

# Curriculum Summary Document

## Year 8 – Computing

Module/Unit of Learning	Taught During	What will students learn?	How does this help to build a broad and strong foundation?	Links to other Subjects
Digital Game Creation	Sept – Dec	<p>Students learn game theory and plan both top-down and platform games before building them in GDevelop.</p> <p>They apply events, conditions, variables, scoring and difficulty, developing creativity, logic and problem-solving while producing polished interactive digital products.</p>	<p>This unit strengthens Digital Literacy and Information Technology by using game-development tools and design principles.</p> <p>It also deepens Computer Science foundations through logic, events and variable use, preparing students for later coding and design tasks.</p>	<p>Art &amp; Design</p> <p>Maths</p> <p>Design Technology</p>
Computational Thinking	Jan – Feb	<p>Students develop key computational thinking skills including flowcharts, decomposition, abstraction and pattern recognition.</p> <p>They explore bubble sort and insertion sort and apply reasoning and logic through the Bebras challenge.</p>	<p>This unit develops foundational Computer Science thinking, enabling students to approach problems in structured, logical ways.</p> <p>These skills directly support algorithm work and programming in later units and at GCSE.</p>	<p>Maths</p> <p>Science</p>
Programming	Mar – May	<p>Students extend their text-based programming skills by building a text adventure, chatbot and number-guessing game.</p> <p>They apply sequencing, selection, iteration, variables, input/output and debugging to create increasingly independent programs.</p>	<p>This unit broadens core Computer Science skills by strengthening confidence with syntax, structured code and problem-solving.</p> <p>It prepares students for more complex programming challenges in Key Stage 4.</p>	<p>Maths</p> <p>English</p>
Networks and Security	June – July	<p>Students learn how computer networks operate, exploring LANs, WANs, routers, switches and protocols.</p> <p>They also study cybersecurity threats such as malware and phishing and create a simple website in Canva to understand communication and safe online practice.</p>	<p>This unit builds understanding of networks, communication and system security, key Computer Science concepts needed for later GCSE topics.</p> <p>It also reinforces Digital Literacy through safe, responsible online behaviour.</p>	<p>PSHE</p> <p>Science</p>