



# St Mary's Catholic Academy **Computing** Progression of Knowledge, Skills and Vocabulary



## EYFS Curriculum

- To know how to operate simple equipment. To show an interest in technological toys with knobs or pulleys, or real objects.
- To show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. To know that information can be retrieved from computers.

By the end of KS1 children will be taught to:

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

		<b>Computer Science</b> (principles of imputation and computation, how digital systems work and how to put this knowledge to use through programming).	<b>Information Technology</b> (create programs, systems and a range of content)	<b>Digital Literacy</b> (use and express themselves, and develop their ideas through information and communication technology)	<b>E-safety</b>
<b>F1</b>	<b>Knowledge</b>	<b>30-50m and 40-60m: pre KS1 v &amp; vi</b> <ul style="list-style-type: none"> <li>To recognise and use a range of digital devices (iPads/cameras/IWBs)</li> <li>To recognise the basic parts of a computer, e.g. mouse, screen, keyboard including spacebar, numbers and letters</li> <li>To know how to operate simple equipment such as turn on a CD player or use a remote control</li> <li>I know that information and media can be stored on a digital device.</li> <li>To know how to use a touchscreen correctly to access information.</li> <li>To know how to sort objects on a screen correctly and answer questions about them.</li> <li>To know what the purpose of a range of digital devices is.</li> </ul>	<b>30-50m and 40-60m: pre KS1 i and ii</b> <ul style="list-style-type: none"> <li>To know how to make toys work by pressing buttons or parts to achieve effects such as sound or movement</li> <li>I can answer basic questions about information displayed in images, e.g. more or less.</li> </ul>	<b>30-50m and 40-60m: pre KS1 iv</b> <ul style="list-style-type: none"> <li>To know how to create content using 2Create</li> <li>To know how to collect and present simple data.</li> </ul>	<b>Pre KS1 vi</b> To know they should ask a parent or grown up before using computing devices.
	<b>Skills</b>	<ul style="list-style-type: none"> <li>I can use a mouse, touchscreen or appropriate access device to target and select options on screen</li> <li>I can sort familiar objects into 1 or more categories</li> </ul>	<ul style="list-style-type: none"> <li>To understand buttons/parts need to be pressed to make equipment work</li> <li>To be confident to explore simple technological toys and show some awareness of achieved effects.</li> </ul>	<ul style="list-style-type: none"> <li>To create simple digital content, e.g. digital art (2Create on the iPads)</li> <li>To collect and present simple data (e.g. likes/dislikes) on a topic.</li> </ul>	
	<b>Vocab</b>	Digital device, tablet, mouse, screen, keyboard, spacebar, numbers and letters	Interactive whiteboard, buttons, press, on, off	2Create, digital art, data	

		Computer Science	Information Technology	Digital Literacy	E-safety
F2	Knowledge	<b>30-50m - 40-60m:</b> To recognise technology devices throughout school. <b>Pre KS1 v</b>	<b>40-60m: Pre KS1 i, ii and iii</b> <ul style="list-style-type: none"> <li>To know a device needs a sequence of instructions to make it work. (F1)</li> <li>To know how to evaluate an outcome of an action.</li> <li>To know how to write a simple sequence of instructions.</li> </ul>	<b>Early Learning Goal: Pre KS1 iv</b> <ul style="list-style-type: none"> <li>To know how to use 2Paint to produce images.</li> <li>To know how to use 2Create to produce a story. (F1)</li> </ul>	<ul style="list-style-type: none"> <li>To know the difference between appropriate and inappropriate behaviour and content. <b>Pre KS1 vi</b></li> </ul>
	Skills	<ul style="list-style-type: none"> <li>To use a mouse with support (Paintz)</li> <li>To use a mouse independently</li> <li>To understand that we control computers (F1)</li> </ul>	<ul style="list-style-type: none"> <li>To write and understand a short sequence of instructions to control a device (Bee-Bots)</li> <li>To repeat an action with technology to trigger a specific outcome (F1)</li> <li>To evaluate an outcome based on an initial goal (F1)</li> <li>To write and understand a short sequence of instructions to control a device (Bee-Bots) independently (ELG).</li> </ul>	<ul style="list-style-type: none"> <li>To use 2Paint to paint a face/animal</li> <li>To recognise patterns in groups of objects</li> <li>To use 2Create to create a story (F1)</li> </ul>	<ul style="list-style-type: none"> <li>I can recognise inappropriate content and know to tell an appropriate adult</li> <li>I am aware that information can be public or private</li> <li>I can describe what makes a good friend (Teacher-led class discussion)</li> </ul>
	Vocab	Control, support, independently	Instructions, Bee-Bots, outcome, discuss, sequence	2Paint, patterns, objects	Good friend, Internet, safe, unsafe, parents, teachers, adults

