



# COMPUTING SYSTEMS AND NETWORKS KNOWLEDGE ORGANISER

## Overview



### The Internet

- You should also know that Information technology (I.T.) includes computers and things that work with computers.
- You should also know that information and data can be shared by devices across networks.
- The internet is a network of networks that is used around the world.
- The World Wide Web is a system on the internet that has websites and webpages.
- Some content is protected on the internet. It is important to know that not all information on the internet is accurate.

## Networks and The Internet

- Networks connect different devices to one another, allowing for information sharing.
- Networks can also connect to other networks in different places, using a router.
- The internet is a network of networks that are all connected together.

**Router:** A router is something that finds a route between networks, connecting them.



**The Internet:** The internet is a network of networks, that is used around the world to share information and communicate.



**Protection:** Networks have security features that mean they can block or allow messages and requests. This means that information and data can be kept safe.




## The World Wide Web

### The World Wide Web

- The World Wide Web is the part of the internet where we can visit web pages and websites.
- Information can be shared in the form of things we can see or hear (e.g. things we can read, music, sounds, or videos, etc.).
- When we use the world wide web, routers help us to journey to different networks in different parts of the world.
- We can use traceroute tools to track the journey between routers.
- Web browsers, e.g. Google Chrome and Internet Explorer, let us look at different pages on the internet.

### Website and Webpages

- Websites are a set of webpages.
- Webpages may contain different features, e.g. a title, links to other pages, images, videos, and text.
- Websites and webpages can be found using web addresses (domains), normally split into three parts:
  1. www (world wide web).
  2. Name of the organisation/ topic.
  3. Type of organisation/ location.

 [www.youtube.com](https://www.youtube.com)

## Ownership and Reliability

- The content on the internet may belong to different people or companies, for example the person who wrote it or the company who published it.
- The content may be copyrighted, meaning that others cannot copy or use it without permission.
- Not all of the information that we see or hear on the internet is reliable. Some of it may be inaccurate due to people lying or misunderstanding things.
- Inaccurate information can quickly spread. This has become known as 'fake news.' We should check multiple sources that we can trust to verify information.



## Important Vocabulary

Network

Internet

World Wide Web

Router

Security

Website

Webpage

Browser

Domain

Reliable