



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	<ul style="list-style-type: none"> 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
-------------------------	---	---

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

Assessment End Points Year 3

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