Kit’s Computing Connections: Mastering Networks

Learning objective: To understand the fundamental components and functions of computer networks, including how devices share information.

Study these flashcards to help Kit the fox build a robust network. Read the front of the card, attempt to define the term, then check your answer on the back.

What is a Computer Network?

A collection of computers and devices connected together to share resources and information.

Define a 'Server' in a network.

A powerful computer that provides services, files, or programs to other computers on the network.

What is a 'Client'?

A device, such as a laptop or tablet, that requests services or information from a server.

What does a 'Router' do?

It acts as a traffic controller, directing data packets between different networks to ensure they reach the correct destination.

Explain 'Wi-Fi'.

A technology that allows devices to connect to a network wirelessly using radio waves instead of physical cables.

What is a 'Data Packet'?

A small unit of data that is sent across a network, containing a piece of the original file or message.

Define 'Bandwidth'.

The maximum amount of data that can travel over a network connection at one time, often measured in bits per second.

What is a 'Node'?

Any device connected to a network, such as a printer, computer, or smartphone.

What is the purpose of a 'Switch'?

A device that connects multiple devices within a single local network, ensuring data is sent to the correct recipient.

Define 'The Internet'.

A massive global network that connects millions of smaller private, public, academic, and government networks together.

What is an 'IP Address'?

A unique string of numbers that identifies each device on a network, like a digital home address.

Explain the difference between a wired and wireless connection.

Wired connections use physical cables for stability and speed, while wireless connections use radio signals for mobility.