



# ICT: Year 8 Overview

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Esafety</p> <p>This scheme of work will give learners an understanding of the fundamentals of the World Wide Web. Learners will learn how the Web works, how to be safe and responsible online, gain an understanding of ethical issues surrounding the use of the Web and also look at security risks and how they can be prevented.</p>	<p>Databases</p> <p>Building on what they learned about databases in year 7, students create their own database based on Welsh celebrities. This includes the use of more advanced features such as:</p> <ul style="list-style-type: none"><li>• Data validation</li><li>• Complex queries</li><li>• Forms</li><li>• Reports</li></ul>	<p>Spreadsheets</p> <p>Pupils will use Microsoft Excel to plan a road trip across a country of their choice. They will use Google maps to identify a route as well as the distance covered. This data will be analysed using a spreadsheet to calculate the overall cost. Finally they will manipulate the variables to show how changes would impact their results.</p>	<p>Small Basic</p> <p>Small Basic is a text based programming environment designed by Microsoft for children. Throughout this module, pupils will learn how to program using:</p> <ul style="list-style-type: none"><li>• Variables</li><li>• Constants</li><li>• Sequences of instructions</li><li>• Selection statements</li><li>• Iterative elements such as For loops</li></ul>	<p>Web development</p> <p>This scheme of work is designed to give learners an introduction to the main languages involved in web development. Learners will begin by gaining an understanding of the hardware and protocols involved with networking before developing their own websites using HTML, CSS and JavaScript.</p>	<p>Animation</p> <p>Using Adobe Animate, pupils will design and create an animation on a topic of their choice incorporating advanced features such as:</p> <ul style="list-style-type: none"><li>• Layers</li><li>• Motion tweens</li><li>• Shape tweens</li></ul>