THE BLESSED SACRAMENT CATHOLIC PRIMARY SCHOOL COMPUTING STRAND / UNIT OVERVIEW

PURPOSE OF STUDY

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

STRAND	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
DIGITAL LITERACY	Technology Outside School (Use technology safely & recognise uses of technology outside of school)	Online Safety (Keep personal information private, know where to go for help and support)	Email (recognise acceptable / unacceptable behaviour)	Online Safety (digital footprint, pros/cons apps, plagiarism)	Online Safety (impact of sharing digital content, children's responsibility to each other when online)	Blogging (Use technology safely, respectfully and responsibly)
INFORMATION TECHNOLOGY	Animated Story Books (Create, store, manipulate digital content)	Effective Searching (searching the internet using a web search engine)	Simulations/Graphing (Select, use and combine a variety of software to design and create a range of programs, systems and content)	Animation (Create a range of programs that accomplish given goals)	Game Creator (Select, use and combine a variety of software that accomplish given goals, including collecting and presenting data)	Text Adventures (Select, use and combine a variety of software that accomplish given goals, including collecting, analysing, evaluating and presenting data)
COMPUTER SCIENCE	Coding (Algorithms, create and debug simple programs)	Coding (create more complex programs using different kinds of objects)	Coding (simulation, selection, variable, debugging)	Coding (if/else statement, repeat until, timers and counting machines, decomposition)	Coding (Design, write and debug programs that accomplish specific goals)	Coding (Use sequence, selection and repetition in programs; work with variables and various forms of input and output)