

Computing End Points

YEAR 5		
<p>UNIT 5.1 Coding</p>	<p>Children will review existing coding knowledge, begin to simplify code and create playable games. They understand what a simulation is and program them using 2Code. They will take a real-life situation, decompose it and think about the level of abstraction, then use decomposition to make a plan of a real-life situation. They will begin to understand what a function is and how functions work in code, understand what the different variable types are and how they are used differently and understand how to create a string.</p>	<ul style="list-style-type: none"> • I can select the right images to reflect my simulations. • I can make good attempts to break down my task into smaller achievable steps. • I recognise the need to start coding at a basic level of abstraction to remove superfluous details from my program that do not contribute to the aim of the task. • I can create a program which represents a physical system. • I can create and use functions in my code to make my programming more efficient. • I can set/change variable values appropriately. • I know some ways that text variables can be used in coding. • I can use strings to produce a range of outputs.
<p>UNIT 5.2 Online Safety</p>	<p>Children will gain a greater understanding of the impact that sharing digital content can have. They will review their responsibility to one another in their online behaviour and understand the advantages, disadvantages, permissions and purposes of altering an image digitally. They will become aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. They will be able 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, as well as reference sources used in their work.</p>	<ul style="list-style-type: none"> • I know who to tell if I am upset by something online. • I can use the SMART rules as a source of guidance online. • I think critically about what I share online, even when asked by a usually reliable person to share something, both about myself and others. • I have clear ideas about good passwords. • I have experienced how image manipulation could be used to upset me or others even using simple, freely available tools. • I can cite all sources when researching and explain the importance of this. • I show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each.
<p>UNIT 5.3 Spreadsheets</p>	<p>Children will explore spreadsheets whilst converting measurements and begin to use the count tool to answer hypotheses. They will use spreadsheets to model real-life problems, use formulae to calculate area and perimeter of shapes and use text variables.</p>	<ul style="list-style-type: none"> • I can create a formula in a spreadsheet to convert measurements. • I can use the count tool to answer hypotheses about common letters in use. • I can use a spreadsheet to work out the area and perimeter of a shape. • I can use these calculations to solve a real-life problem. • I can create simple formulae that use different variables.
<p>UNIT 5.4 Databases</p>	<p>Children will learn how to search for information on a database and create a database around a chosen topic.</p>	<ul style="list-style-type: none"> • I can search a database in order to answer questions correctly. • I can create my own database on a chosen topic and add records to it. • I understand how to word questions so that I can be effectively answered using a search of their database.
<p>UNIT 5.5 Game Creator</p>	<p>Children will begin to set scenes, create game environments, game quests, be able to finish games and share them.</p>	<ul style="list-style-type: none"> • I can begin the process of designing my own game. • I can design the setting for my game so that it fits with the selected theme. • I can upload images or use the drawing tools to create the walls, floor, and roof. • I can design characters for my game and can decide upon, and change, the animations and sounds that the characters make.

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		<ul style="list-style-type: none"> • I can write informative instructions for my game so that other people can play it.
<p>UNIT 5.6 Modelling</p>	<p>Children will explore the effect of moving points when designing. They will understand designing for a purpose, as well as printing and making.</p>	<ul style="list-style-type: none"> • I can adapt one of the vehicle models by moving the points to alter the shape of the vehicle while still maintaining its form. • I can explore how to edit the polygon 3D models to design a 3D model for a purpose. • I can refine one of my designs to prepare it for printing. • I can print my design as a 2D net and then create a 3D model.
<p>UNIT 5.7 Concept Maps</p>	<p>Children will understand the need for visual representation when generating and discussing complex ideas. They will create concept maps and understand how these can be used to retell stories and information.</p>	<ul style="list-style-type: none"> • I understand what is meant by 'concept maps', 'stage', 'nodes' and 'connections'. • I can create a basic concept map. • I can see the importance of recording concept maps visually.
<p>UNIT 5.8 Word Processing (Microsoft Word)</p>	<p>Children will learn what a word processing tool is for and how to add and edit images to a word document. They will learn how to use word wrap with images and text, change the look of text within a document and add features to a document to enhance its look and usability. They will learn how to use tables within MS Word to present information and be introduced to templates whilst considering page layouts, including headings and columns.</p>	<ul style="list-style-type: none"> • I know how to add images to a word document. • I can edit my images to best present them alongside text. • I understand wrapping of images and text. • I can use bullet points and numbering, text boxes and shapes. • I can add tables to present information. • I can edit properties of tables including borders, colours, merging cells, adding and removing rows and columns. • I can use a Word template and edit it appropriately. • I can format a page using a combination of images, headers and columns.