



St Marie's Catholic Primary School

Long Term Plan: Computing

	Topic	National Curriculum	Vocabulary	Knowledge	Skills
Year 5	Online safety	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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Online safety Smart rules Password Reputable Encryption Identity theft Shared image Plagiarism Citations Reference Bibliography	To review sources of support when using technology and children's responsibility to one another in their online behaviour. To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. Ensure reliability through using different methods of communication	To gain a greater understanding of the impact that sharing digital content can have. To know how to maintain secure passwords. To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this. To learn about how to reference sources in their work
	3D Modelling	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. use technology safely, respectfully and responsibly;	CAD Modelling 3D 2D Viewpoint Polygon Net 3D printing Points template	To use a computer to create and manipulate three-dimensional (3D) digital objects To compare working digitally with 2D and 3D graphics To construct a digital 3D model of a physical object To identify that physical objects can be broken down into a collection of 3D shapes To design a digital model by	To understand designing for a purpose. To understand printing and making.

		recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.		combining 3D objects To develop and improve a digital 3D model	
	5.8 Word processing		Copyright Cursor Document Font In-built styles Merge cells Paragraph formatting Readability Text Text formatting Text wrapping Word art Word processing tool	To add and edit images to a word document. To change the look of text within a document. To add features to a document to enhance its look and usability. To use tables within MS Word to present information. To use templates and the pdf format. To consider page layout including heading and columns.	To know what a word processing tool is for. To know how to use word wrap with images and text.
	Coding	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range	Action Algorithm Bug Output Command Input Debug/Debugging Repeat Selection Design Mode Code Design Event If Object Control Alert Get Input If/Else Simulation	To represent a program design and algorithm. To create a program that simulates a physical system using decomposition. To explore string and text variable types so that the most appropriate can be used in programs. To use the Launch command in 2Code Gorilla To program a playable game with timers and scorepad.	

		<p>of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>			
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Theme Key:

	Coding and Computational thinking		Spreadsheets		Internet and Email		Art and Design		Music		Databases and graphing		Writing and Presenting		Communication and networks
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