St Joseph's Catholic Primary School
Computing Long Term Plan

Reception						
	Autumn		Spring		Summer	
Cycle A	Mouse and Trackpad Skills Keyboard Skills	Drawing Skills Safety and Privacy	Robots	Sounds Photography	Technology Around Us	Hardware Quizzes

KS1						
	Autumn		Spring		Summer	
Cycle A	Unit 1.1 Online Safety & Exploring Purple Mash Number of lessons – 4 Programs – Various Unit 2.5 Effective Searching Number of lessons – 3 Programs – Browser.	Unit 1.4 Lego Builders Number of lessons – 3 Programs – 2DIY	Unit 1.9 Technology outside school Number of lessons – 2 Programs – Various Unit 1.2 Grouping & Sorting Number of lessons – 2 Programs – 2DIY	Unit 2.6 Creating Pictures Number of lessons – 5 Programs – 2PaintAPicture	Unit 1.8 Spreadsheets Number of lessons – 3 Programs – 2Calculate Unit 1.7 Coding Number of lessons – 6 Programs – 2Code	Unit 2.1 Coding Number of lessons – 5 Programs – 2Code
Cycle B	Unit 1.1 Online Safety & Exploring Purple Mash Number of lessons – 4 Programs – Various Unit 1.5 Maze Explorers Number of lessons – 3 Programs – 2Go	Unit 2.4 Questioning Number of lessons – 5 Programs – 2Question, 2Investigate	Unit 2.2 Online Safety Number of lessons – 3 Programs – Various Unit 1.6 Animated Story Books Number of lessons – 5 Programs – 2Create A Story	Unit 2.7 Making Music Number of lessons – 3 Programs – 2Sequence	Unit 2.3 Spreadsheets Number of lessons – 4 Programs – 2Calculate Unit 1.3 Pictograms Number of lessons – 3 Programs – 2Count	Unit 2.8 Presenting Ideas Number of lessons – 4 Programs – Various

Lower KS2						
	Autumn		Spring		Summer	
Cycle A	Coding Using Flowcharts Unit 3.1, Lesson 1 Using Timers Unit 3.1, Lesson 2 'if' statements Unit 4.1, Lesson 2 Coordinates Unit 4.1, Lesson 3 Code, Test and Debug – Unit 3.1, Lesson 4 Design, Code, Test and Debug Unit 4.1, Lesson 1	Unit 3.2 Online safety Number of lessons – 3 Programs – Various Unit 3.3 Spreadsheets Number of lessons – 3 Programs – 2Calculate	Unit 3.4 Touch Typing Number of lessons – 4 Programs – 2Type	Unit 3.5 Email (including email safety) Number of lessons – 6 Programs – 2Email, 2Connect, 2DIY	Unit 3.6 Branching Databases Number of lessons – 4 Programs – 2Question Unit 3.7 Simulations Number of lessons – 3 Programs – 2Simulate, 2 Publish	Unit 3.8 Graphing Number of lessons – 3 Programs – 2Graph
Cycle B	Coding Using Repeat Unit 3.1, Lesson 3 Repeat Until and 'if/else' Statements Unit 4.1, Lesson 4 Number Variables Unit 4.1, Lesson 5 Design and Make an Interactive scene Unit 3.1, Lesson 5-6 Making a Playable game – Unit 4.1, Lesson 6 Unit 4.2 Online safety Number of lessons – 4 Programs – Various	Unit 4.3 Spreadsheets Number of lessons – 6 Programs – 2Calculate		Unit 4.4 Writing for different audiences Number of lessons – 5 Programs – 2Email, 2Connect, 2DIY Unit 4.5 Logo Number of lessons – 4 Programs – Logo	Unit 4.6 Animation Number of lessons – 3 Programs – 2Animate Unit 4.7 Effective Search Number of lessons – 3 Programs – Browser	Unit 4.8 Hardware Investigators Number of lessons – 2

Upper KS2					
	Autumn		Spring	Summer	
Cycle A	Coding Coding Efficiently Unit 5.1, Lesson 1 Simulating a physical system Unit 5.1, Lesson 2 Friction and Functions Unit 5.1, Lesson 4 Introducing Strings Unit 5.1, Lesson 5 Text Variable and Concatenation Unit 5.1, Lesson 6 User Input Unit 6.1, Lesson 5 Unit 5.2 Online safety Number of lessons – 3 Programs – Various	Unit 5.3 Spreadsheets Number of lessons – 6 Programs – 2Calculate	Unit 5.4 Databases Number of lessons – 4 Programs – 2Question, 2Investigate	Unit 5.5 Game Creator Number of lessons – 5 Programs – 2DIY 3D	Unit 5.6 3D Modelling Number of lessons – 4 Programs – 2Design and Make Unit 5.7 Concept Maps Number of lessons – 4 Programs – 2Connect
Cycle B	Coding Designing and writing a more complex program Unit 6.1, Lessons 1 & 2 Decomposition and Abstraction Unit 5.1, Lesson 3 Using Functions Unit 6.1, Lesson 3 Flowcharts and control simulations Unit	Unit 6.3 Spreadsheets Number of lessons – 5 Programs – 2Calculate	Unit 6.4 Blogging Number of lessons – 4 Programs – 2Blog	Unit 6.5 Text Adventures Number of lessons – 5 Programs – 2Code, 2Connect	Unit 6.6 Networks Number of lessons – 3 Unit 6.7 Quizzing Number of lessons – 6 Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate

	6.1, Lesson 4 Text Adventure Unit 6.1, Lesson 6 Unit 6.2 Online safety Number of lessons – 2 Programs – Various				

Sequencing rationale:

All KS1 and KS2 classes will follow the Purple Mash units to ensure National Curriculum coverage. This document works alongside the 'Progression of Skills' document.

Key stage 1

Pupils should be taught to:

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology 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

Key stage 2

Pupils should be taught to:

- 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 and to detect and correct errors in algorithms and programs

- 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
- select, use and combine a variety of software (including internet services) 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 and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact