

## Year 4 Scheme of Work – Computing

Unit	Time (Wks)	Activities	Outcomes	Differentiation	Assessment	NC Links	Other Subject Link
<b>Previous learning:</b> Y3 – Cyberbullying; reporting cyberbullying; benefits/disadvantages of email; unsafe emails; safely send and receive emails;				<b>Next learning:</b> Y5 – Spam emails; strong password; edited online photographs; consequences of not following online safety rules; share webpage on a blog			
4.1 E-Safety (DL)	6	<p>L1 - Identify how a message can hurt someone’s feelings. Say how I should respond to a hurtful message online. L2 - Use a search engine accurately. L3 - Understand the term ‘plagiarism’ and how to avoid it. L4 - Create a safe online profile. L5 - Explain how to be a responsible digital citizen.</p>	<ul style="list-style-type: none"> <li>- Identify comments or messages that may be hurtful to others;</li> <li>- Edit their own messages and comments to make sure they are kind;</li> <li>- Understand that search results are ranked;</li> <li>- Choose an appropriate number of words for a search term;</li> <li>- Explain how to use other people’s work respectfully;</li> <li>- Explain why it may be dangerous to share private information;</li> <li>- Explain how to be a good digital citizen;</li> <li>- Tell someone else more than one way to stay safe online.</li> </ul>	<ul style="list-style-type: none"> <li>- Modelling</li> <li>- Pair work.</li> </ul>	<p>Continuous throughout.</p> <p>E-Safety discussions.</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	PSHCE, Islamic Studies
<b>Previous learning:</b> Y3 – Sequence; input; say command; changing costumes; loops; pen function				<b>Next learning:</b> See Y4 Diving Beetle unit			
4.2 Scratch (CS)	6	<p><b>Shapes: Basic Procedures</b> L1 - Understand the concept of basic procedures through everyday examples. Extend understanding of count-controlled loops using role play. L2 - Predict the code from a pre-created shapes program using input, count-controlled loops and basic procedures. L3 - Run the code checking if predictions were accurate. L4 - Investigate aspects of the code. L5 - Modify parts of the code. L6 - Plan their own shapes program using basic procedures. L7 - Code their program. Test and refine their creations.</p> <p>Software: Scratch 3.0</p>	<ul style="list-style-type: none"> <li>- Understand the concept of basic procedures through everyday examples.</li> <li>- Predict the code from a pre-created shapes program using input, count-controlled loops and basic procedures.</li> <li>- Run the code checking if predictions were accurate.</li> <li>- Investigate aspects of the code.</li> <li>- Modify parts of the code.</li> <li>- Plan and create own shapes program using basic procedures.</li> <li>- Debug and refine the code.</li> </ul>	<ul style="list-style-type: none"> <li>- Example code.</li> <li>- Task instructions.</li> <li>- Tinker time</li> <li>- Pair programming</li> <li>- Unplugged activities</li> <li>- Concept before code.</li> <li>- PRIMM scaffolding.</li> </ul>	<p>Continuous throughout.</p> <p>Create shapes.</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems;</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p>	Maths, Art
<b>Previous learning:</b> Y1-3 - Combining text/images; formatting font/text; drawing/editing shapes				<b>Next learning:</b> Used across other areas of the curriculum			

## Year 4 Scheme of Work – Computing

<p><b>4.3</b> Word Processing (IT, DL)</p>	<p>6-7</p>	<p>L1 - Format images for a purpose. L2 - Use formatting tools to create an effective layout. L3 - Use the spellcheck tool. L4 - Insert and format a table in a word processing document. L5 - Change a page layout for a purpose. L6 - Create hyperlinks within a word document.</p> <p>Software: Microsoft Word</p>	<ul style="list-style-type: none"> <li>- Use some of the main keyboard shortcuts;</li> <li>- Suggest ways to improve a layout;</li> <li>- Apply specific effects to an image;</li> <li>- Add a spelling to the spelling dictionary;</li> <li>- Add or delete rows or columns in a table;</li> <li>- Suggest ways to change a table;</li> <li>- Type at an appropriate speed;</li> <li>- Choose a relevant website to link a document to;</li> <li>- Create a hyperlink.</li> </ul>	<ul style="list-style-type: none"> <li>- Templates</li> <li>- Pair work</li> <li>- Use-Modify-Create</li> <li>- Examples of activities</li> </ul>	<p>Continuous throughout.</p> <p>Produce a comic strip.</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content.</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p>	<p>Literacy</p>
<p><b>Previous learning:</b> See Y4 Basic Procedures unit</p>				<p><b>Next learning:</b> Y5 – Nested loops; basic procedures; count-controlled loops</p>			
<p><b>4.4</b> Scratch: (CS)</p>	<p>7-9</p>	<p><b>Diving Beetle Game</b> L1 - Understand the concept of conditions that start actions through everyday examples. L2 - Predict the code from a pre-created game using indefinite loops and conditions that start actions L3 - Run the game code checking if predictions were accurate. L4 - Investigate aspects of the game code. L5 - Modify parts of the code. L6 - Plan their own game using conditions that start actions. - Code their game. - Test and refine their creations. .</p> <p>Software: Scratch</p>	<ul style="list-style-type: none"> <li>- Understand the concept of conditions that start actions through everyday examples.</li> <li>- Predict the code from a pre-created game using indefinite loops and conditions that start actions</li> <li>- Run the game code checking if predictions were accurate.</li> <li>- Investigate aspects of the game code.</li> <li>- Modify parts of the code.</li> <li>- Plan and create their own game using conditions that start actions.</li> <li>- Debug and refine the code.</li> </ul>	<ul style="list-style-type: none"> <li>- Example code.</li> <li>- Task instructions.</li> <li>- Tinker time</li> <li>- Pair programming</li> <li>- Unplugged activities</li> <li>- Concept before code.</li> <li>- PRIMM scaffolding.</li> </ul>	<p>Continuous throughout.</p> <p>Create a game.</p>	<p>Create content that accomplish given goals.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Write and debug programs that accomplish specific goals.</p> <p>Use sequence, selection and repetition in programs.</p> <p>Work with variables.</p>	<p>Maths</p>

## Year 4 Scheme of Work – Computing

Previous learning: Y2 – Scratch animation and dialogue				Next learning: Y6 – Lego stop motion animation; green screen; credits/titles/sound effects			
4.5 Animation (IT)	4-6	<p>L1 - Describe early forms of animation before computers and how computers have made a difference.</p> <p>L2- Create a short computer animation using one or more moving stick figures.</p> <p>L3 - Create a short computer animation involving a number of moving characters on a background.</p> <p>L4 - Structure specific timings of animations.</p> <p>- Analyse and evaluate software.</p> <p>Software: Pivot Animator</p>	<ul style="list-style-type: none"> <li>- Describe one or more traditional methods of animation.</li> <li>- Make slight changes to an image using onion skinning, understanding the term.</li> <li>- Use a time slider to find a specific point in a film clip to insert or edit an object.</li> <li>- Edit and refine images in a stop-motion animation short film clip.</li> <li>- Compare different animation software by analysing good and bad points.</li> </ul>	<ul style="list-style-type: none"> <li>- Pair work</li> <li>- Tinker time</li> <li>- Use-Modify-Create</li> <li>-Step-by-step instructions</li> </ul>	<p>Continuous throughout.</p> <p>Complete the various animations.</p>	<p>Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	Art, Literacy