



# WPS Scheme Overview

DL = Digital Literacy

CS = Computer Science

IT = Information Technology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>NURSERY</b>	DL		IT		CS	
	<p><b>Using Technology Safely</b></p> <p>Pupils learn to recognise who we can trust with information and how that links to the online world.</p>		<p><b>Understanding the parts of a computer</b></p> <p>Pupils learn to recognise the different parts of a computer.</p>		<p><b>Using Programming Devices</b></p> <p>Pupils use different types of devices &amp; to give and follow instructions.</p>	
<b>EARLY YEARS FOUNDATION STAGE</b>	IT & DL		IT		CS	
	<p><b>I Am a Super Surfer</b></p> <p>Pupils will learn to recognise on and offline technology and how to use it safely with the help of trusted adults.</p>		<p><b>Look What I Can Do</b></p> <p>Pupils will learn that information can be used and created using technology.</p>		<p><b>I Am a Computer Scientist</b></p> <p>Pupils will learn cause and effect in computing. <i>(I press this button – this is the result)</i></p>	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	DL	CS	CS	IT	IT

YEAR 1	<b>Basic Computing Skills</b> Pupils will learn how to log in and shut down a computer accurately and begin to understand the importance of a password.	<b>Using text-based programs to process and format text and Images</b> 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.	<b>Unplugged Algorithms</b> Pupils learn what an unplugged algorithm is and create and apply them to an on-screen program.	<b>Programming, coding &amp; Robotics</b> Pupils explore how to control both physical and virtual robots with a sequence of commands.	<b>Digital Painting</b> Pupils will explore how to use the different tools and features in a computer based paint program to create a variety of effects.	<b>Presenting Information</b> Pupils will consider a variety of ways to present cross curricular information digitally, and compare the advantages and disadvantages with paper-based content.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 2	IT	CS	CS	IT	IT	IT/DL
	<b>What is a Computer?</b> Pupils will learn how to identify a computer's different parts and talk about the role computers play in our society.	<b>Coding &amp; Algorithms</b> 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 coding programs to create algorithms, solve programs and debug errors.	<b>Programming using Scratch Jr</b> Pupils will use the Scratch Jr app to write their own block code for several different projects. These can easily be made cross curricular.	<b>Data collection and representation using Pictograms</b> 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.	<b>Modifying Text and Images</b> 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.	<b>Staying Safe Online</b> Pupils will use the CEOP Jessie & Friends materials to explore using the online world safely, including sharing pictures and online gaming. They will use the skills developed in other units to create digital content about online safety.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT	CS	CS	IT	CS	IT/DL

YEAR 3	<b>Composing Emails</b>	<b>Introduction to Scratch</b>	<b>Prediction and Debugging</b>	<b>Altering Media</b>	<b>Inside a computer</b>	<b>Publishing Online Content</b>
	Pupils will explore the different advanced features of Microsoft Word. They will also use these skills to compose an email.	Pupils will learn how to program sprites using a range of blocks to add animation, sound and other effects	Pupils will learn how to use prediction when coding to test and debug written programs.	Pupils to look at the skills behind taking a good photograph and how these photos can be edited in various ways.	Pupils will identify the different parts of a computer and explore how computers have evolved over the last 100 years.	Pupils will be introduced to graphic design, marketing, and will develop their publishing skills.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 4	IT	CS	CS	IT	DL	IT
	<b>Branching Databases</b>	<b>Repetition and Forever Loops</b>	<b>Designing a Game</b>	<b>Making a Special Effects movie</b>	<b>Smarter Searching and Online Safety</b>	<b>Pixel Art</b>
	Pupils learn about the concept of a branching database and create their own using presentation software.	Pupils learn to use repetition and loops when coding.	Pupils use their knowledge of Scratch to create a Formula One style game.	Pupils create their own videos and apply special effects to them.	Pupils to gain awareness of the best ways to use a search engine and to continue to develop awareness of online dangers.	Pupils create a piece of pixel artwork using a grid format.
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

		IT	CS	CS	IT	CS	IT
<b>YEAR 5</b>		<b>Create &amp; Search A Database</b> Pupils will use Excel to create and search a database.	<b>Using Variables</b> Pupils identify different types of variables. what conditionals are and understand how variables are used in computer programming.	<b>Coding Using Micro:Bits</b> Pupils to program Micro:Bit to make a variety of practical and usable devices.	<b>Stop Motion Animation</b> 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.	<b>The Internet &amp; The World Wide Web</b> 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.	<b>3D Modelling</b> Children will learn to design models using online CAD software.
		<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>YEAR 6</b>		<b>Creating Formula in Excel</b> Pupils will learn how to organise data and make calculations using the application Microsoft Excel.	<b>Edublocks- Introduction to Python</b> Pupils will learn how block-based programming compares to written code. Pupils will be introduced to Python as a text-based method of programming.	<b>Programming a Game</b> Using the application Scratch, pupils will create an interactive, playable game using conditionals, variables, and operators.	<b>Creating a Podcast</b> Pupils will produce a podcast based on a piece of writing from another curriculum area or aspect of school life.	<b>HTML</b> 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.	<b>Social Media &amp; Being Safe Online</b> Pupils will learn about the purpose of social media and different aspects of social media and how to use it safely.
		IT	CS	CS	IT	IT	IT & DL