The Computing curriculum is built upon three core principles:

1. **Safe and Respectful Use of Computers** – Developing responsible digital citizenship, cybersecurity awareness, and ethical technology use.
2. **Problem-Solving with Computational Thinking** – Strengthening logical reasoning, pattern recognition, and structured problem-solving approaches.
3. **Creators, Not Consumers** – Encouraging students to design and build with technology, rather than passively using it.

Each year gradually deepens understanding, ensuring skills build progressively across KS3 and KS4.

Progression Map Across Year Groups

Year	Safe and Respectful Use of Computers	Problem-Solving with Computational Thinking	Creators, Not Consumers
7	Understanding online safety and respectful interaction. Introduction to digital footprints and cyberbullying awareness. *(Lays the foundation for later cybersecurity discussions)*	Decomposition & pattern recognition. Introduction to computational thinking through unplugged activities. *(Prepares for coding & logic development)*	Block-based programming (Scratch) to create animations & games. Basic website design (WYSIWYG). *(First steps in digital creation)*
8	Cybersecurity awareness—password security, phishing risks, personal data protection. *(Strengthens safe practices)*	Introduction to algorithms & flowcharts. Logical reasoning in problem-solving scenarios. *(Develops structured thinking for programming)*	Text-based programming (Python) with focus on variables & loops. Website creation using HTML/CSS. *(Advances digital making skills)*
9	Digital ethics—fake news, media bias, cyber laws. Advan ced cybersecurity principles. *(Prepares for ethical computing discussions in KS4)*	Exploring different algorithms (searching & sorting). Developing debugging skills. *(Critical thinking for software development)*	Python programming (functions & data structures). Spreadsheet modelling & real-world data analysis. *(Strengthens ability to build & manipulate digital solutions)*

10	Legal, ethical, and environmental impacts of computing (GDPR, AI biases). *(Ensures responsible computing knowledge)*	Problem-solving strategies in complex scenarios. Logical operators & Boolean logic. *(Essential skills for advanced computing challenges)*	Object-oriented programming. Networking & system architecture exploration. *(Lays groundwork for computing in practical applications)*
11	Secure programming practices—data protection, encryption basics. Understanding implications of cybercrime. *(Critical for career readiness in computing fields)*	Computational logic applied in real-world case studies. Exam practice in algorithm efficiency. *(Readies students for assessments & further education)*	Advanced project-based programming. AI & machine learning concepts introduction. *(Prepares students for emerging technology fields)*