Computing Long Term Plan

Route A

St. Joseph's
Catholic
Primary School

EYFS		
Autumn Term	**Once Upon A Time** Engage in games/artwork (such as phonics play) on Clevertouch. Confidently use and manipulate a touch screen.	**Walking around the zoo** Use google Earth/explore different websites to view zoo maps from different viewpoints Use ipads and google 3d to place animals in the classroom and explore them
Spring Term	**Travel through London** Online safety – digiduck learn about different ways of staying safe online. Learn to use cameras to take photos and videos.	**Are We There Yet?** Use simple electronic toys (cars that move/on off buttons). .
Summer Term	**How does your garden grow?** Give simple oral instructions to follow – introduce simple algorithms. Begin to understand coding/control using Beebots and other remote control toys	**We could be heroes!** Use a simple search engine (YouTube kids, Google) Online safety – review and revisit ways to stay safe online Begin to understand how machines help people to do their jobs
Year 1/2		
Autumn Term	**Computing Systems and Networks:** **Technology Around Us** Recognising technology in school and using it responsibly.	**Creating Media :** **Digital Painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.
Spring Term	**Programming A:** **Moving a Robot** Writing short algorithms and programs for floor robots, and predicting program outcomes.	**Data Information :** **Grouping Information** Exploring object labels, then using them to sort and group objects by properties.
Summer Term	**Creating Media:** **Digital Writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Programming B :** **Programming Animations** Designing and programming the movement of a character on screen to tell stories.
Year 3/4		
Autumn Term	**Connecting Computers:** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	**Stop-frame animation:** Capturing and editing digital still images to produce a stop-frame animation that tells a story.
Spring Term	**Sequencing sounds:** Creating sequences in a block-based programming language to make music.	**Branching databases:** Building and using branching databases to group objects using yes/no questions.
Summer Term	**Desktop publishing**	**Events and actions in programs**

	Creating documents by modifying text, images, and page layouts for a specified purpose.	Writing algorithms and programs that use a range of events to trigger sequences of actions.
Year 5/6		
Autumn Term	**Systems and searching** Recognising IT systems in the world and how some can enable searching on the internet	**Video production** . Planning, capturing, and editing video to produce a short film
Spring Term	**Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.	**Flat-file databases** Using a database to order data and create charts to answer questions.
Summer Term	**Introduction to vector graphics** Creating images in a drawing program by using layers and groups of objects	**Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.

Route B

	EYFS	
Autumn Term	**Once Upon A Time** Engage in games/artwork (such as phonics play) on Clevertouch. Confidently use and manipulate a touch screen.	**Walking around the zoo** Use google Earth/explore different websites to view zoo maps from different viewpoints Use ipads and google 3d to place animals in the classroom and explore them
Spring Term	**Travel through London** Online safety – digiduck learn about different ways of staying safe online. Learn to use cameras to take photos and videos.	**Are We There Yet?** Use simple electronic toys (cars that move/on off buttons). .
Summer Term	**How does your garden grow?** Give simple oral instructions to follow – introduce simple algorithms. Begin to understand coding/control using Beebots and other remote control toys	**We could be heroes!** Use a simple search engine (YouTube kids, Google) Online safety – review and revisit ways to stay safe online Begin to understand how machines help people to do their jobs
	Year 1/2	
Autumn Term	**Computing Systems and Networks:** **Information Technology Around Us** Identifying IT and how its responsible use improves our world in school and beyond.	**Creating Media:** **Digital Photography** Capturing and changing digital photographs for different purposes.
Spring Term	**Programming A:** **Robot Algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	**Data Information:** **Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.
Summer Term	**Creating Media:** **Digital Music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	**Programming B:** **Programming Quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
	Year 3/4	
Autumn Term	**The internet** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	**Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.
	Repetition in shapes	**Data logging**

Spring Term	Using a text-based programming language to explore count-controlled loops when drawing shapes.	Recognising how and why data is collected over time, before using data loggers to carry out an investigation.
Summer Term	**Photo editing** Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	**Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5/6		
Autumn Term	**Communication and collaboration** Exploring how data is transferred by working collaboratively online.	**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.
Spring Term	**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	**Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data.
Summer Term	**3D modelling** Planning, developing, and evaluating 3D computer models of physical objects.	**Sensing movement** Designing and coding a project that captures inputs from a physical device.