

Holy Family Catholic Primary School
Computing End Points - Termly



Computing intent

I always know how to be safe on a Computer.
 I enjoy learning new things in Computer
 Science, Information Technology and Digital
 Literacy.

INTENT	To enhance our children’s digital competence and enable them to use computational thinking, whilst exploring and answering the questions, “What does it mean to be digitally literate?” and “How do I keep myself and others safe online?”						
Year groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Year 1	<p style="text-align: center;">iAlogrithm</p> <ul style="list-style-type: none"> Children will learn how to devise and follow a simple algorithm. Children will understand that programs execute by following instructions. Children will learn how to test and debug a simple algorithm. Children will predict the outcome of an algorithm. Children will explore condition and outcomes. 		<p style="text-align: center;">iModel</p> <ul style="list-style-type: none"> Children will recognise how computer models work. Children will understand that computers can be used to make choices. Children will learn that computers can be used to model an environment. Children will learn how to create a representation of a real fantasy game or story. <p style="text-align: center;">iSafe</p> <ul style="list-style-type: none"> Children will learn what being online means and how to identify adults who can help. Children will understand that photographs can be shared online and that permission is needed. Children will learn about where to go for help with issues online. 			<p style="text-align: center;">iLearn AI</p> <ul style="list-style-type: none"> Children will understand that intelligence can be simulated by machines. Children will learn about everyday AI applications. Children will understand that computers learn using information given to them by people. Children will understand that artificial intelligence (AI) may not always be accurate or reliable Children will understand that AI can help people be creative. 	

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Year 2			<ul style="list-style-type: none"> Children will learn about online manipulation 			
		<p style="text-align: center;">iSearch</p> <ul style="list-style-type: none"> Children will learn how to use links to navigate to a website. Children will recognise that the world wide web can be used to answer questions. Children will learn how to use hyperlinks. Children will learn how to locate specific information using a website. Children will learn how to collect information from a number of websites. 	<p style="text-align: center;">iSafe</p> <ul style="list-style-type: none"> Children will learn about the importance of a trusted adult. Children will understand that not everyone is trustworthy. Children will recognise when it is wise to turn to a trusted adult. Children will recognize when unsafe situations. Children will learn how to participate in a n online environment. 	<p style="text-align: center;">iProgram (Unit 1)</p> <ul style="list-style-type: none"> Children will learn that algorithms can describe everyday activities. Children will understand that algorithms are made up of steps. Children will learn about how algorithms can repeat steps. Children will learn how to program a simple animation involving movement. Children will learn how to write a simple program which produces output. Children will learn how to create a simple animation 		<p style="text-align: center;">iAnimate</p> <ul style="list-style-type: none"> Children will understand what an animation is. Children will understand the requirements of an animation. Children will learn about the importance of a storyboard. Children will understand that animations need to be scripted. Children will know how to create a simple animation using software. Children will know how to animate a background.
Year 3		<p style="text-align: center;">iSimulate</p> <ul style="list-style-type: none"> Children will know that computer simulations can represent real or imaginary situations. Children will know that computer 		<p style="text-align: center;">iNetwork</p> <ul style="list-style-type: none"> Children will know what a network is. Children will learn about the key parts of a computer network. Children will know that the internet is the physical 		<p style="text-align: center;">iConnect</p> <ul style="list-style-type: none"> Children will know that the internet is many computers that are connected. Children will know how to use basic navigation skills to browse the world wide web. Children will know how to

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Computing End Points - Termly

