



## St Gregory's Computing Knowledge & Skills Progression



	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Online Safety</b>	To explore a variety of sources and decide what is safe/unsafe, as a class. To decide which information should be kept private from strangers. To know who safe adults are.	To explore a variety of sources and decide what is safe/unsafe, as a class. To decide which information should be kept private from strangers. To know who safe adults are.	To show an understanding of which websites are safe to use alone or with an adult. To know which information is to be kept private or public and some of the consequences to sharing private information. To know who safe adults are, both at home and at school.	To show an understanding of which websites are safe to use alone or with an adult. To know which information is to be kept private or public and some of the consequences to sharing private information. To know who safe adults are, both at home and at school.	To know why some websites are safer to use. To understand the consequences to sharing information online, e.g. employers looking at social media and online profiles. To know a variety of safe adults and know how to report websites that make them feel worried or concerned.	To know why some websites are safer to use. To understand the consequences to sharing information online, e.g. employers looking at social media and online profiles. To know a variety of safe adults and know how to report websites that make them feel worried or concerned.
	Internet, Safe, Unsafe, Safe adults, Stranger, Choices, Website, App, Rules, Online, Private information, Email, Appropriate/inappropriate sites, Cyber-bullying, Digital footprint, Keyword searching	Internet, Safe, Unsafe, Safe adults, Stranger, Choices, Website, App, Rules, Online, Private information, Email, Appropriate/inappropriate sites, Cyber-bullying, Digital footprint, Keyword searching	Website, Private, Public, Contact, Acceptable, Unacceptable, E-safety rules, Secure passwords Report abuse button, Gaming, Blogs	Website, Private, Public, Contact, Acceptable, Unacceptable, E-safety rules, Secure passwords Report abuse button, Gaming, Blogs	Consequence, Report, Social media, Concerns, Responsible online communication, Informed choices, Virus threats, Messaging	Consequence, Report, Social media, Concerns, Responsible online communication, Informed choices, Virus threats, Messaging
<b>Research</b>	To explore different sources of information (including electronic and paper, etc.) and discuss pros and cons of both, as a group.	To use a given search engine to research information about a topic.	To generate questions to research and then use Computing resources to find relevant answers, using the class topic. To note any difficulties in trying to find relevant information.	To begin to understand copyright regulations when using copy and paste. To show an understanding that not all information online is correct.	To independently, and safely, search the internet to find a range of information, using the class topic. To use a variety of methods to check accuracy of research.	To independently, and safely, search the internet to find a range of information on a chosen topic. To use appropriate methods to check both accuracy and bias of information. To repurpose information for a given audience.

	Information, Source, Digital	Search engine, Research, Retrieve	Questions, Relevant, World Wide Web	Copyright, Regulations, Copy, Paste	Compare, Evaluate, Accuracy	Bias, Purpose, Audience
<b>Coding and algorithms</b>	To control simple everyday devices to make them produce different outcomes. To understand and follow one-step unambiguous instructions.	To control a variety of devices, both on and off screen. To make predictions about the effect of their programming. To understand and follow two-step unambiguous instructions.	To type a short, unambiguous sequence of instructions. To plan ahead (choose a destination) when programming on and off screen.	To use coding software to control devices. To predict, test and refine their algorithms.	To independently create a sequence of commands to control a device.	To design, build, test, evaluation and modify the algorithm to ensure it is fit for purpose.
	Device, Outcome, Instruction, Equipment, Buttons Movement, Instructions, Robots, Patterns, Program	Predict, Effect, Precise, Unambiguous, Forward, Backward, Right-angle turn, Algorithm, Sequence, Debug	Destination, Goal, Sequence instructions, Sequence debugging, Test + improve, Logo commands	Software, Refine, Command, Error, Type + edit logo commands, Sensors, Open-ended problems, Bugs in programs	Control, Explore procedures, Refine procedures, Variable, Hardware + software control, Change inputs, Different outputs, Articulate solutions	Design, Build, Evaluate, Modify, Purpose, Predict outputs, Plan, program, test & review a program, Program writing, Control mimics + devices, Sensors, Measure input, Create variables, Link errors
<b>Data Handling</b>	To use a simple pictogram or painting program to develop simple graphical awareness, as a class.	To enter data into a simple graphing program to create a graph To save, retrieve and edit their work.	To use a simple database (the structure of which has already been set up) to enter and save data. To search their data to answer enquiries.	To create a data collection sheet and use it to create a simple database to answer questions, as a group.	To independently solve a problem by planning and carrying out data collection. To enter information and interrogate it (searching, sorting, graphing). To reflect on how useful the collected data was.	To understand and demonstrate the need for accuracy when creating databases. To relate and discuss the use of spreadsheets to situations in the wider world, e.g. police databases.
	Pictogram, Graph, Data, Collect, Count, Organise Photographs, Video, Sound, Data, Digitally	Save, Retrieve, Edit, Capture moments, Magnified images, Questions, Data collection, Graphs, Charts	Search, Enquiry, Question, Construct, Contribute, Record data, Present data, Data logger	Collection sheet, Database, Analyse, Database creation, Database searches, Inaccurate data	Data collection, Interrogate, Search, Sort, Graph, Spreadsheets, Complex searches (and/or: ), Problem solving, Present	Accuracy, Spreadsheets, Wider world, Generate, Process, Interpret, Store, Present information, Plausibility,

					answers, Analyse information, Question data	Appropriate data tool, Investigations
<b>Understanding technology</b>	To show an awareness of the range of devices used in everyday life. To understand that what has been created on one device can be shared to another.	To show an awareness of a range of inputs, e.g. mouse, microphone. To become familiar with managing a journey on a website, e.g. back button, hyperlinks.	To show an understanding that a password is vital in protecting and accessing personal files. To begin to understand URLs.	To choose specific devices and tools for specific purposes. To show an understanding of the school network and how computers are linked to resources.	To perform a search using a search engine and show an awareness for accuracy in spelling. To understand how networks used at home are connected to the wider world, e.g. banks.	To perform a search using a search engine and check the results against another search engine, explain why they may be different. To evaluate the tools available and demonstrate an awareness of the different outcomes of the tools.
	Device, Share, Technology, Create, Internet, Purpose, Online tools, Communicate	Input, Mouse, Microphone, Keyboard, Journey, Hyperlink, Back button, Information sources, Communication, Website content	Password, Protect, Personal, URLs, Collaborate, Appropriate, online communication, Search tools, Appropriate websites, Owner	Tool, Network, Purpose, Information collection, Reliability	Search, Search engine, Accuracy, Connected, networks, Computing devices, Internet parts, Collaboration, Responsibility, Searching strategies, Webpages	Check, Compare, Evaluate, Outcome, Information movement, Connecting devices, Different audiences, Research strategies, Search result rankings, Acknowledge resources