Task 1

Draw/Design a diagram of what you think each of the following networks might look like. Annotate this diagram by identifying the following:

* Type of network (LAN)
* Network model (Client-server/Peer-to-peer)
* Network hardware required
* Transmission media required (cabling)

Ethernet cable is used to connect router to ethernet port socket which can transmit coverage via Wi-Fi signals.

Hardware required is a router to allow these devices to connect to the internet.

This network is peer-to-peer because there is no server, each device has equal responsibility.

This network is a LAN because it covers a small geographical area.

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| **Home network**  Games console  Smartphone  Laptop  Router |

Hardware required:

Server as they need a powerful computer to store all the data.

Switch which will allow all network traffic to be sent to it’s intended location.

Majority of cabling will be ethernet based.

This network uses a client-server network as the server as it’s the centralised location at which all files are stored.

This network is a LAN (Local Area Network) as it covers a single site.

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| **School network**  Device  Device  Device  Printer  Server  Switch |

Accept a wide range of responses to this. Some home network will vary in terms of number of devices and some may have WAP’s or boosters. Some students may also want to take the cabling further by suggesting fibre optic cabling to access the internet via their broadband. Although this task is designed to get them thinking about how networks are put together, it’s good for them to think about this and draw upon other parts of the specification that have been taught.

Encourage them to label their diagram as this is a common question in the examination.