Ursuline Catholic Primary School Progression of Skills: Computing

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
To Connect	To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type To use the keyboard to edit text To create rules for using technology responsibly	To recognise the uses and features of information technology To identify information technology in the home To identify information technology beyond school To explain how information technology benefits us To show how to use information technology safely To recognise that choices are made when using information technology	To explain how digital devices function To identify input and output devices To recognise how digital devices can change the way we work To explain how a computer network can be used to share information To explore how digital devices can be connected To recognise the physical components of a network	To describe how networks physically connect to other networks To recognise how networked devices, make up the internet To outline how websites can be shared via the World Wide Web To describe how content can be added and accessed on the World Wide Web To recognise how the content of the WWW is created by people To evaluate the consequences of unreliable content	To explain that computers can be connected together to form systems To recognise the role of computer systems in our lives To recognise how information is transferred over the internet To explain how sharing information online lets people in different places work together To contribute to a shared project online To evaluate different ways of working together online	To identify how to use a search engine To describe how search engines, select results To explain how search results are ranked To recognise why the order of results is important, and to whom To recognise how we communicate using technology To evaluate different methods of online communication

| To Collect | To label objects
To identify that objects can be counted

To describe objects in different ways

To count objects with the same properties

To compare groups of objects

To answer questions about groups of objects | | To create questions with yes/no answers

To identify the object attributes needed to collect relevant data

To create a branching database

To identify objects using a branching database

To explain why it is helpful for a database to be well structured

To compare the information shown in a pictogram with a branching database | | To use a form to record information

To compare paper and computer-based databases

To outline how grouping and then sorting data allows us to answer questions

To explain that tools can be used to select specific data

To explain that computer programs can be used to compare data visually

To apply my knowledge of a database to ask and answer real-world questions | |

To Communicate		To know what devices can be used to take photographs To use a digital device to take a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image		To explain that digital images can be changed To change the composition of an image To describe how images can be changed for different uses To make good choices when selecting different tools To recognise that not all images are real To evaluate how changes can improve an image		To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people.

To Code						
	To explain what a given command will do	To describe a series of instructions as a sequence	To explain how a sprite moves in an existing project	To develop the use of count-controlled loops in a different programming environment	To explain how selection is used in computer programs	To define a 'variable' as something that is changeable
	To act out a given word	To explain what happens when we change the order of instructions	To create a program to move a sprite in four directions	To explain that in programming there are infinite loops and count controlled loops	To relate that a conditional statement connects a condition to an outcome	To explain why a variable is used in a program
	To combine forwards and backwards commands to make a sequence	To use logical reasoning to predict the outcome of a program (series of commands)	To adapt a program to a new context	To develop a design which includes two or more loops which run at the same time	To explain how selection directs the flow of a program	To choose how to improve a game by using variables
	To combine four direction commands to make sequences	To explain that programming projects can have code and artwork	To develop my program by adding features	To modify an infinite loop in a given program	To design a program which uses selection	To design a project that builds on a given example
	To plan a simple program	To design an algorithm	To identify and fix bugs in a program	To design a project that includes repetition	To create a program which uses selection	To use my design to create a project
	To find more than one solution to a problem	To create and debug a program that I have written	To design and create a maze-based challenge	To create a project that includes repetition	To evaluate my program	To evaluate my project