

Subject Knowledge Organiser - Effective Searching/Hardware Investigator - Year 3/4

What I will have learnt by the end of this unit

Unit 4.7 - Effective Searching

To locate information on the search results page.

- Children can structure search queries to locate specific information.

To use search effectively to find out information.

- Children have used search to answer a series of questions.
- Children have written search questions for a friend to solve.

To assess whether an information source is true and reliable.

- Children can analyse the contents of a web page for clues about the credibility of the information.

Unit 4.8 Hardware Investigators

To understand the different parts that make up a desktop computer.

- Children can name the different parts of a desktop computer. • Children know what the function of the different parts of a computer is.

To recall the different parts that make up a computer.

- Children have created a leaflet to show the function of computer parts.

What I will have learnt by the end of my Key Stage

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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.

Key Skills I will learn/use

Effective Searching

Search Engines

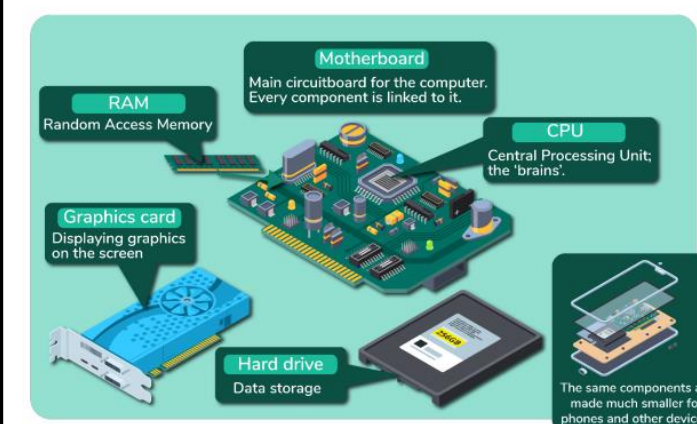
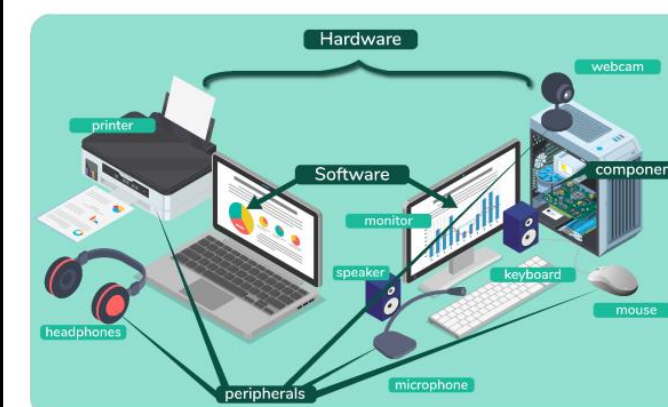


A program that searches the World Wide Web to locate information. Browsers typically allow access to a search engine.



- 2 use keywords
- 2 punctuation doesn't matter
- 2 capitalization doesn't matter
- 2 you can search for events, score, mathematical calculations, translations, conversions, locations, weather and much more ...

Hardware Investigators



Key Questions

What is a search engine?

A search engine is a piece of software that allows the user to find and display pages from the World Wide Web.

What is the difference between hardware and software?

Hardware refers to the physical parts of a computer or device. The parts inside the computer casing are often called the components. The parts that are attached to the computer case are called peripherals. Software describes the programs that run on the computer.

Opportunities for teaching Diversity, Equality (including protected characteristics) and expanding Cultural Capital

Show children examples of contrasting countries and cultures that do not have the same opportunities as we have

- Educational video: The Third World for kids | Happy Learning

Look at what technology will look like in the future.

- Technology of the Future | Safe Search (safesearchkids.com)

Key Concepts/Strands

- Computing Science
- Information Technology
- Digital Literacy

What I have already learnt (KS1)

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

My Skills and Knowledge that I may use from other subjects

Literacy- I can use my literacy skills to read and input data
Mathematics- I can use my mathematical skills to read and interpret diagrams and graphs

Recall and remember

Quiz unit 4.7
 Quiz unit 4.8

Key Vocabulary Unit 4.7
Effective Searching

Balanced View

Presenting opposing points of view fairly and without bias.

Internet

A global computer network providing a variety of information and communication facilities.

Easter eggs

An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or a bonus.

Key words

A word or a group of words an Internet user uses to perform a search in a search engine.

Reliability

The degree to which the result of something can be depended on to be accurate.

Results page

Where the answers to a search are displayed.

Search engine

A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.

Key Vocabulary Unit 4.8 Hardware
Investigators

Components

Parts inside the computer casing.

CPU

The 'brains' of the computer, where all the calculations take place.

Graphics Card

Also known as a video card and used for displaying images.

Hard Drive

Where the computer stores all your documents, pictures, games and videos.

Input

How information enters the computer.

Motherboard

Main printed circuit board of the computer.

Network Card

Used to connect the computer to a network such as the Internet.

Output

Where information leaves the system.

Peripherals

Parts that are attached to the computer case.

RAM

Allows programs to store information to help the computer run quickly.

Software

The programs that run on the computer.

Key Knowledge

Effective Searching

To locate information on the search results page.

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To assess whether an information source is true and reliable

Hardware Investigators

To understand the different parts that make up a computer.

To recall the different parts that make up a computer.

Key Images



Motherboard



CPU



RAM



Graphics card



Network card



Monitor



Speakers



Keyboard



Mouse