

Subject: Computing

Year group: 6

Term: Spring Term

Unit name: Communication

**Big idea: To know how search engines work.**

**To investigate and evaluate methods of online communication.**

In this unit, the class will learn about the World Wide Web as a communication tool. First, 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.

**Progression of skills :**

Understands how to effectively use search engines, and knows how search results are selected, including that search engines use 'web crawler programs'.

Selects, combines and uses internet services.

Demonstrates responsible use of technologies and online services, and knows a range of ways to report concerns

Explores the validity of digital content.

**Prior learning:**

**Year 3 Connecting computers.** Learners are introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches.

**Year 4 The Internet** Children are introduced to the idea of the internet as a network of networks. The evaluate some content of the World Wide Web.

**Year 5 Sharing information** In this unit children develop their understanding of computer systems and how information is transferred between systems and devices

Vocabulary	
Information movement	Acknowledge resources
Research	Research strategies
Refine	LAN
Address bar	Antivirus/virus
Ranking	trojan
Optimisation	Adware
Selection	Server
Validity	Connecting devices
Connecting devices	Firewall
Different audiences	Pop up blocker
Research strategies	Security updates
Search result rankings	Home page
Bread crumb trail	Media
Subpage	Hypertext
External link	Markup Language (HTML)
Embed	Fair use

**Education for a Connected World links**

- I can describe and assess the benefits and the potential risks of sharing information online.
- I can use various additional tools to refine my searches (e.g. search filters: size, type, usage rights etc.).
- I can explain how to use search effectively and use examples from my own practice to illustrate this.
- I can explain how search engine rankings are returned and can explain how they can be influenced (e.g. commerce, sponsored results).

### Key assessment learning statements:

To use a search engine effectively , learning to refine searches and compare results.

To learn how search engines select results and explore the role of web crawlers to create an index.

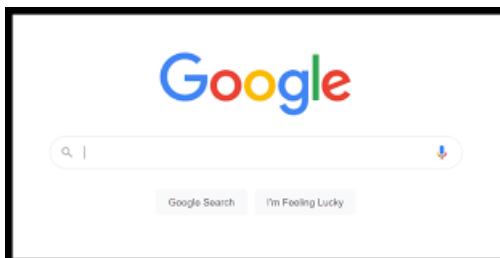
To explain how search results are ranked.

To consider internet based communication and evaluate methods for different purposes.

To explore issues around privacy and information security. Consider communication on the internet may not be private.

### National Curriculum links

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
- Select, **use and combine a variety of software (including internet services)** on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- **Use technology safely, respectfully and responsibly;** recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact



### Spiritual Development

Computing allows children to reflect on the awe and wonder of the achievements and possibilities of ICT in a modern world. They think about the limitless opportunities that could be achieved thus promoting their sense of self and motivation. Exodus 15:11: And amazement seized them all, and they glorified God and were filled with awe, saying, "We have seen extraordinary things today."