The Network Detective: Connecting the Village

Learning objective: I can identify the components of a computer network and explain how data travels between devices.

About 15 minutes. Grown-up tip: Ask your child to imagine how the Wi-Fi in your home connects to their tablet or games console.

Kit the Fox is helping our village community centre set up a new network. Use the word bank to label the components of the network and complete the sentences.

Worked Example: A 'Server' is a powerful computer that stores files and shares them with other devices on the network. Use this logic to match the terms to their functions below.

Word bank: Router · Server · Switch · Wireless Access Point · Client · Data Packet

1. 1. Which device acts as the traffic controller, directing information to the correct computer on the network? (1 mark)

2. 2. Small chunks of information sent across a network are known as what? (1 mark)

3. 3. If a laptop connects to the network without using a cable, which device is it likely talking to? (1 mark)

4. 4. Explain why a network is better than using a single stand-alone computer if you want to print a document from three different rooms. (2 marks)

5. 5. A local school has 450 tablets. If they use a 'Star Topology' (where every device connects to a central switch), what happens to the network if the central switch stops working? (2 marks)

Draw: An illustration of a friendly fox (Kit) wearing a headset, pointing to a diagram of computers connected to a central box in a village community centre.

Extension challenge: Imagine the internet is a series of roads. If the main 'motorway' (the backbone of the network) is closed for repairs, suggest one way data might still reach its destination.

I did it! Name: _____ Date: _____

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