

Computing Curriculum Overview 2018-2019

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>E-safety Unit:</p> <p>Understand where to go for help and support when they have concerns about content or contact on the internet or other online technologies</p>	<p>Using technology Unit:</p> <p>Recognise common uses of information technology in the home and school environment</p> <p>Use technology purposefully to create digital content</p>	<p>Coding Unit: -link in with theme topic - Superheroes</p> <p>Understand what algorithms are and how they are implemented on digital devices</p> <p>Predict the behaviour of simple programs</p>	<p>Creating digital content - linked to theme topic: Street Detectives</p> <p>Use technology purposefully to create digital content</p>	<p>Creating digital content - linked to theme topic:</p> <p>Use technology purposefully to create digital content</p> <p><i>Depending on timescale:</i></p> <p><i>Additional coding linked to theme topics.</i></p>	
Year 2	<p>E-safety unit:</p> <p>Use technology safely and keep personal information private</p>	<p>Coding Unit: Linked to Theme Topic - Animals (Bee-bots/ Scratch)</p> <p>Use logical reasoning to predict the behaviour of simple programs</p> <p>Create simple programs</p>	<p>Creating digital content: Linked to Theme Topic - Bright Lights, Big City</p> <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>Coding Unit: Linked to Theme Topic - Bright Lights, Big City</p> <p>Create and debug simple programs</p> <p>Debug simple programs by using logical reasoning to predict the actions instructed by the code</p>	<p>Creating digital content unit: Linked to Theme Topic - Land A’Hoy</p> <p>Use technology purposefully to create digital content comparing the benefits of different programs</p> <p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Create and debug simple programs</p>	

Year 3	<p>E-safety Unit: Use technology safely and recognise acceptable and unacceptable behaviour</p> <p>Use technology safely and respectfully, keeping personal information private</p>	<p>Programming Unit: Design, write and debug programs that control or simulate virtual events</p> <p>Using logical reasoning to explain how some simple algorithms work</p> <p>Linked to Theme Topic: Romans</p> <p>With support select and use a variety of software to accomplish goals</p> <p>Use Purple Mash: create mosaic tiles, artwork, writing templates</p>	<p>Using the internet and presenting: Understand that the internet is a large network of computers and that information can be shared between computers</p> <p>Linked to Them Topic: Tremors and Mountains With support select and use a variety of software to accomplish goals</p> <p>Use simple search technologies</p> <p>Use simple search technologies and recognise that some sources are more reliable than others</p> <p>Use technology safely and respectfully</p> <p>With support select and use a variety of software to accomplish goals</p> <p>Coding:</p> <p>Using Purple Mash 2Code Design, write and debug programs that control or simulate virtual events</p> <p>Use Scratch to simulate volcano erupting</p>		<p>Using Computers:</p> <p>Recognise familiar forms of input and output devices and how they are used Make efficient use of familiar forms of input and output devices Understand that computer networks enable the sharing of data and information</p> <p>Use simple search technologies and recognise that some sources are more reliable than others</p> <p>Linked to Theme Topic: Using 2Design and Create - create sweet wrapper using CAD</p> <p>With support select and use a variety of software to accomplish goals</p> <p>Programming:</p> <p>Further development of skills in:</p> <p>Design, write and debug programs that control or simulate virtual events Use logical reasoning to explain how some simple algorithms work</p>	