**Year 1**

**Drivers - Advent:** Living Memory – Toys Goose Fair (History) **Lent:** Hot and Cold Places (Geography) **Pentecost:** Local Knowledge – Map work in Hyson Green (Geography)

		Computer Science	Information Technology	Digital Literacy	E-safety
Y1	Knowledge	<ul style="list-style-type: none"> <li>To understand the purpose of user names and passwords <b>KS1 vi</b></li> </ul>	<ul style="list-style-type: none"> <li>To know how to control and evaluate the movements of a Bee-Bot (F2) <b>KS1 ii &amp; iii</b></li> <li>To know how to programme a sprite</li> <li>To know how to test your instructions (F2)</li> <li>To recognise uses of technology in the home. <b>KS1 v</b></li> </ul>	<ul style="list-style-type: none"> <li>To know how to connect a camera to a computer</li> <li>To know how to record sound and play it back</li> <li>To know how to use Tux Paint and its features <b>KS1 iv</b></li> </ul>	<ul style="list-style-type: none"> <li>To know what stay safe online is. <b>KS1 vi</b></li> </ul>
	Skills	<ul style="list-style-type: none"> <li>To use a password to access the secure network</li> </ul>	<ul style="list-style-type: none"> <li>To operate, control and evaluate the movements of a Bee-Bot robot (F2)</li> <li>To use the language of forwards, backwards, left and right</li> <li>To plan a journey for a programmable toy (F2)</li> <li>To programme a sprite through trial and error instructions (Scratch Jr)</li> <li>To use statements to control the sprite</li> <li>To test an algorithm</li> <li>To control variables</li> </ul>	<ul style="list-style-type: none"> <li>To use a website and a camera (to record their toy in action)</li> <li>To record sound and play back (Commentary for their toy in action)</li> <li>To create images and pictures tied into my topic (Tux Paint) (F2)</li> <li>To use various tools such brushes, pens, rubber, stamps and shapes (F2)</li> </ul>	<ul style="list-style-type: none"> <li>To understand the importance of staying safe online</li> <li>I can know that personal information should not be shared online (F2)</li> </ul>
	Vocab	User name, password	Evaluate, forwards, backwards, left, right, program, Scratch Jr, sprite, statements, algorithm, test, variables	Camera, website, Sound, play back, commentary, Tux Paint, images, brushes, pens, rubbers, stamps, shapes	Staying safe online, personal information

