

Questions

1) State the purpose of the following network devices:

a) Wireless Access Point

[1]

b) Switch

[1]

c) Cable

[1]

2) a) Draw lines to connect each network to the correct characteristic.

[3]

LAN

uses cables owned by the company

Wi-Fi

computers are not close together

WAN

connects devices using radio signals

b) Which of the following is the Internet an example of?

[1]

A LAN

B PAN

C WAN

3) Give **three** functions a server may perform in a network.

[3]

4) a) Give **three** advantages of networking computers in a nursery school.

[3]

b) Explain **two** disadvantages of networking computers within a home.

[4]

5) a) Give **two** advantages of a client-server network compared with a peer-to-peer network.

[2]

b) Give **two** advantages of a peer-to-peer network compared with a client-server network.

[2]

GCSE Computer Science - Chapter 3-1 - Question Template

6) A school has a network which includes fibre optic cables, copper cables and wireless access points.

a) i) Give **two** reasons why the school uses fibre optic cables. [2]

ii) Give **one** reason why the school uses copper cable. [1]

iii) Give **three** reasons why the school has wireless access points. [1]

The wireless access points include an open unencrypted 'hot spot' for guests.

d) Explain the risks that come with an open unencrypted 'hot spot'. [4]

The PE department have complained they regularly lose the Wi-Fi signal in the changing rooms.

e) Give **three** reasons why the Wi-Fi signal could be lost regularly. [3]

The school uses a star topology.

f) i) Explain why the star topology is more appropriate than a mesh topology for the school. [4]

ii) Draw and label a diagram of a star network with 4 computers, showing the direction of flow of data. [3]

iii) Draw and label a diagram of a full mesh network with 4 computers, showing the direction of flow of data. [3]

7) A television network is broadcasting live news from Australia to the UK. When the news reporter in the UK studio asks a question to the reporter in the Australia studio, there is a delay before the Australian reporter responds.

a) Identify the name given to this type of delay. [1]

b) Explain why this delay is happening. [2]