Computing: Systems and Searching

Overview of unit

Learners develop their understanding of computer systems and how information is transferred between systems and devices. Learners consider small-scale systems as well as large-scale systems. They explain the input, output, and process aspects of a variety of different real-world systems. Learners discover how information is found 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.

Key Questions

What systems can you explain?
Can you identify the input and output of everyday systems?
Why are computer systems so import to our lives?
Explain how a search engine works.
How do search engines rank our results?

Key Vocabulary

Word	Definition	Word	Definition
System	components can work together to perform a task	output	The result of data processed by a computer
content creator	someone who creates digital entertaining or educational material	refine	to improve a search result to be more specific and lower the number of hits
Input	Data that is sent to a program to be processed	Index	a set of items each of which specifies one of the records of a file and contains information about its address.
Process	A program, or part of a program, that is running on a computer	crawler	a program that systematically browses the World Wide Web in order to create an index of data.
search engine	a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web.	ranking	refers to the position a particular Web page holds in the results for a specific query
algorithm	A precise set of ordered steps that can be followed by a human or a computer to achieve a task		

Key Knowledge and Understanding:
What will we be learning about in this unit / topic?

To explain that computers can be connected together to form systems
To recognise the role of computer systems in our lives
To identify how to use a search engine
To describe how search engines select results
To explain how search results are ranked
To recognise why the order of results is important, and to whom