual online and create a summary report of the information I find</p> <p>I can explain ways that some of the information about me online could have</p>

			been created, copied, or shared by others Managing online information I can evaluate digital content (and can explain how I make choices from search results)
4	Data and information – Flat-file databases	<p>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>	
5	Programming A – Selection in physical computing	<p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	
6	Programming B – Selection in quizzes	<p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>select, use and combine a variety of software (including internet services) on a range of digital</p>	

		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	
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Year 6

BLOCK	TOPIC	NC Objectives	Education in a Connected World Links
1	Computing systems and networks – Communication	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>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</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>I can describe and assess the benefits and the potential risks of sharing information online.</p> <p>I can use various additional tools to refine my searches (e.g. search filters: size, type, usage rights etc.).</p> <p>I can explain how to use search effectively and use examples from my own practice to illustrate this.</p> <p>I can explain how search engine rankings are returned and can explain how they can be influenced (e.g. commerce, sponsored results).</p>
2	Creating media – 3D Modelling	<p>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,</p>	<p>Privacy and Security (Y4) – I can describe strategies for keeping my</p>

		<p>systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>personal information private, depending on context</p>
3	Creating media – Web page creation	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>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>use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour.</p>	<p>Online relationships</p> <p>I can use the internet with adult support to communicate with people I know.</p> <p>Managing information online</p> <p>I can navigate online content, websites, or social media feeds using more sophisticated tools to get to the information I want (e.g. menus, sitemaps, breadcrumb-trails, site search functions).</p> <p>Copyright and ownership</p> <p>I can explain why copying someone else’s work from the internet without permission can cause problems.</p> <p>I can give examples of what those problems might be.</p> <p>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</p> <p>I can give some simple examples.</p>

			<p>I can assess and justify when it is acceptable to use the work of others.</p> <p>I can give examples of content that is permitted to be reused.</p> <p>I can demonstrate the use of search tools to find and access online content which can be reused by others.</p> <p>I can demonstrate how to make references to and acknowledge sources I have used from the internet.</p> <p>I can explain the principles of fair use and apply this to case studies.</p>
4	Data and information – Spreadsheets	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>Managing information online</p> <p>I can describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites)</p> <p>I can use different search technologies</p> <p>I can evaluate digital content and can explain how I make choices from search results</p>
5	Programming A – Variables in games	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	
6	Programming B – Sensing	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	

		<p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>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>	
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