

Prior Learning (Y5):

Learners will develop their understanding of computer systems and how information is transferred between systems and devices. Learners will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. They will also understand how to work collaboratively online.

Year 6

Computer Systems and Networks: Communication

Future Learning (Y7):

Learners are given sufficient time to familiarise themselves with the school network. It also allows the teacher to discuss appropriate use of the school network, and to update and remind learners of important online safety issues. Whilst completing this unit, learners will also learn how to use presentation software effectively. In terms of online safety, this unit focuses on respecting others online, spotting strangers, and the effects of cyberbullying

Current Learning (Y6):

Learners will find out about the World Wide Web as a communication tool. They will learn how we find information on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines. They will then investigate different methods of communication, before focusing on internet-based communication. Finally, they will evaluate which methods of internet communication to use for particular purposes

Key Vocabulary

Search Engine	Is software, usually accessed on the Internet, that searches a database of information according to the user's question
Web Crawler	A computer program that automatically and systematically searches web pages for certain keywords
Index	A method of sorting data by creating keywords or a list of the data
Communication	To share or exchange information by speaking, writing, or using another medium

RANKING

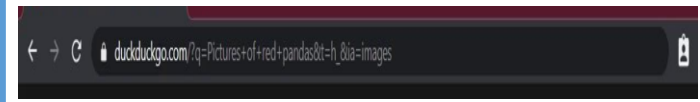
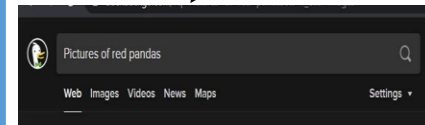
Search engines use algorithms to rank web pages. The algorithm looks at a number of factors on the web page and gives a score for each. The web page with the highest score ranks the highest. Although the exact algorithms are kept secret, search engines typically rank pages based on these factors:

- Receive 1 point for each time the search term appears in the paragraphs of text
- Receive 5 points for each time the keyword appears in the subheadings
- Receive 10 points if the search term appears in the heading
- Receive 20 points if the search term appears in the URL
- Receive 50 points for each other web page that has linked to your page (an inbound link)

Key Questions:

- How do you use a search engine?
- How do search engines select results?
- How are search results ranked?
- How are searches influenced?
- How can we communicate effectively using technology?

There are **two ways** we can conduct a search:
Using the search bar or using the address bar,



Web crawlers create an index of the WWW.



Search engines use the index to work out which web pages contain the users search term (s).