Year 7	Autumn 1 - Assessment focus Digital Literacy/IT		Autumn 2 - Assessment focus IT

	(Title of unit) – 7 weeks
	E Safety
	   ■ Revision of computing/protocols and conduct expectations
	   ■ File management revisited
	   ■ Online safety – my personal 'online' image
	(Progression pathway foci)
	Makes judgements about digital content when evaluating and repurposing it for a given audience.
	Demonstrates responsible use of technologies and online services, and knows a range of ways to report concerns.
	Recognises ethical issues surrounding the application of information technology beyond school.
			(Title of unit) – 7 weeks
			Computers the basics
			   ■ An introduction for students to the world of computers and computing
			   ■ Parts of a computer/human analogy
			   ■ Software and hardware systems
			   ■ How computers work - Von Neumann 'fetch-execute cycle'
			(Progression pathway foci)
			Knows that there is a range of operating systems and application software for the same hardware.
			Recognises and understands the function of the main internal parts of basic computer architecture.
			Understands and describes the concepts behind the fetch-execute cycle.
			Knows the names of hardware e.g. hubs, routers …

	Spring 1 - Assessment focus Computer Science/IT		Spring 2 - Assessment focus IT

	(Title of unit) – 6 weeks
	Cryptography/Data Representation (***Bletchley Park Trip – Spring 2***)
	   ■ How codes and **binary** have been used historically
	   ■ Convert between **denary and hexadecimal** and use binary as characters
	   ■ Identifying the purpose of cryptography and encryption of data and its use in everyday society
	   ■ How the use of computers has enabled ever more secure and sophisticated methods of cryptography to be developed
	(Progression pathway foci)
	Knows that digital computers use binary to represent all data and how bit patterns represent numbers and images.
	Knows that computers transfer data in binary.
			(Title of unit) – 6 weeks
			'Superheroes' **Databases**
			   ■ To know what a database is and how it used in real life situations
			   ■ Using a database to store, sorting and filter data to use as information
			   ■ Creating and testing an hypotheses using research
			(Progression pathway foci)
			Queries data on one table using a typical query language.
			Designs criteria to critically evaluate the quality of solutions, uses the criteria to identify improvements and can make appropriate refinements to the solution

	Summer 1 - Assessment focus Computer Science		Summer 2 - Assessment focus Digital Literacy/IT

	(Title of unit) – 6 weeks
	'**Scratch** That' – next steps coding: game or animation.
	   ■ Creating and implementing algorithms to solve problems
	   ■ Using and understanding pseudocode
	   ■ Creating a block coded programme and debugging
	(Progression pathway foci)
	Recognises that different algorithms exist for the same problem and can identify similarities and differences in situations and can use these to solve problems (pattern recognition).
	Uses a range of operators and expressions e.g. Boolean, and applies them in the context of program control.
	Knows that a procedure can be used to hide the detail with sub-solution.
			(Title of unit) – 7 weeks (**Assessment 2**)
			Desk Top Publishing (Shakespeare revisited)
			   ■ Learning the key features of DTP control
			   ■ How to use effective block drawing to plan, refine and improve
			   ■ Creating a booklet using set criteria
			(Progression pathway foci)
			Evaluates the appropriateness of digital devices, internet services and application software to achieve given goals.
			Designs criteria to critically evaluate the quality of solutions, uses the criteria to identify improvements and can make appropriate refinements to the solution.

St Gregory's Catholic Middle School
Long Term Lesson Plan