



Computing Knowledge Organiser

Year 6 ★ Computing Systems and Networks ★



Communication and collaboration

-We can find information on the World Wide Web by using search engines (Web Browsers)

The first search engine was Yahoo and started in 1994, when the WWW had only 2,738 websites!

Protocols are an agreed method of communication (rules)

All digital devices have their own **Internet Protocol (IP Address)**, which are a series of numbers and digital stops, ie, 192.168.1.15

When data is transferred from one device to another, both the sender and destination IP addresses are needed so that they can communicate back and forth.

Domain Name Server a special computer that acts like an address book for the Internet, translating web

Data can be text, images, video or audio.

Data Packets all data transferred over the internet is broken down into small chunks of data, called packets. Data is split into small packets to be sent. Once they reach their destination, they go no further and are reassembled into their original form.

Router are devices that find a route between networks, connecting them. Data packets will be sent via different routers

Important Vocabulary

Protocol

Internet Protocol (IP)

Domain Name Server (DNS)

Data

Data Packets

Router

Internet

World Wide Web

Algorithm

Significant person

Sir Tim Berners-Lee



When talking about the WWW, he said: "This is for everyone!"

Born in London, 8th June 1955. He is a Computer Scientist and teaches in universities in Oxford and in the USA.

He invented the World Wide Web and fought to keep it free for everyone to use.

When the World Wide Web was invented by Tim Berners-Lee in 1989, there was only 1 website.

By 2018, there were 1,630, 322, 579!

The World Wide Web is a big place, and we need search engines to be able to find what we need.



You should know that:

- The internet is a network of networks.
- The World Wide Web is the part of the internet where we can visit websites and webpages.
- The World Wide Web can be used to find information, using search engines.
- The internet is also a useful communication tool – with a number of different communication mediums for a

Communicating and Collaborating Online

The Internet has been invented so that Universities far away could collaborate on projects together in a quicker and more efficient way.

People all over the world are now able to collaborate with each other and work on the same document at the same time! This may be through messages, images, videos and live documents, such as a PowerPoint presentation.



Age limits some websites and social media platforms, such as Facebook and Snapchat have age restrictions to

keep children safe - you should always abide by them for your own safety.

Although we may collaborate online and modify each other's work, we should also be aware of copyright (who owns the original work) and have permission to make changes on other people's work.



Online Communication

-Communication is when we share information with one another. We can communicate in lots of different ways on the internet, e.g. messaging services, emails, social media, video calling and gaming platforms.

-Public communication is visible to all, whilst private communication is restricted to only some people.

-Some communications are one-way (e.g. Youtube) whilst others are two-way (e.g. Skype, Face-Time).

-Some communications are to one person, whilst others are to many.

-We should consider which type of communication is most appropriate to our needs, safety and privacy.

