St Michael's Computing Overview

Key Stage 1

KS1	Autumn	Spring	Summer
Themes	Online safety & internet- Digital literacy	Computer skills—Information technology:	Programming (computer science)Computer science:
NC Objectives	-Recognise uses of information technology beyond school -Use technology safely and respectfully, including: *communicating online 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 logical reasoning to make predictions -Create, organise, store, manipulate and retrieve digital content -Use technology purposefully to organise and manipulate digital content.	-Understand that algorithms are used as programs on digital devices -Understand that programs execute by following precise and unambiguous instructions -Create and debug simple programs - Use logical reasoning to predict the behaviour of simple programs
Apps & software for i-pads	*i-movie* *Drawing ciao*	*Drawing Ciao—painting* *Pages – word processing*	*Bee-bot* *Roamers* *Scratch (online)*
Y1	Online safety Digital paining	Word processing skills Using and applying	Programming toys Scratch junior intro to programming
Y2	Online safety Using the internet	Computer Art Presentation skills	Prepare for turtle log Programming scratch and turtle

Key Stage 2

KS2	Autumn	Spring	Summer
Themes	Online safety & internet—digital literacy	Computer skills—information technology	Programming—computer science
LKS2 **NC objectives** How do we know children are making progress?	-Understand the opportunities computer networks offer for communication -Identify a range of ways to report concerns about content -Recognise acceptable/unacceptable behaviour -Know the effects of cyber bullying and know how to prevent it	Select a variety of software to accomplish given goals Select, use and combine internet services Analyse information Evaluate information Collect data Present data	-Write programs that accomplish specific goals -use sequence in programs -work with various forms of input -work with various forms of output -Write programs that accomplish specific goals -Design and create programs -Debug programs that accomplish specific goals -Use repetition in programs -Control or simulate physical systems -Use logical reasoning to detect and correct errors in programs
UKS2 **NC objectives** How do we know children are making progress?	-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 -Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; -Identify a range of ways to report concerns about content and contact.	-select, use and combine a variety of software 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 Presenting data & information	-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 -Detect and correct errors in algorithms and programs

Apps & software for i-pads	*i-movie* *Garageband*	*Pages – word processing* *Keynote- presentation* *SketchUp – 3D* *Numbers - spreadsheets* *Animations apps x3*	*Programming - Scratch and turtle logo*
Y3	Online safety Internet research and communication	Word processing - pages Presentation skills	Programming – scratch and turtle Drawing and publishing
Y4	Online safety Internet research I-movie Youtube video	Word processing—*Pages* Animation	Programming – Scratch Questions and quizzes Using and applying skills end of year
Y5	Online safety Internet research Radio station—podcasting	*SketchUP*—3D modelling Using *Keynote* to create presentations	Programming – *Scratch* Using and applying skills (end of year pack)
Y6	Online safety Film making	*Numbers*—Spreadsheets Website Design (Y5 pack)	Animated stories Applying skills end of year pack