Year 4	<p>E-safety unit:</p> <p>Use technology responsibly and understand that communication online may be seen by others</p> <p>Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies</p>	<p>About Me Presentation:</p> <p>Understand what servers are and how they provide services to a network</p> <p>With support select and use a variety of software on range of digital devices</p> <p>Programming: Decompose programs into smaller parts Use logical reasoning to detect and correct errors in algorithms and programs Select, use and combine a variety of software, systems and content that accomplish given goals (editing in Scratch) -Link to Theme Topic - simulate a viking raid in scratch</p>	<p>Data Unit:</p> <p>With support select, use and combine a variety of software on a range of digital devices to accomplish given goals (spreadsheets/graphs and charts)</p> <p>Possible links to Theme Topic re collecting data on America, or can be linked to sport etc.</p>	<p>Presenting information:</p> <p>With support select, use and combine a variety of software on a range of digital devices to accomplish given goals</p> <p>Using other input devices such as cameras or sensors (using audio, cameras, range of software)</p>	<p>Programming:</p> <p>Decompose programs into smaller parts</p> <p>Use logical reasoning to detect and correct errors in algorithms and programs - <i>using 2Logo - shapes, angles, distance</i></p> <p>Link to Theme Topic - create a sandwich wrapper using 2Design CAD</p> <p>With support select, use and combine a variety of software on a range of digital devices to accomplish given goals</p>	<p>Networks:</p> <p>Understand what servers are and how they provide services to a network</p> <p>Understand how results are selected and ranked in search engines</p> <p>Use technology responsibly and understand that communication online may be seen by others.</p> <p>Additional programming short unit - Scratch -linked to theme topic</p>
Year 5	<p>E-safety Unit:</p> <p>Understand the need to only select age appropriate content -</p>	<p>Google Classroom - selecting and using software:</p> <p>Begin to use internet</p>	<p>Programming Units:</p> <p>Design, input and test an increasingly complex set of instructions to a</p>	<p>Search & filters</p> <p>Use filters in search technologies effectively Use filters in search</p>	<p>Use and combine a variety of software</p> <p>Independently</p>	<p>Programming</p> <p>Design, write and debug programs that accomplish</p>

	<p>includes cyberbullying, appropriate games and websites, social media and sharing content</p> <p>Presenting information - Possible links to Theme - create Wanted Poster.</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience</p>	<p>services to share and transfer data to a third party</p> <p>Independently select and use appropriate software for a task</p> <p>Select, use and combine a variety of software to design and create content for a given audience</p> <p>Blogs, spreadsheets, google slides.</p>	<p>program or device - Flowol 4</p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating 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><i>Introduction to Flowol 4 - simulating physical systems, repeats, "if, else" statements</i></p>	<p>technologies effectively and appreciate how results are selected and ranked</p> <p><i>Using filters in spreadsheets, internet search engines, sort tools</i></p>	<p>select, use and combine a variety of software to design and create content for a given audience - working with art packages, audio software to create sound clips, presenting content in different ways.</p> <p>Link to Theme Topic - Gallery Rebels - using art apps/software</p>	<p>specific goals, including controlling or simulating 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><i>Using Lightbot Hour of Code resources - simulating physical system, procedures within procedures</i></p>
Year 6	<p>E-safety: Use technology respectfully and responsibly</p> <p>Identify a range of ways to report concerns about content, contact and conduct in and out of school -</p>	<p>Google Classroom: Begin to use internet services within own creations to share and transfer data to a third party</p> <p>Independently select, use and combine a variety of software to design and create</p>	<p>Programming - Creating a game</p> <p>Design and create a range of programs systems and content for a given audience</p> <p>Include use of sequences, selection and repetition with the hardware used to</p>	<p>Computers:</p> <p>Understand how computer networks enable computers to communicate and collaborate</p> <p>Design and create a range of programs systems and content</p>	<p>Theme presentation:</p> <p>Be discerning when evaluating digital content</p> <p>Use filters in search technologies effectively and is</p>	<p>Programming:</p> <p>Python - short intro to Python</p> <p>complex programming language</p>

	<p><i>social networking</i> <i>sharing of information</i> <i>reporting abuse online</i></p>	<p>content for a given audience, including collecting, analysing, evaluating and presenting data and information - Spreadsheets and databases</p> <p>Possible links to Theme topic - Frozen Kingdom</p> <p>database on passengers presenting information about the Titanic Recording a news announcement</p>	<p>explore real world systems</p> <p>Solves problems by decomposing them into smaller parts</p> <p>Create programs which use variables</p> <p>Use variables, sequences, selection and repetition in programs</p> <p>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently</p>	<p>for given audience Use filters in search technologies effectively and is discerning when evaluating content</p> <p><i>Databases, using filters, sorting, reliable websites</i></p>	<p>discerning when evaluating digital content</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information</p>	
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