Curriculum Map for Computing Years 10 to 11

Year 10

Year 10	Topic 1 – Problem Solving 1.1 Algorithms 1.2 Decomposition and abstraction 1.3 Truth tables	Topic 2 - Data 2.1 Binary 2.2 Data representation 2.3 Data storage and compression	Topic 3 – Computers 3.1 Hardware 3.2 Software 3.3 Programming Languages	Topic 6 – Problem solving with programming This will be taught throughout the year

Delivery is aimed at engaging students with Computing and embedding the basic principles of computer science. We start with Topic 1 and blend this with some basic programming concepts.

During the delivery of each unit programming will be taught, which is **Topic 6**. Students will learn about basic programming constructs in 1 lesson every 2 weeks throughout years 10 and 11. All aspects covered in year 10 will be covered in year 11 with specific emphasis on exam technique.

The **exam technique** focus will be on the command words State and Describe – 20% of the exam questions are this type and it's essential they build this skill. Students will also learn about specific Computing questions such as creating an expression and interpreting programming questions.

For **assessment**, every unit will have an assessed homework during delivery and an assessed test at the end. All these pieces will be given a GCSE grade, which will inform the SIMs assessments. The end of unit exam is a modified Edexcel paper to reflect units covered.

Year 11

Year 11	**Topics 4 – Networks** 4.1 Networks 4.2 Network Security	**Topic 5 – Issues and Impact** 5.1 Environmental 5.2 Ethical and legal 5.3 Cybersecurity	**Topics 1 – 5 Revision** We will spend time focussing on question and answer technique for paper 1. Specific focus will be placed on the technical questions and ways to answer.	**Topic 6 – Problem solving with programming** This will again be taught throughout the year with a greater emphasis on paper 2 questions and how to answer

Delivery is focussed on embedding all knowledge needed and applying to exam questions whilst covering the final units. Students should be well versed at this point with the command words with the work we do in year 10.

This year is aimed at perfecting the **exam techniques** and ensure students understand how to answer the very specific Computing questions. This exam technique will be embedded in every lesson, with a key focus question in every one.

For **assessment**, every unit will have an assessed homework during delivery and an assessed test at the end. All these pieces will be given a GCSE grade, which will inform the SIMs assessments.   Students will also do a full mock paper for papers 1 and 2. And extra papers will be given during the year.