



Holy Family Catholic Primary School

Computing Curriculum 2025-2026

What do we want for our pupils?

Intent

Our Computing curriculum aims to enhance pupil's enjoyment, resilience, understanding and attainment in Computing. Our units are sequenced and progressive, giving particular attention to fundamental concepts and are built on prior knowledge. Children work independently and collaboratively to try to achieve Mastery in Computing.

Implementation

Computing is supported by Icompute which is a rich, broad and balanced scheme that covers the National Curriculum and all three strands: Computer Science, Information Technology and Digital Literacy (including E-safety). Icompute is taught once a week for 30 minutes which provides children time to develop their knowledge, skills and vocabulary in Computing. The Computing curriculum is supported through long term plans, knowledge organisers, unit overviews, short term planning and assessment tools to ensure children show progress.

What is our goal?

Impact

The curriculum offers equity for all groups and it is intended that all children access it. By following and monitoring the curriculum and its delivery, leaders are supported by Icompute in ensuring that all teachers teach the full range of lessons for each year group and that they are taught in accordance with the planning to ensure rigor, challenge and inclusion.

Assessment in Computing

Attainment of Computing is reported on O'track; staff are also supported by the Icompute Assessment database. This assessment allows us to assess if children are WTS, EXS or GDS in Computing. The assessment tool is kept up to date on a regular basis. The Computing team check the data at the end of Autumn, Spring and Summer.

Year Groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	iAlgorithm		iModel iSafe		iLearnAI	
Year 2		iSearch	iSafe	IProgram (Unit 1)		iAnimate
Year 3	iSimulate		iNetwork iSafe		iConnect	
Year 4		iProgram (Unit 1)	iSafe	iData		iLearn AI
Year 5	iDraw		iWeb iSafe		iModel	
Year 6		iProgram (Unit 1)	iSafe	IData		iLearn AI

Year Groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>iAlgorithm To understand what algorithms are, how they are implemented on programs as digital devices. To execute by following precise and unambiguous instructions To use logical reasoning to predict the behaviour of simple programs To create and debug simple programs.</p>		<p>iModel To use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>iSafe To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies To recognise common uses of information technology beyond school.</p>		<p>iLearnAI To understand that intelligence can be simulated by machines To learn about everyday AI applications To understand that computers learn using information given to them by people To understand that artificial intelligence (AI) may not always be accurate or reliable To understand that AI can help people be creative</p>	
Year 2		<p>iSearch To use technology purposefully to create, organise, store, manipulate and retrieve digital content To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. To learn the importance of verifying the accuracy of information given on the internet and how to check multiple sources before answering questions.</p>	<p>iSafe To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies To recognise common uses of information technology beyond school</p>	<p>. IProgram (unit 1) To understand that programs execute by following precise and unambiguous instructions To use logical reasoning to predict the behaviour of simple programs. To create and debug simple programs To use technology purposefully to create, organise, store, manipulate and retrieve digital content. To use the context of art and drawing, in creatively developing simple animations.</p>		<p>iAnimate To use technology purposefully to create, organise, store, manipulate and retrieve digital content. To explore stop frame animation through story telling. To create narratives and combine them with images to make their own short animated scenes.</p>

<p>Year 3</p>	<p>iSimulate To 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. To explore computer simulations, investigate options and test predictions.</p>		<p>iNetwork To 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. To explore networks and learn how digital devices are connected to form them.</p> <p>iSafe To be discerning in evaluating digital content To use technology safely, respectfully and responsibly. To recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>		<p>iConnect To 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. To learn about the internet and World Wide Web.</p>	
<p>Year 4</p>		<p>iProgram (unit 1) To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems: solve problems by decomposing them into smaller parts. To use sequence, selection, and repetition in programs; work with variables and various forms of input and output To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. To develop computational thinking and create programs with scratch.</p>	<p>iSafe To 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. To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>iData To 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. To explore data representation with databases.</p>		<p>iLearn AI To explore the machine learning process and discover how AI systems are trained and learn from examples. To learn about the potential of AI and its limitations. To train machine learning models and create their own AI systems. To use logical reasoning to explain how some simple algorithms work. To select, use and combine a variety of software.</p>

Year 5	<p>iDraw</p> <p>To 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.</p> <p>To explore how images are made from shapes and lines.</p>		<p>iWeb</p> <p>To 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.</p> <p>To 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.</p> <p>To explore web design and construction.</p> <p>iSafe</p> <p>To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>To use technology safely, respectfully and responsibly.</p> <p>To recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact..</p>		<p>iModel</p> <p>To 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.</p> <p>To explore 3D digital modelling.</p> <p>To design and construct 3D models.</p>	

<p>Year 6</p>		<p>iProgram (unit 1) To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. To solve problems by decomposing them into smaller parts. To use sequence, selection and repetition in programs. To work with variables and various forms of input and output. To use logical reasoning to explain how some simple algorithms work. To detect and correct errors in algorithms and programs. To design and develop programs with Scratch.</p>	<p>iSafe To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>iData To select, use and combine a variety of software on a range of digital devices to design & create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. To explore and produced data spreadsheets.</p>		<p>iLearn AI To explore what makes AI; Machine learning and Artificial intelligence. To recognise the benefits and drawbacks and train their own models to produce AI using Scratch. To design, write and debug programs including controlling or simulating physical systems.</p>
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