



# Belfairs Academy

## Computing Year 8 Fundamentals

Knowledge & Skills	
<b>Programming in Python</b>	<ul style="list-style-type: none"><li>• Basic Python syntax</li><li>• How to use variables</li><li>• IF, THEN and ELSE in Python</li><li>• FOR and WHILE loops</li></ul>
<b>Networks</b>	<ul style="list-style-type: none"><li>• State that the Internet is a wide area network and the world wide web is part of the Internet</li><li>• Define the meaning of the terms “domain name”, http protocol</li><li>• Explain the basic principle of packet switching</li><li>• Give examples of LANs and WANs</li><li>• State three different network topologies</li><li>• Describe the advantages of a client-server network.</li><li>• State why some transmissions are encrypted, and use a simple algorithm to encrypt and decrypt a message</li></ul>
<b>Website Development</b>	<ul style="list-style-type: none"><li>• Write HTML code to create a simple web page and display it in a browser</li><li>• Write CSS to define the styles used in a web page</li><li>• Create a simple navigation system using HTML</li><li>• Use a design to create a template for a web page using HTML</li><li>• Create their own multi-page website</li><li>• Insert text, images and links on their web pages</li></ul>
<b>BBC Micro Bit</b>	<ul style="list-style-type: none"><li>• Development of programs on the BBC micro:bit using visual programming.</li><li>• Understand how a program develops in a lifecycle.</li><li>• Start to look at some MicroPython</li></ul>
<b>Excel</b>	<ul style="list-style-type: none"><li>• develop knowledge of how to use Excel in real life situations</li><li>• cell references</li><li>• brackets to change order of functions</li><li>• filters</li><li>• conditional formatting</li><li>• some functions: SUM, AVERAGE, MIN, MAX</li></ul>