

Shillington Lower school and Stondon Lower school (Shillington and Stondon Federation)

Curriculum map/skills progression grid

Date	Computing Skills Progression Review date						Subject Leader
April 2021	September 2022						Sarah Comerford
<p>This document aims to give guidance on the progression of skills and knowledge across the year groups. It is used to support planning the year groups long term overviews that break up content into termly blocks. As children make progress through the school, it is expected that they can demonstrate a wider range of independent skills and knowledge in the three strands of computing across the curriculum. In computing, like in other subjects, we recognise the importance that a range of different teaching methods could be used in supporting pupils to know more, understand more and remember more. In computing we use the following approaches; open-ended activities, discussion and collaborative working, scaffolding, problem solving and unplugged activities. These will be evident in pupil discussion, observations and work in books in order that learning opportunities in computing are as effective as possible and that pupils make progress throughout the year and across different years.</p>							
Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Basic Skills</b>							
	<p>By the end of Reception, children will be able to...</p> <p>Use a mouse and/or touchpad to navigate a simple program.</p> <p>Begin to type their name, first and surname, on a keyboard.</p> <p>Know that they should only use the internet with a trusted adults permission e.g. parents or teaching staff</p>	<p>By the end of Year 1, children will be able to...</p> <p>Log on and off a laptop using their username and password.</p> <p>Open different programs e.g. Google Chrome, Paint, Word etc.</p> <p>Be confident when typing their name and surname and short pieces of text in a word document or search bar on the internet.</p>	<p>By the end of Year 2, children will be able to...</p> <p>Type longer pieces of text using a keyboards with increasing accuracy and developing pace.</p> <p>Save a file/document.</p> <p>Open/retrieve a file/document.</p> <p>Copy and paste an image and text from the internet into another document e.g. Word, PowerPoint.</p>	<p>By the end of Year 3, children will be able to...</p> <p>Begin to use some touch typing skills, developing a faster pace and accuracy.</p> <p>Understand the different parts of a computer including; keyboard, mouse, monitor.</p> <p>Recognise acceptable and unacceptable behaviour online</p>	<p>By the end of Year 4, children will be able to...</p> <p>Use some touch typing skills with an increasing pace and accuracy.</p> <p>Use different programs with increasing confidence e.g. Word, PowerPoint, the internet, Excel etc.</p> <p>Use technology responsibly, knowing communication online can be seen by others.</p>	<p>By the end of Year 5, children will be able to...</p> <p>Use some touch typing skills with an increasing pace and accuracy.</p> <p>Use a range of different software for given tasks.</p> <p>Use technology with an increasing awareness of how to keep themselves and others safe online.</p>	<p>By the end of Year 6, children will be able to...</p> <p>Use some touch typing skills with an increasing pace and accuracy.</p> <p>select software appropriately for the task they have been given.</p> <p>Use technology with an increasing awareness of how to keep themselves and others safe online.</p>

		Know what to do if something happens on a device that they do not like – tell a trusted adult e.g. parent or teaching staff	Understand the importance of keeping personal information private.				
<b>Digital Literacy</b>							
<b>E-Safety</b>	Children begin to show a simple understanding about how to use the internet safely.	Children understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies.	Children are able to use technology safely and understand the importance of keeping personal information private.	Children use technology safely and respectfully, keeping personal information private.  They also use technology safely and recognise acceptable and unacceptable behaviour online.	Children use technology responsibly and understand that communication online may be seen by others  They also understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies.	Children understand the need to only select age appropriate content.	Children can use technology respectfully and responsibly.
<b>Using Computers</b>	Children begin to know that information can be retrieved from computers.  They are able to use ICT hardware to interact with age appropriate computer software.	Children use technology purposefully to create digital content.	Children use technology purposefully to create, organise, store, manipulate and retrieve digital content.  They also begin to be able to compare the benefits of different programs.	With support, children are able to select and use a variety of software to accomplish goals.	With support, children are able to select and use a variety of software on a range of digital devices.	Children can independently select and use appropriate software for a task.  Independently select, use and combine a variety of software to design and create content for a given audience.	Independently select, use and combine a variety of software to design and create content for a given audience.  Children can design and create a range of programs, systems and content for a given audience.

							Independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information.
Net Searching				Children can use simple search technologies and recognise that some sources are more reliable than others.	Children understand how results are selected and ranked by search engines.	Children use filters in search technologies effectively and appreciate how results are selected and ranked.	Use filters in search technologies effectively and is discerning when evaluating digital content.
<b>Computer Science</b>							
Coding	<p>Children show an interest in technological toys and toys with moving parts e.g. camera, iPads, pressing parts, lifting flaps.</p> <p>Children are able to complete simple tasks on a laptop/iPad/phone.</p>	<p>Children begin to predict the behaviour of simple programs.</p> <p>They understand what algorithms are and how they are implemented on digital devices.</p>	<p>Children begin to use logical reasoning to predict the behaviour of simple programs and use this to create simple programs.</p> <p>They are able to see simple errors and debug simple programs by using logical reasoning to predict the actions instructed by the code.</p> <p>Children understand that programs work by following precise and unambiguous instructions.</p>	<p>Children design, write and debug programs that control or simulate virtual events.</p> <p>They use logical reasoning to explain how some simple algorithms work.</p>	<p>Children begin to decompose (break down) programs into smaller parts and use logical reasoning to detect and correct errors in algorithms and programs.</p> <p>They select, use and combine a variety of software, systems and content that accomplish given goals</p>	<p>Children will design, input and test increasingly complex set of instructions to a program or device.</p> <p>Design, write and debug programs that accomplish specific goals, including controlling of stimulating physical systems.</p> <p>Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated.</p> <p>Children will design, write and test simple programs</p>	<p>Include use of sequences, selection and repetition with the hardware used to explore real world systems.</p> <p>Children solve problems by decomposing them into smaller parts.</p> <p>They will create programs which use variables.</p> <p>Use variables, sequence, selection, and repetition in programs.</p> <p>Children will use logical reasoning to explain how increasingly complex</p>

						<p>with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency.</p>	algorithms work and to detect and correct errors in algorithms and programs efficiently.
Networks				<p>Children begin to understand that computer networks enable the sharing of data and information.</p> <p>They also begin to understand that the internet is a large network of computers and that information can be shared between computers.</p>	Children begin to understand what servers are and how they provide services to a network.	Begin to use internet services to share and transfer data to a third party.	Children will understand how computer networks enable computers to communicate and collaborate. Begin to use internet services within his/her own creations to share and transfer data to a third party.
<b>Information Technology</b>							
Computers	Children recognise that a range of technology is used in places such as homes and schools.	Children are able to recognise common uses of information technology in the home and school environment	Children recognise common uses of information technology in the home and school environment and in	Children recognise familiar forms of input and output devices and how they are used and	Children use different input devices such as cameras or sensors.	Children will select, use and combine a variety of software on a range of digital devices to design and create a range	Children will continue to select, use and combine a variety of software on a range of digital devices to design

	<p>They select and use technology for particular purposes and know how to operate simple equipment.</p>		<p>the wider community.</p>	<p>make efficient use of them.</p>		<p>of content that accomplish given goals.</p> <p>Children will collect, analyse, evaluate, and present data and information.</p>	<p>and create a range of content that accomplish given goals.</p> <p>Children will continue to collect, analyse, evaluate, and present data and information.</p>
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