

Kit's Network Explorer Fact-File

Learning objective: To understand how computer networks work, including the roles of servers and clients, and the purpose of hardware like routers and switches.

Help Kit the fox map out how devices connect to each other. Use your computing knowledge to complete this fact-file. Remember to explain how data travels across a network to reach its destination.

Word bank: Server · Client · Router · Switch · Data · Network · Connection · Internet

1. Defining the Network: Explain what a computer network is in your own words. Why do we connect computers together? (2 marks)

2. Clients and Servers: Describe the difference between a 'client' (a device like a laptop) and a 'server'. What is the job of the server? (2 marks)

3. Hardware Heroes: What is the purpose of a router in a home network? How does it help devices 'talk' to the internet? (2 marks)

4. Data Journey: Imagine you are sending a digital message to a friend. Describe the path the data takes from your device through the network. (3 marks)

5. Network Security: Why is it important to have secure connections and strong passwords when using a network? (2 marks)

Extension challenge: Draw a diagram of your home or school network. Label the router, any switches, and at least three different devices that connect to it.