**Year 2**

**Drivers - Advent:** Lives of Significant People in the Past (History)

**Lent:** Comparative Study Outside the UK – Nigeria (Geography)

**Lent:** Events Beyond Living Memory – Great Fire of London (History)

**Pentecost:** Comparative Study in the UK – The Countryside (Geography)

		<b>Computer Science</b>	<b>Information Technology</b>	<b>Digital Literacy</b>	<b>E-safety</b>
<b>Y2</b>	<b>Knowledge</b>	<ul style="list-style-type: none"> <li>•To understand how to create and edit text and pictures <b>KS1 iv</b></li> </ul>	<p><b>KS1 i, ii, iii</b></p> <ul style="list-style-type: none"> <li>•To know how to control and evaluate the movements of a Bee-Bot (Y1)</li> <li>•To know how to use and implement the language of control correctly</li> <li>•To know how to write, predict and test instructions (Y1)</li> <li>•To know how to program and test a sprite (Y1)</li> <li>•To know how to debug a program</li> </ul> <p>To know and recognise common uses of technology beyond home and school. (Y1) <b>KS1 v</b></p>	<p><b>KS1 iv</b></p> <ul style="list-style-type: none"> <li>•To know how to use 2Create to create a multimedia story (F1, F2)</li> <li>• To know how to produce an online map</li> </ul>	<p><b>KS1 vi</b></p> <ul style="list-style-type: none"> <li>•To know how to identify appropriate content online (Y1)</li> <li>•To know how to ask for help if you feel uncomfortable about something you see online (Y1)</li> </ul>
	<b>Skills</b>	<ul style="list-style-type: none"> <li>•To use word process a short text</li> <li>•To save, retrieve and print my work</li> <li>•To insert an image into my work</li> <li>•To use tools to edit and improve it</li> </ul>	<ul style="list-style-type: none"> <li>•To operate, control and evaluate the movements of a Bee-Bot robot (Y1)</li> <li>•To use the language of forwards, backwards, left and right</li> <li>•To plan a journey for a programmable toy (Y1)</li> <li>•To test and amend a set of instructions (Y1)</li> <li>•To understand what algorithms are and that they used in digital devices (Y1)</li> <li>•To programme a sprite through trial and error instructions by debugging problems (Scratch Jr) (Y1)</li> <li>•To produce an online map and analyse the results</li> <li>•To use statements to control the sprite (Y1)</li> <li>•To test an algorithm (Y1)</li> <li>•To control variables (Y1)</li> <li>•To debug to solve a problem</li> <li>•To predict what the outcome of a simple program will be (logical reasoning) (Y1)</li> </ul>	<ul style="list-style-type: none"> <li>•To create a multimedia story online (2Create) (F1, F2)</li> <li>•To create a simple presentation with more than one slide</li> <li>•To create appropriate images into my presentation (2Create) (F1, F2)</li> <li>•To produce an online map to analyse that data</li> </ul>	<ul style="list-style-type: none"> <li>•To understand when it's appropriate to access the internet and how to identify appropriate content (Y1)</li> <li>•To know I must tell a trusted adult immediately if anyone tries to meet me via the internet (Y1)</li> <li>•To understand how to identify inappropriate content on websites</li> <li>•To understand how and when the internet can be accessed</li> <li>•To know where to go to ask for help if concerned (Y1)</li> </ul>
	<b>Vocab</b>	Word, save, print, images, edit, text, retrieve	Debugging, logical reasoning, program	Multimedia, presentation, PowerPoint, slides, online maps, Digi maps	e-Safety, appropriate, websites, access, uncomfortable, inappropriate, private, public

### Year 3

**Advent:** Stone Age (History) Natural Disasters (Geography) **Lent:** The Egyptians (History) **Pentecost:** The Local Area (Geography)

**In Key Stage 2:**

- i. **Create programs:** design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- ii. **Develop programs:** use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- iii. **Reasoning:** use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- iv. **Networks:** 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
- v. **Search engines:** use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- vi. **Using programs:** 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
- vii. **Safe use:** use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

