The Arches Community Primary School

Computing Curriculum Overview – following MGL Scheme

DL = Digital Literacy		CS = Computer Science		IT = Information Technology	

FS2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT & DL		IT		CS	
	I am a Super Surfer Pupils will learn to recognise on and offline technology and how to use it safely with the help of trusted adults.		Look what I can do Pupils will learn that information can be used and created using technology.		I am a computer scientist Pupils will learn cause and effect in computing. (I press this button – this is the result).	

Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	DL	CS	CS	IT	IT
	Basic Computing Skills Pupils will learn how to log in and shut down a computer accurately and begin to	Using text-based programs to process and format text and Images Pupils will learn how to use a word processing	Unplugged Algorithms Pupils learn what an unplugged algorithm is and create and apply them to an on-	Programming, coding Robotics Pupils explore how to control both physical and virtual robots with a sequence of commands.	Digital Painting Pupils will explore how to use the different tools and features in a computer based paint	Presenting Information Pupils will consider a variety of ways to present cross curricular information digitally, and

	understand the importance of a password.	program to write and format text. They will add digital images and consider the audience for their work.	screen program.		program to create a variety of effects.	compare the advantages and disadvantages with paper based content.
Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	IT	IT/DL
	What is a Computer? Pupils will learn how to identify a computer's different parts and talk about the role computers play in our society.	Coding & Algorithms Pupils build on their knowledge of what an algorithm is and how we can program computers to use algorithms. They will use a variety of block based	Programming using Scratch Jr Pupils will use the Scratch Jr app to write their own block code for several different projects. These can easily be made	Data collection and representation using Pictograms Pupils will explore how to transfer physical data from a tally chart into a digital pictogram. They will compare the	Modifying Text and Images Pupils will look at software they can use to present their work. They will expand on previous skills such as using a keyboard, formatting text and how	Staying Safe Online Pupils will use the CEOP Jessie & Friends materials to explore using the online world safely, including sharing pictures and online gaming. They will use

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
		coding programs to create algorithms, solve programs and debug errors.	cross curricular	difference with creating a physical pictogram	to use images in their work.	the skills developed in other units to create digital content about online safety.
Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	CS	IT/DL
	Composing Emails Pupils will explore the different advanced features of Microsoft Word. They will also use these skills to compose an email.	Introduction to Scratch Pupils will learn how to program sprites using a range of blocks to add animation, sound and other effects.	Prediction and Debugging Pupils will learn how to use prediction when coding to test and debug written programs.	Altering Media Pupils to look at the skills behind taking a good photograph and how these photos can be edited in various ways	Inside a computer Pupils will identify the different parts of a computer and explore how computers have evolved over the last 100 years.	Publishing Online Content Pupils will be introduced to graphic design, marketing, and will develop their publishing skills.
Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	DL	IT

	Branching Databases Pupils learn about the concept of a branching database and create their own using presentation software.	Repetition and Forever Loops Pupils learn to use repetition and loops when coding.	Designing a Game Pupils use their knowledge of Scratch to create a Formula One style game.	Making a Special Effects movie Pupils create their own videos and apply special effects to them	Smarter Searching and Online Safety Pupils to gain awareness of the best ways to use a search engine and to continue to develop awareness of online dangers.	Pixel Art Pupils create a piece of pixel artwork using a grid format
Year 5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	CS	IT
	Create & Search A Database Pupils will use Excel to create and search a database.	Using Variables Pupils identify different types of variables. what conditionals	Coding Using Micro:Bits Pupils to program Micro:Bit to make a variety of practical	Stop Motion Animation Pupils will learn about all aspects of stop frame animation. They will	The Internet & The World Wide Web In this unit the children will learn the difference between the	3D Modelling Children will learn to design models using online CAD software

		are and understand how variables are used in computer programming	and usable devices	storyboard their own story before using a software package to create their own stop frame animation.	WWW and the internet. They will also understand what is meant by IP address.	
Year 6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	IT	IT & DL
	Creating Formula in Excel

Pupils will learn how to organise data and make calculations using the application Microsoft Excel. | Edublocks Introduction to Python

Pupils will learn how block-based programming compares to written code. Pupils will be introduced to Python as a text-based | Programming a Game

Using the application Scratch, pupils will create an interactive, playable game using conditionals, variables, and operators. | Creating a Podcast

Pupils will produce a podcast based on a piece of writing from another curriculum area or aspect of school life. | HTML

Pupils will learn how to design a multi-page informational website, considering the layout, user experience and key features including home | Social Media & Being Safe Online

Pupils will learn about the purpose of social media and different aspects of social media and how to use it safely. |

		method of programming.			page, links and images.	