|  |
| --- |
| **Subject: Computer Science** |
| **Year 11** |
| Half -Term | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Themes/Content/A can of a product  Description automatically generated with medium confidenceUnits covered | Learning the characteristics of types of network (LANs & WANS) Identifying factors that can affect network performanceExploring hardware needed to connect to a networkLearning about the internetDesigning network topologiesUnderstanding & applying searching & sorting algorithmsDeveloping programming skills to design a program | Learning about modes of network connectionLearning about encryption Exploring IP addressing & MAC addressingLearning about standards & protocols (including layers)Using SQL to search for dataUnderstanding defensive design considerationsIdentifying and using suitable test data for a given scenarioDeveloping programming skills to write a program | Learning about threats to computer systems & networksIdentifying & preventing vulnerabilities in computer systems & networksLearning the purpose & functionality of operating systemsLearning about the different levels of programming languagesExploring the tools & facilities available in an IDEDeveloping programming skills to test & refine a program | Learning the purpose & functionality of utility softwareExploring the impacts of digital technology on societyExploring legislation relevant to Computer ScienceDeveloping computational thinking skills | Revision and exam technique in preparation for your exam |  |