		Computer Science	Information Technology	Digital Literacy	E-safety
<b>Y3</b>	<b>Knowledge</b>	<ul style="list-style-type: none"> <li>•To understand connectivity and how the computer can be a window to the outside world</li> <li>•To understand the internet's value for researching work</li> <li>•To understand the importance of building computer-based keyboard skills (Y2)</li> </ul> <p><b>KS2 iv</b></p>	<ul style="list-style-type: none"> <li>•To know how to design and debug programs (Y1, Y2)</li> <li>•To know what sequencing, selection and repetition are</li> <li>•To know how to use logical reasoning to explain how something work (Y2)</li> <li>•To know how to navigate around Scratch (Y1)</li> <li>•To know how to add a background</li> <li>•To know how to add inputs to control a sprite</li> </ul> <p><b>KS2 i</b></p>	<ul style="list-style-type: none"> <li>•To know how to confidently use 2Create to create a multimedia story (F1, F2, Y2)</li> <li>•To know how to produce a PowerPoint</li> <li>•To know how to produce an online map</li> </ul> <p><b>KS2 vi</b></p>	<ul style="list-style-type: none"> <li>•I know how to use technology safely (Y2)</li> <li>•I know what dangers can present themselves via email</li> <li>•I know how to report concerns (Y2)</li> </ul> <p><b>KS2 vii</b></p>
	<b>Skills</b>	<ul style="list-style-type: none"> <li>•To know 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</li> <li>•To use the computer to research and uncover interesting facts and details about a topic</li> <li>•To type up a piece of non-fiction writing, edit it and add appropriate images (linked to literacy work) (Y2)</li> <li>•To get quicker at typing with both hands (Y2)</li> <li>•To add borders to my artwork</li> <li>•To include clip art and Word art for effect in my work</li> </ul>	<ul style="list-style-type: none"> <li>•Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (Y2)</li> <li>•Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>•Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>•To use debugging to solve problems within your coding (Y2)</li> <li>•To navigate the Scratch programming environment</li> <li>•To create a background and a sprite for a game</li> <li>•To add inputs to control a sprite</li> <li>•To understand the terms algorithm, code and debug (Y2) (Y2)</li> </ul>	<ul style="list-style-type: none"> <li>•To create a multimedia story online (2Create) independently (Y2)</li> <li>•To create a simple presentation with more than one slide independently</li> <li>•To create appropriate images into my presentation (2Create) independently (Y2)</li> <li>•To produce an online map to analyse that data independently (Y2)</li> </ul>	<ul style="list-style-type: none"> <li>•To use technology safely, respectfully and responsibly (Y2)</li> <li>•To recognise acceptable/unacceptable behaviour (Y2)</li> <li>•To identify dangers when presented with scenarios from the online world (e-Safety poster)</li> <li>•To identify inappropriate content on emails</li> <li>•To identify a range of ways to report concerns about content and contact (Y2)</li> </ul>
	<b>Vocab</b>	Computer networks, world wide web, communication, collaboration, research, Google, typing, borders, clip art, keyboard skills.	Design, sequence, selection, repetition, input, output, background, code		Respectfully, responsibly, acceptable, unacceptable, email, report concerns

**Year 4**

**Advent:** Ancient Greece (History) Coastal Regions – UK and Europe (Geography)    **Lent:** Biomes (Geography)    **Pentecost:** The Romans (History)

