# Computing Knowledge Organiser- Year 5/6- Our Technological World

Internet services can be split into 3 categories:

1. Communication services, such as email, instant messaging, Skype/Facetime/Video conferencing/VOIP,
2. Information services, such as FTP (File Transfer Protocol) to access information on the internet.
3. World Wide Web (www) access documents spread over the several servers over the internet. These documents may contain texts, graphics, audio, video, hyperlinks. The hyperlinks allow the users to navigate between the documents.
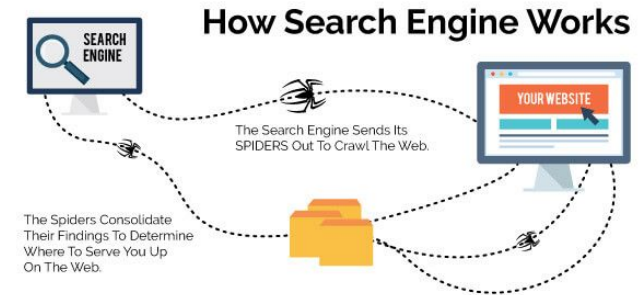
## How the internet works

Websites, emails, even videos are transferred over the internet in little packets of data. When you request to view something, the request is passed through routers to a DNS, which shows where the information is stored. The request reaches the server that holds the information, then sends back small packets to the client. A web browser will put all the little packets of data back together again so you can see the information. Next time you watch a youtube video and it 'buffers' you now know why- the web client is putting back the little packets of data.

The internet has changed the way the world works, sometimes for good, sometimes for bad. By using the World Wide Web, people can communicate, shop, watch films, complete banking taks, view the news and play games.

## How search works

Search engines, like Google, uses automated programs called spiders or crawlers, to help generate its search results. Google has a large index of keywords that help determine search results and uses a trademarked algorithm called PageRank, which assigns each Web page a relevancy score. This is based on lots of things, including how useful the site is, if it is reliable and what other sites link to it. The higher the score, the higher up the search the page will be.
The higher up the search results, the more chance of people clicking on it.

## Vocabulary

Internet        World Wide Web        Search Engine        Results        Client        Router        Server

Domain Name Server        Hyperlink        Link        Algorithm        Page Rank Email        Information

## Advertising

Advertising can be presented in many forms; from TV adverts, to radio jingles, to internet pop ups and billboards.
Pop-popups, web banners, email marketing, search engine marketing, and even vloggers and bloggers all provide adverts. Usually, this is a source of income for the sites that have the adverts.
If a service is free, like Google, it will have adverts on the page- that is how they make money.

## Copyright ©

Images returned by search engines do not belong to the search engine and are not free to use. The search engine has included them from a number of websites. All of the major search engines provide a link to the website that the original image is from. If you want to use an image you have found using a search engine, always check who it belongs to.

## Fake News

Not everything we see is real. Often the internet can be used to spread wrong information. Do not believe everything you read online, check at least 3 sites or other sources to see if the information is reliable