	<p>simulations are guided by rules.</p> <ul style="list-style-type: none"> • Children will know the effect of changing variables in a simulation using them to make and test predictions. • Children will know that simulations help us to understand difficult concepts. • Children will learn how to design and produce a computer simulation or adventure game 		<p>connection between computers and networks.</p> <ul style="list-style-type: none"> • Children will understand that devices on networks have a unique address. <p style="text-align: center;">iSafe</p> <ul style="list-style-type: none"> • Children will know some measures that can be taken to stay safe. • Children will know potential consequences of sharing without consent. • Children will know some of the ways we can protect ourselves online against manipulation. • Children will know the ways the internet can make young people feel about themselves. • Children will know the need for strong passwords. • Children will know how to identify several different forms advertising can take online. 		<p>find the main features of web browsers.</p> <ul style="list-style-type: none"> • Children will know how to find information using the search engine. • Children will know the basic steps that can help distinguish safe and credible websites. • Children will know that copyright is an author's right of ownership and it is illegal to steal other people's material. 	
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Year 4		<p style="text-align: center;">iProgram 1</p> <ul style="list-style-type: none"> • Children will know the need to reuse code in programming. • Children will know that action can be programmed to synchronise. • Children will know that broadcasts can be used to change scenes in Scratch. • Children will know how to detect and correct errors in a computer program. • Children will know that code can be remixed and reused to create new content. 	<p style="text-align: center;">iSafe</p> <ul style="list-style-type: none"> • Children will know some measure that can be taken to stay safe. • Children will know potential consequences of sharing without consent. • Children will know some of the ways we can protect ourselves online against manipulation. • Children will know the ways the internet can make young people feel about themselves. • Children will know the need for strong passwords. • Children will know how to identify several different forms advertising can take online. 	<p style="text-align: center;">iData</p> <ul style="list-style-type: none"> • Children will know that computers represent data as numbers and count using switches of 'on' and 'off' (0 and 1). • Children will know how to sort record cards using field names. • Children will know that storing information in an organised way helps answer questions. • Children will know how to search a database to answer questions. • Children will know how to use the information in a database to create a simple chart 		<p style="text-align: center;">iLearn AI</p> <ul style="list-style-type: none"> • Children will identify examples of AI in everyday life • Children will understand that computers are taught to learn • Children will understand that computers learn using information given to them by people. • Children will understand the importance of using high quality data to train and test a machine learning model. • Children will practice and review the unit.
Year 5	<p style="text-align: center;">iDraw</p> <ul style="list-style-type: none"> • Children will know that digital tools can be used to create images. • Children will know that vector images are made up of shapes and lines. • Children will learn 		<p style="text-align: center;">iWeb</p> <ul style="list-style-type: none"> • Children will know that the world wide web is one of the services offered on the internet. • Children will know that many people remix content to work on the world wide 		<p style="text-align: center;">iModel</p> <ul style="list-style-type: none"> • Children will know basic 3D modelling tools. • Children will know that graphical models can easily be changed. • Children will know how to use features of graphical modelling software to develop a 3D model. 	

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	<p>how to use digital tools to improve detail.</p> <ul style="list-style-type: none"> • Children will know that vector images are constructed of layers. • Children will know how to design and create vector images. 		<p>web.</p> <ul style="list-style-type: none"> • Children will know that HTML gives a web page structure. • Children will know how to read basic HTML code. • Children will know how to use research for the creation of a website. <p style="text-align: center;">iSafe</p> <ul style="list-style-type: none"> • Children will know the risks and benefits of various modes of communication. • Children will know the concept of personal and private information. • Children will learn the SMART rules for being online. • Children will know the validity of online content. • Children will know how to chat sensibly and safely. <p>Children will know what to do if confronted with cyber bullying..</p>		<ul style="list-style-type: none"> • Children will know how to evaluate and improve 3D models. 	
Year 6		<p>iProgram (Unit 1)</p> <ul style="list-style-type: none"> • Children will know the various inputs that computer 	<p>iSafe</p> <ul style="list-style-type: none"> • Children will know the importance of protecting 	<p>iData</p> <ul style="list-style-type: none"> • Children will know some parts of a spreadsheet. 		<p>ILearn AI</p> <ul style="list-style-type: none"> • Children will understand what artificial intelligence is.

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		<p>games can use.</p> <ul style="list-style-type: none"> • Children will know how to program a computer game by sequencing conditional statements. • Children will know that programs are developed according to a plan. • Children will learn how to program an algorithm according to a plan. • Children will develop a program according to a plan. • Children will know how to develop strategies for testing and debugging computer programs. 	<p>passwords.</p> <ul style="list-style-type: none"> • Children will know how to customise privacy settings for online services. • Children will know how to put into practice what they have learnt about privacy and security. • Children will know situations of harassment or bullying online. • Children will know there are different ways to intervene in a specific situation. • Children will know how to express feelings and opinions in positive, effective ways. • Children will know how to make good decisions when choosing how and what to communicate. • Children will know that seeking help for oneself or others is a sign of strength. • Children will know online tools for reporting abuse. 	<ul style="list-style-type: none"> • Children will know that spreadsheets can be used to store numerical data and to make calculations. • Children will know how to enter a formula to calculate totals. • Children will know that graphs and charts can be created and easily be changed from spreadsheet data. • Children will know how to use spreadsheet to model a costing exercise. 		<ul style="list-style-type: none"> • Children will understand that AI systems are trained using Machine Learning. • Children will understand the effect training data has on the accuracy of a Machine Learning system. • Children will know that human bias can impact machine learning. • Children will understand that AI can be trained to extract patterns from our movement and respond to it. • Children will train a computer to recognize emotion using code.
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