

Knowledge Mat – Information Technology – Year 5

National Curriculum Links: KS2 Computing

- 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

| Information | Technology Vocabulary |
|---------------|---|
| | |
| Information | Information technology (IT) is the use of |
| technology | computers to store, retrieve, transmit, |
| _ | and manipulate data or information |
| computer | Two or more computers that are |
| networks | connected with one another for the |
| | purpose of communicating data |
| | electronically |
| internet | The internet is a huge network of |
| | computers all connected together |
| World Wide | The world wide web ('www' or 'web' for |
| Web | short) is a collection of webpages found |
| | on this network of computers |
| communication | There are many different types of |
| | communication technology. They all |
| | have different strengths. It is important |
| | to think about which type of |
| | communication is best for each occasion |
| collaboration | The action of working with someone to |
| | produce something |
| evaluate | To judge something for its value, |
| CValuate | reliability and use |
| search engine | A great way to find things on the web |
| | using key words or filtering results |
| online | Online information is found, on the |
| information | internet, viewed and interpreted |
| privacy | Someone's right to keep their personal |
| | matters and relationships secret |
| security | To keep all the information stored on a |
| | computer or on the internet safe from |
| | people who want to steal it or change it |
| copyright & | Copyright is a legal protection extended |
| ownership | to those who produce creative works. |
| | The act or right of possessing |
| | something |
| | |

I can...

IT5.1 explainwhat an operating system is and why it important

IT5.2 identify the key internal parts of a computer – RAM, memory, processor and motherboard and describe what each part does

IT5.3 explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'

IT5.4 evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results

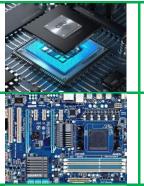
IT5.5 explain key concepts including information, reviews, fact, opinion, belief, validity, reliability and evidence

IT5.6 explain what a strong password is and demonstrate how to create one

IT5.7 explain what app permissions are and can give some examples

IT5.8 assess and justify when it is acceptable to use the work of others

IT5.9 give examples of content that is permitted to be reused and know how this content can be found online



CPU / Processor

Central processing unit - the brain of the computer that processes program instructions. The CPU and memory work together to run programs

Motherboard

The circuit board inside a computer that houses the CPU, memory and connections to other devices. This lets them work together.



RAM

RAM is the main place for storing instructions and data whilst a program is being executed. RAM is usually measured in gigabytes. The more gigabytes of RAM a computer has, the more programs and operations it can handle at the same time

Website Evaluation

5W's

- 1 Who wrote it?
- 2 What is the purpose of the resource?
- 3 When was the resource published?
- 4 Where is the information from?
- 5 Why is this resource reliable?

What facts can you share about our technology pioneers?

Bill Gates, Grace Hopper &

Steve Wozniak







How does a Search Engine work?

A search engine will scan its index of webpages for content related to your search. A search engine makes this index using a program called a 'web crawler'. This automatically browses the web and stores information about the pages it visits. You need to think about the important keywords you us.