



Internet Communication

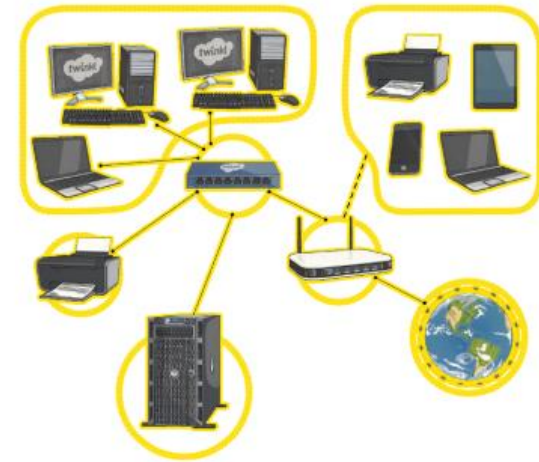


Key Vocabulary

clients	Computers or computer controlled devices that can connect to the server are called clients .
encrypted	The process of changing a message so it cannot be read by anyone except who it is sent too.
protocol	A protocol is a set of rules that say how information and data should be sent.
router	Routers are small computers that communicate between the Internet and devices that connect to the Internet. They keep the packets in a network moving to their destination as smoothly and quickly as possible.
server	A server is a piece of hardware that has a large memory drive where lots of files and resources are stored. It also responds to requests across a computer network.
streaming	A method that allows people to transmit or receive data. This happens when people listen to music or watch videos over a computer network. People can stream whenever they like as long as they are connected to the Internet.
switch	A device that has lots of connection ports for lots of other devices to connect to a computer network.
topology	Topology is a term used to define the layout of a network and can tell us how different devices are connected. There are different types of topology , such as: star, bus, mesh, ring and hybrid.

What Is a Computer Network?

A computer network is a group of connected devices, such as computers, printers, smartphones, **routers** and hard drives. They link together to 'communicate' with each other and share information. Computer networks can be large or small and can have lots of devices connected to them. For example, most schools have a computer network that allows staff and pupils to access and share information and resources. Some devices they might use are printers, computers, tablets and photocopyers.



NPA Knowledge Organiser: Year 6 Computing - Internet Communication

Internet vs World Wide Web

Many people believe that the Internet and the World Wide Web are the same. In fact, they are two separate concepts. One is a network and the other is a file system.

The Internet is a network of computers connected to each other all around the world. The World Wide Web is a global filing system that runs on the Internet. Many entries in the World Wide Web's filing system are websites which consist of many web pages.



Networks

The most common network sizes are LAN (local area network), MAN (metropolitan area network) and WAN (wide area network).

LAN:	A small wired or wireless network.
MAN:	A network that covers a city. Mainly uses fibre-optic cable connections between buildings.
WAN:	A network that covers more than 48km (30 miles). WAN networks are connected using copper wires, fibre-optic cables or satellites.

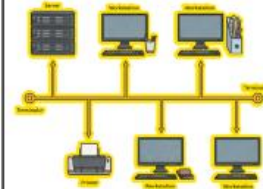
What Is Cloud Computing?

Cloud computing is the storage of files online. A group of computers provide storage services through the Internet. Cloud computing uses massive **servers** to store data and information and is classed as a network.



Topology

Bus topology:



Star topology:



Beware of the Malware!

Malicious software can gain illegal access to your computer network and cause damage to your files, data and information. Malware includes worms, viruses, spyware and Trojans.