		Computer Science	Information Technology	Digital Literacy	E-Safety
<b>Y4</b>	<b>Knowledge</b>	<ul style="list-style-type: none"> <li>•To understand the importance of building computer-based keyboard skills (Y2, Y3)</li> <li>•To know the importance of computers being connected to the outside world (Y3)</li> <li>•To know what search engines are and how they work (Y3)</li> <li>•To know how to use the tools bar in Word and other programs (Y3)</li> </ul> <p><b>KS2 v &amp; vi</b></p>	<ul style="list-style-type: none"> <li>•To give a definition of what an algorithm is (Y3)</li> <li>•To know the importance of prediction, trial and error to controlling a device (Y3)</li> <li>•To know how to write and debug programs (Y3)</li> <li>•To know how to use sequencing, selection and repetition in programs (Y3)</li> <li>•To know how to use logical reasoning to detect and correct errors (Y3)</li> <li>•To know that an ‘algorithm’ is a specific set of instructions used to control a function (Y3)</li> <li>•To know that algorithms have to be accurate in order to work properly (Y3)</li> </ul> <p><b>KS2 i, ii &amp; iii</b></p>	<ul style="list-style-type: none"> <li>•To know how to transfer pictures from a camera to a computer (Y1)</li> <li>•To know how to record video footage (Y1)</li> <li>•To know how to edit pictures successfully (Y1)</li> <li>•To know how to record a podcast</li> </ul> <p><b>KS2 vi</b></p>	<ul style="list-style-type: none"> <li>•I know how to use technology safely (Y2)</li> <li>•I know what dangers can present themselves via email (Y2)</li> <li>•I know the difference between good and bad online behaviour (Y2)</li> </ul> <p><b>KS2 vii</b></p>
	<b>Skills</b>	<ul style="list-style-type: none"> <li>•To 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 programs (Y3)</li> <li>•To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content programs (Y3)</li> <li>•To use a range of child friendly search engines to locate different media, e.g., text, images, sounds or videos programs (Y3)</li> <li>•To develop key questions and key words to search for specific information to answer a problem (e.g., important facts for a Roman-themed newspaper report) programs (Y3)</li> </ul> <p>To use appropriate tools to save and retrieve accessed information, e.g., through the use of favourites, history, copy/paste and save as programs (Y3)</p>	<ul style="list-style-type: none"> <li>•To ‘debug’ my programming to achieve a goal (Y3)</li> <li>•To understand that prediction, trial and error are important when controlling devices to achieve a specific outcome (Y3)</li> <li>•Design, write and debug programs that accomplish specific goals (Y3)</li> <li>•Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (Y3)</li> <li>•Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Y3)</li> <li>•To program a sprite to move around a set course based on my predictions (Scratch) (Y3)</li> <li>•To ‘debug’ my programming to achieve a goal (Y3)</li> </ul>	<ul style="list-style-type: none"> <li>•To select and import graphics from digital cameras, graphics packages and other sources and prepare it for processing using ICT. (e.g. cropping, resizing and editing) (Y1)</li> <li>•To produce and upload a podcast</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology safely, respectfully and responsibly (Cyberwise) (Y2)</li> <li>•Recognise acceptable/unacceptable behaviour (Y2)</li> <li>•Identify a range of ways to report concerns about content and contact (Y2)</li> <li>•I can articulate examples of good and bad online behavior (Y3)</li> <li>•I can use a range of child friendly search engines to locate different media, e.g., text, images, sounds or videos (Y3)</li> </ul>
	<b>Voacb</b>	Computer networks, communication, collaboration, search engines, digital content, sound, video, key questions, key words, favourites, history, copy, paste	Prediction, trial and error	Digital cameras, graphics packages, cropping, resizing, editing, videoing, podcast	Online behaviour, child-friendly, search engines.

