



Year 10					
Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
System Architecture, Memory and Storage This unit will give a deep understanding of how a computer functions and processes data. Overview of the knowledge and skills covered in this unit: <i>Systems Architecture</i> • The purpose of the CPU • Common CPU components and their function • CPU performance • Embedded systems <i>Memory & Data Storage</i> • Primary storage • Secondary storage • Units How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Data Representation This unit will give a deep understanding of how data is represented within a computer system and how it can be manipulated in binary form. Overview of the knowledge and skills covered in this unit: <i>Data Storage</i> • Numbers – Bits and Bytes, Binary, Hex, Denary, Binary Addition, Binary Shifts • Characters • Images • Sound How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Networking This unit will give a deep understanding of how computers are networked, how they communicate and the hardware necessary to allow this. Overview of the knowledge and skills covered in this unit: • Networks & topologies • Network Hardware • Wired and wireless networks • Protocols and layers • Network Performance How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Network Security This unit will give a deep understanding of the threats that face networks and computer systems in the modern world. Overview of the knowledge and skills covered in this unit: • Threats to computer systems and networks • Identifying and preventing vulnerabilities How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Systems Software This unit will give a deep understanding of operating systems, utility software and user interfaces within modern OS. Overview of the knowledge and skills covered in this unit: • Operating systems • Utility software • Compression and Defragmentation How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Legal, Ethical, Cultural and environmental impacts This unit will give an in depth look at the legislation and ethical/cultural limitations or effects of computing. Overview of the knowledge and skills covered in this unit: • Ethical issues • Legal issues • Cultural issues • Environmental issues • Privacy issues • The data protection act • Computer misuse act • Copyright • Software licences How will this be assessed? • Midpoint Assessment • Practice Exam Questions Summer Mocks