The Invisible Web: Understanding Computer Networks

Success criteria (tick when done)

[ ] I have used technical vocabulary like 'router' and 'data packets'.
[ ] I have written in clear, logical paragraphs.
[ ] I have used conjunctions like 'consequently' or 'furthermore' to link my ideas.
[ ] I have checked my spelling and punctuation, especially for capital letters and full stops.

What to expect at this age

Year 6 pupils should be able to explain technical processes using logical sequencing and subject-specific vocabulary. They should aim for clear, concise sentences that avoid unnecessary repetition.

Good, better, best: model responses

Good: A network is a group of computers connected together. They share information. A router is like a traffic controller because it sends data to the right place. Data travels through wires or Wi-Fi. The internet is a huge global network. We need networks to send emails and watch videos.

Uses basic definitions and covers the main points of the prompt.

Better: A network is a collection of devices linked to share data. The router is the traffic controller; it directs data packets to the correct device. Information travels via wires or wireless signals. The internet is a global network that connects smaller local networks. Consequently, we can access information instantly from anywhere.

Introduces technical terms like 'data packets' and uses a conjunction for better flow.

Best: A network is a system of interconnected devices designed to share data packets efficiently. The router acts as a gateway, directing traffic to ensure information reaches the right destination. Furthermore, while wired connections offer stability, wireless technology provides flexibility. The internet is a vast global infrastructure; in contrast, a LAN is local. Without these networks, tasks like online learning would be impossible.

Uses precise vocabulary, complex sentence structures, and demonstrates a clear understanding of the relationship between local networks and the global internet.

What a secure answer looks like

Focus on the logical flow of information. Encourage students to use the word bank to elevate their writing from simple descriptions to formal explanations.

If your child is stuck

Ask your child to trace the path of a message from their computer to a friend's computer. Where does it go first? What helps it find the way?

Common mistakes to watch for

Children often confuse the 'internet' with the 'World Wide Web'. Remind them that the internet is the infrastructure (the roads), while the Web is the service we use (the shops on the road).