St Peter's Catholic Primary School

Progression of skills: Computing

Reception	• Show resilience and perseverance in the face of challenge. • Develop their small motor skills so that they can use a range of tools competently, safely ad confidently. • Know and talk about different factors that support their overall health and wellbeing: Sensible amounts of 'screen time' • Explore, use and refine a variety of artistic effects to express their ideas and feelings.				
ELG	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for the rules, know right from wrong and try to behave accordingly. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, texture, form and function.				
Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Computers • Recognise common uses of information technology beyond school					
Recognise common uses of information technology in the home and school environment	Recognise common uses of information technology beyond school	Recognise familiar forms of input and output devices and how they are used			
		Make efficient use of familiar forms of input and output devices	Use other input devices such as cameras and sensors		
Using Computer • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • 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 purposefully to create digital content	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	With support use a variety of software to accomplish goals	With support use a variety of software on a range of digital devices	Independently select and use appropriate software for a task	
			With support select, use and combine a variety of software on a range of digital devices to accomplish given goals	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 difference audience, including collecting, analysing, evaluating and presenting data and information
					Independently select, use and combine a variety of software to collect analyse, evaluate and

					present data and information
					Design and create a range of programs, systems and content for a given audience
E-Safety • 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 • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact					
Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies			Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies	Understand the need to only select age-appropriate content	Identify a range of ways to report concerns about content and contact in and out of school
	Use technology safely and keep personal information private	Use technology safely and respectfully, keeping personal information private	Use technology responsibly and understand that communication online may be seen by others		Use technology respectfully and responsibly
		Use technology safely and recognise acceptable and unacceptable behaviour			
Coding • Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • 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					
Understand what algorithms are and how they are	Understand that programs execute by following precise and		Decompose programs into smaller parts		Create programs which use variables

implemented on digital devices I can explain that an algorithm is a step by step set of instructions	unambiguous instructions I can understand the programs run by following clear instructions		I can break programs up into smaller parts		I can store and retrieve variables within a program
Predict the behaviour of simple programs I can predict the behaviour of a programmed toy	Use logical reasoning to predict the behaviour of simple programs I can predict the behaviour of a programmed toy, clearly relating each action to part of an algorithm	Use logical reasoning to explain how some simple algorithms work I can explain how simple algorithms solve a given problem	Use logical reasoning to detect and correct errors in algorithms and programs I can use logical thinking to identify and solve potential bugs during coding		Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently I can use logical thinking to identify and solve **potential** bugs during coding
	Create simple programs I can create a simple program to perform a task				Use variables, sequence, selection and repetition in programs I can use loops, variables and IF statements to alter the way my program runs
	Debug simple programs by using logical reasoning to predict the actions instructed by the code I can find and fix simple bugs in programs			Use logical reasoning to explain how increasingly complex algorithms work to ensure a programs efficiency I can explain how increasingly complex algorithms solve a **given** problem	Solve problems by decomposing them into smaller parts I can break code up into related instructions making debugging easier and quicker
	Create and debug simple programs	Design, write and debug programs that control or simulate virtual events		Design, write and test simple programs with opportunities for selection, where a particular result will happen based on	

	I can create and debug simple programs	I can produce a simple program that completes a given task		actions or situations controlled by the user I can use IF statements to alter the way my program runs	
				Design, input and test and increasingly complex set of instructions to program a device I can write increasingly complex programs	
				Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated I can use loops to repeat tasks within a program	
			Select, use and combine a variety of software, systems and content that accomplish given goals I can use other programs as I code	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems I can control external hardware from within my programs	Include use of sequences, selection and repetition with the hardware used to explore real world systems I can combine software and hardware to solve real life problems
Networks • 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					
		Understand that computer networks enable the sharing of data and information			Understand how computer networks enable computers to communicate and collaborate
		Understand that the internet is a large network of computers		Begin to use internet services to share and	Begin to use internet services within his/her own creations to share

		and that information can be shared by computers		transfer data to a third party	and transfer data to a third party
			Understand what servers are and how they provide services to a network		
Net Searching • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content					
		Use simple search technologies and recognise that some sources are more reliable than others			Be discerning when evaluating digital content
		Use simple search technologies		Use filters in search technologies effectively	Use filters in search technologies effectively and is discerning when evaluating digital content
			Understand how results are selected and ranked by search engines	Use filters in search technologies effectively and appreciate how results are selected and ranked	