

Class 4 Computing Assessment: Connecting Our World

Learning objective: To demonstrate an understanding of computer networks, how devices communicate, and the role of the internet.

Read each question carefully. Write your answers clearly in the spaces provided. You have 45 minutes to complete this assessment.

Kit the fox is setting up a digital library for the forest animals. He needs to make sure that Pip the caterpillar can access e-books on his tablet, and that Nova the owl can send weather data from her telescope to the central computer. Kit explains that they need a network to share this information quickly and safely.

Word bank: Network · Server · Router · Data · Wireless · Internet · Device · Connection

1. What is a computer network? Explain using the word 'device' in your answer. (2 marks)

2. Kit uses a router to help the forest animals connect to the internet. What is the main job of a router in a network? (2 marks)

3. Is the internet the same thing as the World Wide Web? Give one reason for your answer. (2 marks)

4. Name two pieces of equipment (hardware) that you might find in a computer network. (2 marks)

5. Explain the difference between a wired connection and a wireless connection. Which one do you think is more convenient for Nova the owl when she is stargazing? (4 marks)

6. How does data travel from one computer to another? Describe the journey the information takes. (4 marks)

7. Imagine you are helping Kit the fox design a network for the library. Write a short plan (5 sentences) explaining why a network is useful for the animals and what equipment you would need to set it up. (5 marks)

8. What does a server do in a network? (2 marks)

Draw: Draw a simple diagram showing a network. Include a router, a laptop, and a tablet. Use arrows to show how data travels between them.



Extension challenge: Total: /25. Think about online safety: If Kit shares a file on the network, how can he make sure it stays private? Write two sentences about strong passwords.