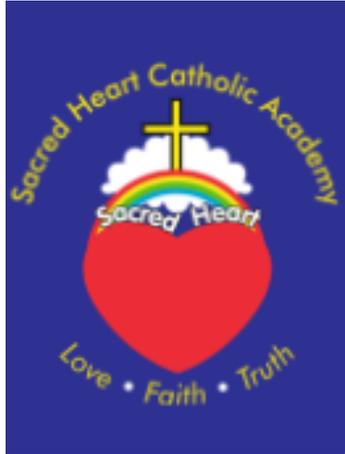| Computing at Sacred Heart 	**Reception** Children will: -Know that there is a wide range of technological devices in their everyday life. -Use a range of technological devices available to them including digital cameras, laptops, walkie talkies and BeeBots. -Give simple instructions to control a device such as a BeeBot. -Begin to use a computer keyboard and mouse. -Create a range of digital art. -Be taught how to stay safe online at an age appropriate level.	**Year 1** Children will: - understand what is meant by technology and can identify a variety of examples both in and out of school. -Understand that an algorithm is a set of instructions used to solve a problem. -Know an algorithm written for a computer is called a program. -Work out what is wrong with a simple algorithm when the steps are out of order. -Use a range of 2Simple programs to code, design, write and input data. - Discuss and understand the importance of keeping information such as usernames and passwords private. -Know how to communicate safely with their teacher on Purple Mash.	**Year 2** Children will: - Plan and use algorithms in programs successfully to achieve the desired a result. -Code a program using a variety of objects, actions, events and outputs successfully. -Know how to debug a simple program. -Explain what debugging is. -Use a range of 2Simple programs to code, design, email safely and input data. -Be able to create, name, save and retrieve content from Purple Mash -Use a range of media in their digital content including photos, text and sound. -Know the implications of inappropriate online searches. -Identify the basic parts of a web search engine search page.
Year 3 Children will: -Explain what a variable is in programming. -Explain why variables need to be named. -Create a variable in a program. -Debug simple programs - Use a variety of software to design and create a range of programs, systems and content. -Carry out simple internet searches or Purple Mash searches to retrieve digital content. -Consider what software is the most appropriate for a given task. -Understand what makes a good password for use on the Internet. -Contribute to a class blog with clear and appropriate messages.	**Year 4** Children will: -Design a program -Create code that conforms to the program they have designed. -Set/change the variable values appropriately. -Create an algorithm modelling the sequence of a simple event. -Continue to debug their program and read code efficiently. -Select software that is the most appropriate for a given task. -Continue to use a variety of software to design and create a range of programs, systems and content. -Know what a computer virus is. -Explain what a digital footprint is and how it relates to identity theft. -Give examples of things that they wouldn't want to be in their digital footprint. -Know the difference between researching and using information and copying it.	**Year 5** Children will: -Know some ways that text variables can be used in coding. -Create a game which has a timer and score pad. -Use variables to control the objects in the game. -Create loops using the timer and If/else statements. -Create code that conforms to a design. -Search with greater complexity for digital content using a search engine. -Select how to share digital content appropriately in several ways including 2Blog, Display Boards and 2Email. -Select keywords and search techniques to find relevant information and increase reliability. -Know who to tell if they are upset by something that happens online. -Children have clear ideas about what makes a good password.	**Year 6** Children will: -Debug confidently when things do not run as expected. -Explain how they organised code in a program into functions to make it easier to read. -Code programs that take text input from the user and use this in the program. -Follow flowcharts to create and debug code. - Compare and use a range of digital content sources. -Use critical thinking skills in everyday use of online communication. -Know about the risks of sharing their location online, how to identify secure and spoof website, know about phishing and other email scams. -Know about the consequences of promoting inappropriate content online and how to put a stop to such behaviour when they experience it or witness it as a bystander. -talk about the positives and negative aspects of technology.