

# Year 3

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Coding</b>		<b>Online Safety</b>	<b>Branching Databases</b>	<b>Presenting</b>	<b>Simulations</b>
<ul style="list-style-type: none"> <li>To understand what a flowchart is and how flowcharts are used in computer programming.</li> <li>To understand that there are different types of timers and select the right type for purpose.</li> <li>To understand how to use the repeat command.</li> <li>To understand the importance of nesting.</li> <li>To design and create an interactive scene.</li> </ul>		<ul style="list-style-type: none"> <li>To know what makes a safe password.</li> <li>To learn methods for keeping passwords safe.</li> <li>To understand how the Internet can be used in effective communication.</li> <li>To understand how a blog can be used to communicate with a wider audience.</li> <li>To consider the truth of the content of websites.</li> <li>To learn about the meaning of age restrictions symbols on digital media and devices.</li> </ul> <p style="color: red; font-size: small;">*Graphing Unit taught through Maths (statistics topic)</p>	<ul style="list-style-type: none"> <li>To sort objects using just 'yes' or 'no' questions.</li> <li>To complete a branching database using 2Question.</li> <li>To create a branching database of the children's choice.</li> </ul>	<ul style="list-style-type: none"> <li>To understand the uses of PowerPoint.</li> <li>To create a page in a presentation.</li> <li>To add media to a presentation.</li> <li>To add animations to a presentation.</li> <li>To add timings to a presentation.</li> <li>To use the skills learnt to design and create an engaging presentation.</li> </ul> <p style="color: red; font-size: small;">*Link with English unit on Climates and Biomes</p>	<ul style="list-style-type: none"> <li>To consider what simulations are.</li> <li>To explore a simulation.</li> <li>To analyse and evaluate a simulation.</li> </ul> <p style="color: red; font-size: small;">*Email Unit taught through English</p>

Touch Typing Taught Throughout

# Year 4

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
<b>Coding</b>		<b>Online Safety</b>	<b>Logo</b>	<b>Animations</b>	<b>Making Music</b>	
<ul style="list-style-type: none"> <li>To begin to understand selection in computer programming.</li> <li>To understand how an IF statement works.</li> <li>To understand how to use co-ordinates in computer programming.</li> <li>To understand the 'repeat until' command.</li> <li>To understand how an IF/ELSE statement</li> </ul>		<ul style="list-style-type: none"> <li>To understand how children can protect themselves from online identity theft.</li> <li>To identify the risks and benefits of installing software including apps.</li> <li>To understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism.</li> <li>To identify appropriate behaviour when participating or contributing to collaborative online projects for learning.</li> <li>To identify the positive and negative influences of technology on health and the environment.</li> <li>To understand the importance of balancing game and screen time with other parts of their lives</li> </ul>	<ul style="list-style-type: none"> <li>To learn the structure of the coding language of Logo.</li> <li>To input simple instructions in Logo.</li> <li>Using 2Logo to create letter shapes.</li> <li>To use the Repeat function in Logo to create shapes.</li> <li>To use and build procedures in Logo.</li> </ul>	<ul style="list-style-type: none"> <li>To discuss what makes a good animated film or cartoon.</li> <li>To learn how animations are created by hand.</li> <li>To find out how animation can be created in a similar way using the computer.</li> <li>To learn about onion skinning in animation.</li> <li>To add backgrounds and sounds to animations.</li> <li>To be introduced to 'stop motion' animation.</li> <li>To share animation on the class display board and by blogging.</li> </ul>	<ul style="list-style-type: none"> <li>To identify and discuss the main elements of music.</li> <li>To understand and experiment with rhythm and tempo.</li> <li>To create a melodic phrase.</li> <li>To electronically compose a piece of music.</li> </ul>	
			<b>Effective Search</b>			<b>Hardware Investigation</b>
			<ul style="list-style-type: none"> <li>To locate information on the search results page.</li> <li>To use search effectively to find out information.</li> <li>To assess whether an information source is true and reliable.</li> </ul>			<ul style="list-style-type: none"> <li>To understand the different parts that make up a computer.</li> <li>To recall the different parts that make up a computer.</li> </ul>

