

Scheme Overview

DL = Digital Literacy

CS = Computer Science

IT = Information Technology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EARLY YEARS FOUNDATIO N STAGE	IT & DL		IT		CS	
	I Am a Super Surfer Pupils will learn to recognize 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>(I press this button – this is the result)</i>	

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 1	IT	DL	CS	CS	IT	IT
	<p style="text-align: center;">Basic Computing Skills</p> <p>Pupils will learn how to log in and shut down a computer accurately and begin to understand the importance of a password.</p>	<p style="text-align: center;">Using text-based programs to process and format text and Images</p> <p>Pupils will learn how to use a word processing program to write and format text. They will add digital images and consider the audience for their work.</p>	<p style="text-align: center;">Unplugged Algorithms</p> <p>Pupils learn what an unplugged algorithm is and create and apply them to an on-screen program.</p>	<p style="text-align: center;">Programming, coding & Robotics</p> <p>Pupils explore how to control both physical and virtual robots with a sequence of commands.</p>	<p style="text-align: center;">Data collection and representation using Pictograms</p> <p>Pupils will explore how to transfer physical data from a tally chart into a digital pictogram. They will compare the difference with creating a physical pictogram.</p>	<p style="text-align: center;">Presenting Information</p> <p>Pupils will consider a variety of ways to present cross curricular information digitally, and compare the advantages and disadvantages with paper-based content.</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 2	IT	CS	CS	DL	IT	IT/DL
	<p style="text-align: center;">What is a Computer?</p> <p>Pupils will learn how to identify a computer's different parts and talk about the role computers play in our society.</p>	<p style="text-align: center;">Unplugged Algorithms</p> <p>Pupils build on their knowledge of what an algorithm is and how we can program computers to use algorithms.</p>	<p style="text-align: center;">Programming using Scratch Jr</p> <p>Pupils will use the Scratch Jr app to write their own block code for several different projects. These can easily be made cross curricula.</p>	<p style="text-align: center;">Storing and Presenting Data</p> <p>Pupils to understand what data is, and how we store that data in different ways. Storing data on a computer allows us to quickly sort it and present it as information in graphs and charts.</p>	<p style="text-align: center;">Modifying Text and Images</p> <p>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 to use images in their work.</p>	<p style="text-align: center;">Presenting Information</p> <p>Pupils will explore and learn how to present information to an audience using technology.</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 3	IT	CS	CS	IT	CS	IT/DL
	<p>Composing Emails</p> <p>Pupils will explore the different advanced features of Microsoft Word. They will also use these skills to compose an email.</p>	<p>Introduction to Scratch</p> <p>Pupils will learn how to program sprites using a range of blocks to add animation, sound and other effects</p>	<p>Prediction and Debugging</p> <p>Pupils will learn how to use prediction when coding to test and debug written programs.</p>	<p>Altering Media</p> <p>Pupils to look at the skills behind taking a good photograph and how these photos can be edited in various ways.</p>	<p>Inside a computer</p> <p>Pupils will identify the different parts of a computer and explore how computers have evolved over the last 100 years.</p>	<p>Publishing Online Content</p> <p>Pupils will be introduced to graphic design, marketing, and will develop their publishing skills.</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 4	IT	CS	CS	IT	DL	IT
	<p>Branching Databases</p> <p>Pupils learn about the concept of a branching database and create their own using presentation software.</p>	<p>Repetition and Forever Loops</p> <p>Pupils learn to use repetition and loops when coding.</p>	<p>Designing a Game</p> <p>Pupils use their knowledge of Scratch to create a Formula One style game.</p>	<p>Making a Special Effects movie</p> <p>Pupils create their own videos and apply special effects to them.</p>	<p>Smarter Searching and Online Safety</p> <p>Pupils to gain awareness of the best ways to use a search engine and to continue to develop awareness of online dangers.</p>	<p>Pixel Art</p> <p>Pupils create a piece of pixel artwork using a grid format.</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 5	IT	CS	CS	IT	CS	IT
	<p>Create & Search Database</p> <p>Pupils will use Excel to create and search a database.</p>	<p>Using Variables</p> <p>Pupils identify different types of variables. what conditionals are and understand how variables are used in computer programming.</p>	<p>Coding Using Micro:Bits</p> <p>Pupils to program Micro:Bit to make a variety of practical and usable devices.</p>	<p>Stop Motion Animation</p> <p>Pupils will learn about all aspects of stop frame animation. They will storyboard their own story before using a software package to create their own stop frame animation.</p>	<p>The Internet & The World Wide Web</p> <p>In this unit the children will learn the difference between the WWW and the internet. They will also understand what is meant by IP address.</p>	<p>3D Modelling</p> <p>Children will learn to design models using online CAD software.</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 6	IT	CS	CS	IT	IT	IT & DL
	<p>Creating Formula in Excel</p> <p>Pupils will learn how to organise data and make calculations using the application Microsoft Excel.</p>	<p>Edublocks- Introduction to Python</p> <p>Pupils will learn how block-based programming compares to written code. Pupils will be introduced to Python as a text-based method of programming.</p>	<p>Programming a Game</p> <p>Using the application Scratch, pupils will create an interactive, playable game using conditionals, variables, and operators.</p>	<p>Creating a Podcasting</p> <p>Pupils will produce a podcast based on a piece of writing from another curriculum area or aspect of school life.</p>	<p>HTML</p> <p>Pupils will learn how to design a multi-page informational website, considering the layout, user experience and key features including home page, links and images.</p>	<p>Social Media & Being Safe Online</p> <p>Pupils will learn about the purpose of social media and different aspects of social media and how to use it safely.</p>