

Unit Overview – Computer Hardware

Completion date: July

You will learn about

The internal parts of a computer
Computer networking

You will be able to

Describe how a CPU works and different types of secondary storage.
Explain what different networks do and how they functions.

TERM 3

Topic Overview

Computer Systems – Secondary Storage

Discover the reason why secondary storage is needed and the different types. Know how Hard Disk Drives, Optical Media and Solid State Drives operate.

Computer Systems – CPU

Know what the internal parts of a CPU are and how they process data

Networks – Intro

Know and understand the hardware required to create a computer network.

Network Protocols

Know how the data is transmitted across networks using different networking protocols.

Network Modelling.

Learn to build a computer network using the Cisco Packet Tracer simulation software that creates a virtual operational network.

End of Year Exam

Key Words

- **Hardware:** the physical parts of a computer system, both internally and externally (peripheral).
- **Software:** the programs that operate at different levels in a computer system.
- **Network** – two or more computer devices connected together.
- **Data Encryption:** a method of preventing the understanding of a file being found out
- **Social Engineering** – the method getting a user (victim) to do things they would not normally do or make themselves vulnerable.
- **Malware** – various different types of malicious software.

Suggested reading or support available

Teach ICT

http://www.teach-ict.com/2016/GCSE_Computing/AQA_8520/aqa_8520_home.html

BBC Bytesize GCSE Computer Science

Cross curricular

SMSC: hacking, data security and ethics

Literacy: Research methods of ethical and environmental IT issues.

Numeracy: binary storage capacities, algorithms for data compression.