Year 5				
Advent: Anglo-Saxons (History)		Pentecost: The Mayans (History)		Lent: Brazil/Rainforests (Geography)
	Computer Science	Information Technology	Digital Literacy	E-Safety
Y5	<b>Knowledge</b> <ul style="list-style-type: none"> <li>To know the importance of connectivity for computers and the opportunities they provide (communication and collaboration) (Y3)</li> <li>To know search engine results appear in a particular order (Y4)</li> </ul> <b>KS2 iv</b> <b>KS2 v</b>	<ul style="list-style-type: none"> <li>To know how to write and debug programs (Y4)</li> <li>To know how to use sequencing, selection and repetition in programs (Y4)</li> <li>To know how to use logical reasoning to detect and correct errors (Y4)</li> <li>To know how to design a game (Y4)</li> <li>To know how to use a variety of control tools</li> <li>To know how to evaluate my program and debug it (Y4)</li> </ul> <b>KS2 i - iii</b>	<ul style="list-style-type: none"> <li>To know how to record video footage (Y1, Y4)</li> <li>To know how to edit video using the Green Screen and iMovie apps</li> <li>To know how to choose and add audio clips</li> </ul> <b>KS2 iv</b>	<ul style="list-style-type: none"> <li>I know how to use technology safely (Y1 to Y4)</li> <li>I know how to report concerns (Y1 to Y4)</li> <li>To know what privacy settings are and why they are important</li> <li>I know the difference between good and bad online behaviour (Y1 to Y4)</li> <li>To know there are important choices to be made when using technology</li> </ul> <b>KS2 vii</b>
	<b>Skills</b> <ul style="list-style-type: none"> <li>To 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 (Y3)</li> <li>To understand how search results are selected and ranked (Y4)</li> </ul>	<ul style="list-style-type: none"> <li>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (Scratch) (Y4)</li> <li>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (Y4)</li> <li>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Y4)</li> <li>To design my own game including backgrounds, scoring and/or timers</li> <li>To use conditional statements, loops, variables and broadcast messages in the game</li> <li>To give my game a clear ending so the player knows if they have won or lost</li> <li>To evaluate the effectiveness of the game and debug where required (Y4)</li> </ul>	<ul style="list-style-type: none"> <li>To plan, rehearse and perform a video to be recorded and editing using the iMovie and Green Screen apps (Y1, Y4)</li> <li>To plan a short film to meet a given brief</li> <li>To capture video to match my plan (Y1, Y4)</li> <li>To edit and arrange clips to convey meaning.</li> <li>To add titles screens, transitions and special effects</li> <li>To select and add audio and music clips.</li> </ul>	<ul style="list-style-type: none"> <li>Use technology safely, respectfully and responsibly (Cyberwise) (Y1 to Y4)</li> <li>To recognise acceptable/unacceptable behaviour (Y1 to Y4)</li> <li>To identify a range of ways to report concerns about content and contact. (Y3, Y4)</li> <li>To judge what sort of privacy settings might be relevant to reducing different risks.</li> <li>To judge when and when not to answer a question online.</li> <li>To articulate what constitutes good behaviour online. (Y3, Y4)</li> <li>To discuss scenarios involving online risk</li> <li>To understand that I have to make choices when using technology and that not everything is true and/or safe. (Y3, Y4)</li> </ul>
	<b>Voacb</b> <p>Search engine results, ranking.</p>	<p>Detect, correct errors, backgrounds, scoring, timers, conditional statements, loops, broadcast messages.</p>	<p>iMovies, Green Screen, video editing, clips, title screens, transitions, special effects, audio, music, clips.</p>	<p>Privacy settings, technology, choices.</p>

