

Kit's Network Architect Challenge

Learning objective: To understand the basic components of a computer network and how devices communicate using hardware like routers and switches.

Kit the fox is designing a new digital office for the BookFlik team. To get the computers talking to each other, you must match the correct network component to its function. Read each description and write the name of the correct component from the word bank in the space provided.

Word bank: Server · Router · Switch · Client · Wireless Access Point · Ethernet Cable

1. I am a powerful computer that stores files, emails, and shared data so that everyone on the network can access them. What am I? (2 marks)

2. I act as the traffic controller for a local network, connecting devices like printers and computers so they can talk to each other. What am I? (2 marks)

3. I am the device that connects different networks together, such as connecting our home network to the wider internet. What am I? (2 marks)

4. I am the physical wire that transmits data between devices at high speeds. What am I? (2 marks)

5. I am a laptop or tablet used by a person to request information from the network. What am I? (2 marks)

Draw: Draw a simple diagram of a network for a classroom. Include at least three 'Clients' (like laptops), one 'Switch' in the middle, and one 'Router' connecting the whole network to the outside world. Use arrows to show how data travels between them.



Extension challenge: Imagine Kit wants to add a 'Wireless Access Point' to the design. Explain in two sentences why this would be helpful for the team if they wanted to move around the office with their tablets.