

COMPUTING SYSTEMS AND NETWORKS -

Yr 5 & Yr 6 KNOWLEDGE ORGANISER

Communication

Overview

Searching and Communicating

-You should already know that <u>the internet is a</u> <u>network of networks.</u>

You should also know that the <u>World Wide Web</u> is the part of the internet where we can visit <u>websites</u> and <u>webpages.</u>

-The World Wide Web can be used to find information, using <u>search engines.</u>

-The internet is also a useful <u>communication tool</u> – with a number of different communication mediums for a range of different purposes.

Search Engines - Introduction

-We can find information on the World Wide Web by using <u>search engines.</u>

-A search engine is a program that <u>finds websites &</u> <u>webpages</u> based on key words entered by the user.

-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! <u>The World Wide</u> <u>Web is a big place</u>, and we need search engines to be able to find what we need.

-Some examples of search engines are Bing, Google, Yahoo, DuckDuckGo and Kiddle.

-You can also type searches into the address bar of the <u>browser</u> (e.g. Google Chrome or Microsoft Internet Explorer).

| Selecting Search Results | <u>Ranki</u> | | | | |
|---|------------------------------|--|--|--|--|
| -Search engines use programs known as crawlers to index the World Wide Web. | -Searc highes | | | | |
| -They 'crawl' websites for searchable information – they then store where it is found in a huge <u>index.</u> | -Searc algorit factors | | | | |
| -Search engines select information from this index when we type in key words. | -The w the hig | | | | |
| -Searching for some search terms can bring many <u>millions of results.</u> | -Some the titl | | | | |
| -We need to make sure that our search terms are as <u>refined</u> as possible, in order | appea page (| | | | |
| to allow the search engine to select the information that is most relevant. | - <u>Web (</u> makin | | | | |

Online Communication

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

-<u>Public communication</u> is visible to all, whilst <u>private communication</u> is restricted to only some people.

-Some communications are <u>one-way</u> (e.g. Youtube) whilst others are <u>two-way</u> (e.g. Skype).

-Some communications are to <u>one person</u>, whilst others are to <u>many</u>.

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

| | - | Important Vocabulary | | | | | | |
|---|---------------|----------------------|-------|-------------|-----|----------|---------------|-----|
| ſ | Search Engine | Refine | Index | Web Crawler | Rar | ıking Li | nks Searching | S |
| | | Public | | Private | SMS | Blog | World Wide V | Veb |
| | | | | | | | | |

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Selecting and Ranking Search Results

ing Search Results

ch engines '<u>rank</u>' the web pages (the st ranked page is at the top).

ch engines use <u>algorithms</u> to do this – ithms look at a number of different rs and give web pages a score for each.

web page with the highest score ranks ghest.

e factors include if the search term is in tle of the page (high points) or if it ars in the paragraphs of the text on the (lower points).

-<u>Web designers</u> consider algorithms when making when pages.



Selection

Communication