



## KS2 National Curriculum

### Computer Science

- Design and debug programs, including those that control physical systems, and solve problems by breaking them down.
- Employ sequence, selection, repetition, variables, input, and output in programs.
- Apply logical reasoning to understand simple algorithms and fix errors in algorithms and programs.
- Gain an understanding of computer networks like the internet, its services such as the World Wide Web, and its uses for communication and collaboration.

### Information Technology

- Effectively use search tools, understand result selection, and critically evaluate digital content.
- Choose and combine different software and internet services on various devices to create programs, systems, and content for specific purposes.
- Use digital tools to gather, analyse, evaluate, and present data and information.

### Digital Literacy

- Utilise technology safely, respectfully, and responsibly.
- Recognize appropriate and inappropriate online behavior.
- Know how to report concerns about online content and contact.

## YEAR 3

### Computer Science

- Children can turn a simple real-life situation into an **algorithm** for a program by **deconstructing** it into manageable parts.
- Identify an error within their program that prevents it from following the desired algorithm and then fix it.
- Design and code a program that follows a simple **sequence**.
- Experiment with timers to achieve **repetition** effects in their programs.
- Begin to understand the difference in the effect of using a timer command rather than a **repeat command** when creating repetition effects.
- Understand how **variables** can be used to store information while a program is executing.
- Use logical, achievable steps and absorb some new knowledge of **coding structures**.
- Make good attempts to 'step through' more complex code in order to identify errors in algorithms and can correct this.
- 'Read' programs with several steps and predict the outcome accurately.
- List a range of ways that the **internet** can be used to provide different methods of **communication**.
- Use some methods of communication, e.g. being able to open, respond to and **attach files** to emails.
- Describe appropriate **email conventions** when communicating in this way.

Purple Mash Unit 3.1:  
Coding - 2Chart /  
2Code

Purple Mash Unit 3.5:  
Emailing - 2Respond  
/ 2Connect

<b>Information Technology</b>	<ul style="list-style-type: none"> <li>• Carry out simple searches to retrieve digital content.</li> <li>• Understand that to search online they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.</li> <li>• Collect, <b>analyse</b>, evaluate and <b>present data</b> and information using a selection of <b>software</b>.</li> <li>• Consider what <b>software</b> is most appropriate for a given task.</li> <li>• Create purposeful content to attach to <b>emails</b>.</li> </ul>	<p>Purple Mash Unit 3.3: Spreadsheets - 2Calculate</p> <p>Purple Mash Unit 3.4: Touch Typing - 2Type</p> <p>Purple Mash Unit 3.5: Emailing - 2Respond</p> <p>Purple Mash Unit 3.6: Branching Databases - 2Question</p> <p>Purple Mash Unit 3.7: Simulations - 2Simulate</p> <p>Purple Mash Unit 3.8: Graphing - 2Graph</p>
<b>Digital Literacy</b>	<ul style="list-style-type: none"> <li>• Demonstrate the importance of having a <b>secure password</b> and not sharing this with anyone else.</li> <li>• Explain the negative implications of failure to keep <b>passwords</b> safe and secure.</li> <li>• Understand the importance of staying safe and the importance of their conduct when using familiar communication tools.</li> <li>• Know more than one way to <b>report unacceptable content and contact</b>.</li> </ul>	<p>Purple Mash Unit 3.2: Online Safety</p> <p>Purple Mash Unit 3.5: Emailing - 2Respond</p>

### Assessment End Points Year 3

Knowledge	Skills
<ul style="list-style-type: none"> <li>• I know how to use logical, achievable steps and absorb some new knowledge of <b>coding structures</b>.</li> <li>• I know that to search online I am connecting to the internet and using a search engine.</li> </ul>	<ul style="list-style-type: none"> <li>• I can design and code a program that follows a simple <b>sequence</b>.</li> <li>• I can 'read' programs with several steps and predict the outcome accurately.</li> </ul>