**Year 6**

**Advent: Rivers and the Water Cycle (Geography) Lent: Local History Linked to WWI (History) Pentecost: Trade (Geog)**

		Computer Science	Information Technology	Digital Literacy	E-Safety
Y6	Knowledge	<ul style="list-style-type: none"> <li>To know that computer software can be used to gather, interpret and present data</li> <li>To know which tools to use to gather and interpret specific data (Y3 – Y5)</li> </ul> <p><b>KS2 v and vi</b></p>	<ul style="list-style-type: none"> <li>To know how to write and debug programs (Y3 – Y5)</li> <li>To know how to use repetition and 2-way selection</li> <li>To know how to use decomposition to solve problems</li> <li>To know how to use sequencing, selection and repetition in programs (Y4, Y5)</li> <li>To know how to work with variables (Y4, Y5)</li> <li>To know how to use logical reasoning to detect and correct errors (Y3 - Y5)</li> <li>To know how to deconstruct a problem into smaller steps (Y4, Y5)</li> <li>To know how to explain these steps (Y4, Y5)</li> <li>To know how to evaluate progress (Y5)</li> <li>To know how to input a variable to achieve a specific output (Y4, Y5)</li> <li>To know how to use different inputs to control a device</li> </ul> <p><b>KS2 I &amp; iii</b></p>	<ul style="list-style-type: none"> <li>To select the appropriate media/online tool for a specific purpose</li> <li>To be able to evaluate my own digital work and the work of others (Y4, Y5)</li> </ul> <p><b>KS2 v</b></p>	<ul style="list-style-type: none"> <li>I know how to use technology safely (Y1 to Y5)</li> <li>I know the difference between good and bad online behaviour (Y1 to Y5)</li> <li>I know how to report concerns (Y1 to Y5)</li> <li>I know the importance of passwords and protecting them (Y1 to Y5)</li> <li>I know the consequences of too much time online</li> <li>I know the importance of being kind online (Y1 to Y5)</li> <li>I know how to check the reliability of online sources (Y3 to Y5)</li> <li>I know websites can be targeted by advertisers</li> </ul> <p><b>KS2 vii</b></p>
	Skills	<ul style="list-style-type: none"> <li>To 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 (PPT linked to cyberbully for Anti-Bullying Week) (Y4, Y5)</li> <li>To select a particular online tool for a specific purpose (Y3- Y5)</li> <li>To select the most effective tool to collect data for my investigation (Y4, Y5)</li> <li>To check the data I collect for accuracy and plausibility (Y4, Y5)</li> <li>To interpret the data I collect</li> <li>To present the data I collect in an appropriate way (Y4, Y5)</li> <li>To use the skills I have developed to interrogate a database</li> </ul>	<ul style="list-style-type: none"> <li>Design, write and debug programs that accomplish specific goals (Scratch) (Y3 – Y5)</li> <li>Design algorithms that use repetition and 2-way selection</li> <li>Solve problems by decomposing them into smaller parts (Y4-Y5)</li> <li>Use sequence, selection, and repetition in programs (Y3 – Y5)</li> <li>To work with variables and various forms of input and output (Y3 – Y5)</li> <li>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Y3 - Y5)</li> <li>To deconstruct a problem into smaller steps, recognising similarities to solutions used before (Y4, Y5)</li> <li>To explain and program each of the steps in my algorithm (Y4, Y5)</li> <li>To evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm (Y4, Y5)</li> <li>To recognise when I need to use a variable to achieve a required output (Y3 - Y5)</li> <li>To use a variable and operators to stop a program (Y4, Y5)</li> <li>To use different inputs (including sensors) to control a device or onscreen action and predict what will happen.</li> </ul>	<ul style="list-style-type: none"> <li>To combine a range of media, recognising the contribution of each to achieve a particular outcome (Y2-Y5)</li> <li>To tell you why I select a particular online tool for a specific purpose (Y2- Y5)</li> <li>To be digitally discerning when evaluating the effectiveness of my own work and the work of others. (Y4-Y5)</li> </ul>	<ul style="list-style-type: none"> <li>To use technology safely, respectfully and responsibly (Y1- Y5)</li> <li>To recognise acceptable/unacceptable behaviour (Y1-Y5)</li> <li>To identify a range of ways to report concerns about content and contact (Y3-Y5)</li> <li>To protect my password and other personal information (Y1- Y5)</li> <li>To explain the consequences of sharing too much about myself online (Y2-Y5)</li> <li>To support my friends to protect themselves and make good choices online, including reporting concerns to an adult</li> <li>To explain the consequences of spending too much time online or on a game (Y3 - Y5)</li> <li>To explain the consequences to myself and others of not communicating kindly and respectfully (Cyberwise) (Y1 -, Y5)</li> <li>To protect my computer or device from harm on the Internet (Y3- Y5)</li> <li>To check the reliability of a website (Y5)</li> <li>To tell you about copyright and acknowledge the sources of information that I find online.</li> <li>I know that websites can use my data to make money and target their advertising.</li> </ul>
	Voac b	Data, database	Deconstruct, solutions, effectiveness, required output, operators	Media, online tool, digitally discerning, effectiveness.	Report concerns, screen time, kindness, online, reliability, copyright, advertising

