# **Glossary Networks**

#### bandwidth

Bandwidth measures the amount of data that can transfer through a communications channel over a given period of time.

#### 2. **bi**

The smallest unit of data in computing represented by a 1 in binary.

#### 3. Bluetooth

Wireless technology used for transmitting data over short distances.

### 4. bridge

A device that connects local area networks (LAN) or two parts of a LAN.

#### broadband

A high-speed internet connection.

### 6. client

The computer on a network that request data from a server.

#### 7. client-server

A form of computer networking where the data or web application is hosted on a server and accessed by client computers.

#### 8. data packet

A piece of data sent over a network. Messages have to be broken down into binary data packets before they are transferred.

#### digital

Information stored as discrete values usually represented as numbers. This contrasts with analogue data which is represented by continuous data, usually in waves.

#### 10. driver

A piece of software which controls a peripheral device.

### 11. encrypt

Files that are encrypted have been altered using a secret code and are unreadable to unauthorised parties.

### 12. Ethernet

A copper cable used to connect computers to a network.

#### 13. **FTP**

File Transfer Protocol - a protocol used to transfer large files across the internet

#### 14. **GSM**

Global system for mobile communications - standards used to manage communication on the mobile network. 3G and 4G are the third and fourth generations of GSM.

### 15. hacking

Gaining unauthorised access to a computer.

# 16. hard disk drive

A device used to store large amounts of data.

## 17. hardware

The physical parts of a computer system, eg a graphics card, hard disk drive or CD drive.

### 18. hexadecimal

A number system using 16 symbols from 0-9 and A-F, also known as base 16 and hex.

### 19. **HTML**

HyperText Markup Language. The language used to write and display web page documents.

### 20. **huk**

A piece of hardware used in computer networks used to connect multiple devices.

## 21. **LAN**

Local area network. A network of computers that covers a small area, eg a school or college.

# 22. latency

A period of time delay in a computer system.

# 23. MAC address

Media access control - each unique piece of hardware on a network has a MAC address.

### 24. motherboard

The circuit board inside a computer that houses the CPU, memory and connections to other devices.

# 25. MySQL

Open source database management system.

## 26. network card

A piece of hardware that connects a computer to a network.

### 27. **NIC**

Network interface card - all devices connecting to a network need one of these.

## 28. NoSQL

A form of non-relational database.

#### 29. open source

A model for creating technology that promotes free access to its design and makes it free to share.

#### 30. operating system

The software that runs a computer.

#### 31. **PAN**

Personal area network - a network of personal devices, not necessarily on the internet.

# 32. **PC**

Personal computer.

### 33. Peer-to-peer (P2P)

A type of network model where all computers on the network share responsibility and there is no one central server.

### 34. **port**

A physical interface on a computer to connect externals such as mice and keyboards. Over a network a port is a point where information is sent through, eg the http port.

### 35. protocol

A set of rules for how messages are turned into data packets and sent across networks.

### 36. router

A device for connecting computers and other network capable devices together to form a network.

#### 37. server

A computer that holds data to be shared with other computers. Servers require server software.

#### 38. smartphone

A mobile phone with a powerful processor that is capable of running applications and accessing the internet.

# 39. software

The programs, applications and data in a computer system. Any parts of a computer system that aren't physical.

#### 40. streaming

A method of delivering and receiving media such as audio and video in a continuous form over a network.

#### 41. switch

A device for connecting computers and other network capable devices together to form a network.

### 42. terminator

A device that terminates signals to prevent them reflecting back down the line.

# 43. virus

Any computer program designed to replicate and damage other computer systems and software.

### 44. **VPN**

Virtual private network - a private network that can be accessed securely through a public network such as the internet.

# 45. **WAN**

Wide area network. A network that spans across a building, buildings or even countries, eg the internet.

# 46. web application

Software that runs in a web browser. Most websites are web applications which use scripting to make the site interactive.

## 47. web browser

An application that displays web pages.

# 48. web server

The location for storing the contents of a web site.

### 49. web-based applications

An application that runs within a web browser.

### 50. wireless

A connection that does not need wires and transmits data through radio signals.

# 51. workstation

A computer connected to a network.

### 52. **WPA**

Wi-Fi protected access - used with routers to ensure only authorised users can access the network.

# 53. **WPAN**

Wireless personal area network - a wireless network of personal devices, not necessarily on the internet.