# Year 5

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Coding</b>		<b>Online Safety</b>	<b>Databases</b>	<b>Game Creator</b>	<b>Concept Maps</b>
<ul style="list-style-type: none"> <li>To begin to simplify code.</li> <li>To create a playable game.</li> <li>To understand what a simulation is.</li> <li>To program a simulation using 2Code.</li> <li>To know what decomposition and abstraction are in computer science.</li> <li>To take a real-life situation, decompose it and think about the level of abstraction.</li> <li>To understand how to use friction in code.</li> <li>To begin to understand what a function is and how functions work in code.</li> <li>To understand what the different variables types are and how they are used differently.</li> <li>To understand how to create a string.</li> <li>To understand what concatenation is and how it works</li> </ul>		<ul style="list-style-type: none"> <li>To gain a greater understanding of the impact that sharing digital content can have.</li> <li>To review sources of support when using technology and children's responsibility to one another in their online behaviour.</li> <li>To know how to maintain secure passwords.</li> <li>To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this.</li> <li>To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.</li> <li>To learn about how to reference sources in their work.</li> <li>To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.</li> </ul>	<ul style="list-style-type: none"> <li>To learn how to search for information in a database.</li> <li>To contribute to a class database.</li> <li>To create a database around a chosen topic.</li> </ul>	<ul style="list-style-type: none"> <li>To plan a game.</li> <li>To design and create the game environment.</li> <li>To design and create the game quest.</li> <li>To finish and share the game. To self and peer evaluate</li> </ul> <p style="color: red; text-align: center;">*3D Modelling unit taught in D&amp;T</p>	<ul style="list-style-type: none"> <li>To understand the need for visual representation when generating and discussing complex ideas.</li> <li>To understand the uses of a 'concept map'.</li> <li>To understand and use the correct vocabulary when creating a concept map.</li> <li>To create a concept map.</li> <li>To understand how a concept map can be used to retell stories and information.</li> <li>To create a collaborative concept and present this to an audience.</li> </ul>

# Year 6

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Coding</b>		<b>Online Safety</b>	<b>Networks</b>	<b>Spreadsheets</b>	<b>Blogging</b>
<ul style="list-style-type: none"> <li>To design a playable game with a timer and a score.</li> <li>To plan and use selection and variables.</li> <li>To understand how the launch command works.</li> <li>To use functions and understand why they are useful.</li> <li>To understand how functions are created and called.</li> <li>To use flowcharts to create and debug code.</li> <li>To create a simulation of a room in which devices can be controlled.</li> <li>To understand how user input can be used in a program.</li> </ul>		<ul style="list-style-type: none"> <li>To identify benefits and risks of mobile devices broadcasting the location of the user/device.</li> <li>To identify secure sites by looking for privacy seals of approval.</li> <li>To identify the benefits and risks of giving personal information.</li> <li>To review the meaning of a digital footprint.</li> <li>To have a clear idea of appropriate online behaviour.</li> <li>To begin to understand how information online can persist.</li> <li>To understand the importance of balancing game and screen time with other parts of their lives.</li> <li>To identify the positive and negative influences of technology on health and the environment.</li> </ul>	<ul style="list-style-type: none"> <li>To learn about what the Internet consists of.</li> <li>To find out what a LAN and a WAN are.</li> <li>To find out how the Internet is accessed in school.</li> <li>To research and find out about the age of the Internet.</li> <li>To think about what the future might hold.</li> </ul>	<ul style="list-style-type: none"> <li>To use a spreadsheet to investigate the probability of the results of throwing many dice.</li> <li>To use a spreadsheet to calculate the discount and final prices in a sale.</li> <li>To use a spreadsheet to plan how to spend pocket money and the effect of saving money.</li> <li>To use a spreadsheet to plan a school charity day to maximise the money donated to charity.</li> </ul>	<ul style="list-style-type: none"> <li>To identify the purpose of writing a blog.</li> <li>To identify the features of a successful blog.</li> <li>To plan the theme and content for a blog.</li> <li>To understand how to write a blog and a blog post.</li> <li>To consider the effect upon the audience of changing the visual properties of the blog.</li> <li>To understand how to contribute to an existing blog.</li> <li>To understand how and why blog posts are approved by the teacher. To understand the importance of commenting on blogs.</li> </ul>
			<b>Understanding Binary</b>		