

Unit: 6.4 – Computing systems and networks - Communication and collaboration

Knowledge Organiser

	Key Learning
Lesson 1: Y6 - IT1 (KPI) , Y6 - IT4, Y6 - IT5	Internet Addresses
Lesson 2: Y6 - IT1 (KPI) , Y6 - IT3, Y6 - IT4, Y6 - IT5	Data Packets

Communicate - share or exchange information, news, or ideas.

Data - Information in an electronic form that can be stored and used by a computer.

Data payload – The second part of a **packet** of data, which is like the letter inside an envelope. It contains the data that is being sent.

Domain Name Server – A computer which works like an address book; it matches IP addresses to the domains.

Header – The first part of a **packet** of data, similar to the envelope of a letter – it contains the **address** of where the data will be going, as well as where it has come from

Transfer – To move something from one place to another.

I.P Address – Stands for **Internet Protocol Address**. An address which uniquely and specifically identifies a single computer.

Media – Audio, video or images.

Packet – A collection of data that can be used by computers which need to communicate with each other.

Protocols – A set of rules for communication between computers.

Website address – Also known as a URL (uniform resource locator). An Internet name which points to where a web page, a video, an image etc is located. A website address can also be called its **domain name**.

Web server – A computer which stores, processes and delivers web pages to users.

Key Questions

How do I end up with the information or files I need on the computer I am using? Sometimes I use different computers!

Each computer is given its own I.P address (Internet Protocol address) – this uniquely identifies your computer on the network you are using, and also allows it to be identified on larger networks (like the Internet).

How are different forms of media transferred between computers?

Like any form of data, media such as images, video and audio files are transferred in **packets**. Each packet is made up of two parts, the **header** and the **data payload**.

Is there only one packet of data for each file? How does it work?

Most data forms are too large to be transferred in one packet, so they are instead split into multiple packets. They are each given identifiers in each **header** so they can be identified correctly and grouped together in the right order at the destination computer.