

Year 8 Computing Topics:

- Describe the difference between a grey, black and white hacker.
- Describe network attacks e.g. DDoS, Brute Force, Zero Day Attack
- Identify and apply the four offences of the Computer Misuse Act.
- Understand what Copyright law protects against.
- Identify an e-mail scam
- Describe the difference between the internet and world wide web
- Describe the term 'transmission media' using examples e.g. twisted pair, ethernet, fibre optic
- Describe the purpose of network hardware e.g. hub, switch, router, nic, server, bridge
- Compare a LAN and a WAN
- Explain the advantages and disadvantages of a star and bus
- Understand why computers use binary.
- Convert from binary to decimal and decimal to binary.
- Create and debug simple python programs using print
- Identify variables in a python program



There will also be a few questions to recall knowledge of Year 7 Computing topics:



- Define: cyberbullying and online grooming and understand the dangers.
- Identify different types of computer e.g. desktop, laptop
- Describe the purpose of internal computer components: motherboard and hard disk drive
- Explain the difference between RAM and ROM in terms of their characteristics (volatile, non-volatile, permanent, temporary)
- State the type of secondary storage e.g. optical, magnetic or solid state.
- Explain the advantages and disadvantages of storage devices e.g. hard drive, optical storage
- Define an algorithm and give an example e.g. pseudocode or flowchart.
- Create and debug python code to output a string e.g.
print("Hello") or carry out calculations e.g.
print(2*2) multiplies
print(4/2) divides