



Computing Progression at St Minver School

Strand	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Programming	Children follow instructions involving several ideas or actions.	I can understand and create algorithms (steps or rules as instructions, e.g. how to make a sandwich) I understand that algorithms must be precise and unambiguous	I can predict the behaviour of simple programs I can create and run a program (an algorithm or multiple algorithms that can be understood by a computer) I can debug (find and fix a problem) within a simple program	I can use selection in my programs. (Also known as conditionals or If / Then statements). (e.g. if a character moves onto a yellow square, then gain two points) I can create variables within my programs (e.g. a timer, score)	I can use repetition (sometimes referred to as loops) in my programs. I can debug programs multiple times to accomplish specific goals	I can write code that performs calculations with variables (e.g. every time a coin is collected, add one point to the score) I can decompose (break into smaller chunks) a programming problem	I can use a random function in my code for purposeful effect (e.g. a program randomly chooses a number from 1-4 and displays a corresponding statement) I can produce a multi-function, debugged program that uses variables, selection and repetition.
Controlling hardware and machines	Children recognise that a range of technology is used in places	I can identify the major parts of digital devices (e.g.	I understand that digital devices run programs that have been created by	I can control or simulate programmable hardware (e.g. a Sphero robot)	I can identify inputs of common computing devices (e.g keys on a	I can create code that acts on multiple inputs I can create code that	I can program and debug multiple functions on programmable

	such as homes and schools.	keyboard, screen, power, batteries, touchscreen)	humans		keyboard, temperature sensor, tilting a device) I can identify the outputs of common computing devices (e.g. display on a screen, Bluetooth signal, print)	produces multiple outputs	hardware (e.g. with a Microbit)
Operate, understand and implement	Children select and use technology for particular purposes.	I can use apps and websites to aid my learning I can save and retrieve work that I have produced (includes auto-save) I can move a cursor with the trackpad and click on an icon	I can type and edit text I can use two-finger scrolling on a touchpad I can use the shift key to create capital letters I understand that emails and other digital communications can be sent and received from various types of digital device	I know how to search for items on the internet I can use technology to organise and manipulate digital content I can type to achieve a specific goal I understand how to type a space after a punctuation mark. I can perform a two-finger click to access	I can present collected information or data to a group or audience I can type to achieve a specific goal, including accurate punctuation and spelling check I can use technical vocabulary to describe how computing equipment and networks function,	I can edit and improve on-screen writing, including digital thesaurus use I can collaborate meaningfully with networked technologies (for example, within a shared document or shared workspace) I can combine a variety of software (programs that run on computers) to	I can collect and analyse data or information using technology (e.g. use a spreadsheet to produce a graph) I can make document layout and design decisions based on purpose (e.g. format a formal letter) I can re-order on-screen sentences for

				additional options	including storage (e.g. USB drives, Google drive), apps and the world wide web	accomplish given goals	clarity, purpose or effect
Multimedia and sound	Children select and use technology for particular purposes.	I can use technology to capture photos (e.g. with an iPad)	I can use technology to capture and manipulate (position, re-size, rotate) photos as part of a piece of work	I can create video as part of my learning (e.g. using an iPad) I can create an animation (e.g. stop-frame animation on an iPad)	I can create sound, music or a podcast using digital technology I can create a 3D graphic using computer-aided design software (e.g. using Tinkercad)	I can edit video, bringing together different media elements (e.g. stills, video, captions and sound) to produce an effective final product I can storyboard and create an animation	I can design, create and edit sound, music, or a podcast using digital technology I can design, create and modify 3D graphics for purpose using computer-aided design software (e.g. using Tinkercad)
<i>Self-image and Identity</i>	Children will talk about how they and others show feelings, talk about their own and others' behaviour and its consequences, and know that some behaviour is unacceptable.	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.	I can describe ways in which people might make themselves look different online.	I can describe ways in which media can shape ideas about gender.	I can explain how my online identity can be different to the identity I present in 'real life'.	I can explain how identity online can be copied, modified or altered.	I can explain how I can represent myself in different ways

<p><i>Self-image and Identity</i> <i>I can describe ways in which media can shape ideas about gender.</i></p>	<p>Children will show sensitivity to others' needs and feelings and form positive relationships with adults and other children. (In the context of Computing the children will know about appropriate ways of communicating regardless of online or in person).</p>	<p>I can recognise some ways in which the internet can be used to communicate.</p>	<p>I can explain some risks of communicating online with others I don't know well.</p>	<p>Self-image and Identity I can describe ways in which media can shape ideas about gender.</p>	<p>I can explain what it means to 'know someone' online and why this might be different from knowing someone in real life.</p>	<p>I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming).</p>	<p>I can demonstrate how I would support others (including those who are having difficulties) online.</p>
<p>Online bullying</p>	<p>Children will talk about how they and others show feelings, talk about their own and others' behaviour and its consequences, and know that some behaviour is unacceptable.</p>	<p>I can describe how to behave online in ways that do not upset others</p>	<p>I can describe how to behave online in ways that do not upset others</p>	<p>I can describe rules about how to behave online and how I follow them.</p>	<p>I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation).</p>	<p>I can explain how I would report online bullying on the apps and platforms that I use.</p>	<p>I can identify a range of ways to report concerns both in school and at home about online bullying.</p>

Managing online information	Children recognise what technology can be used to access information.	I can identify devices I could use to access information on the internet.	I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections).	I can evaluate digital content and can explain how I make choices from search results.	I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'. I understand what criteria have to be met before something is a 'fact'	I can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true.	I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.
Health, wellbeing and lifestyle	Children are able to work as part of a group or class and understand and follow the rules.	I can explain rules to keep us safe when we are using technology both in and beyond the home.	I can explain simple guidance for using technology in different environments and settings.	I can identify situations when I might need to limit the amount of time I use technology.	I can describe ways technology can affect healthy sleep and can describe some of the issues.	I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.	I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise).
Privacy and security	I know my name and can recognise it. I know my age.	I can identify some simple examples of my personal information (e.g. name, address,	I can explain why I should always ask a trusted adult before I share any information about myself online.	I can describe simple strategies for creating and keeping passwords private.	I can explain how internet use can be monitored.	I can explain how many free apps or services may read and share my private information (e.g. friends,	I can describe ways in which some online content targets people to gain money or information illegally; I can

		birthday, age, location).				contacts, likes, images, videos, voice, messages, geolocation) with others.	describe strategies to help me identify such content (e.g. scams, phishing).
Copyright and ownership	I can write my name.	I can name my work so that others know it belongs to me.	I can recognise that content on the internet may belong to other people.	I can explain why copying someone else's work from the internet without permission can cause problems.	I can assess and justify when it is acceptable to use the work of others.	I can demonstrate the use of search tools to find and access online content which can be reused by others.	I can demonstrate how to make references to and acknowledge sources I have used from the internet.