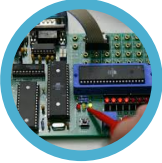


## KEY IDEAS



Hardware is the physical components such as the processor, memory, power supply, screen etc. Software includes the operating system (iOS, Windows, MacOS), control programs and many application programs.



The internet basically transports data from one computer to another. The internet is made up of cables, fibre, transmitters, receivers, switches, routers (and all the rest of the hardware) that connects networks of computers to one another.



The two different kinds of digital devices are computers that are controlled for specific purposes (digital watches, TVs, cameras) and computers that are programmable and can do many things (laptops, tablets, smartphones).



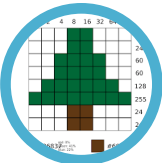
Digital information is broken down into smaller chunks called 'packets' that pass quickly through the internet to the receiving computer where they are reassembled into the original data.



Computers store all sorts of information in binary form. Information needs to be represented in a certain way that computers can interpret and store it. Binary is a way of representing information using only two options.



It is important that we learn to use search engines effectively and efficiently to understand if a particular page can be trusted.



When zooming in on a bitmap image (see resources) the pixels are stretched and made into larger blocks. This is why bitmap images appear as poor quality when they are enlarged too much.



There are two different tools to narrow searches: filtering and operators. They can be used to narrow their searches and solve problems that appear in their search results.



Smartphones have a number of different ways to input data and output information.



Sometimes content seems so amazing that it makes the reader wonder if it's true or not. Before accepting information (text, images and videos) people should check if it's reliable.

## KEY VOCABULARY

<b>Input</b>	Is the data that a computer receives
<b>Output</b>	Is the data a computer sends
<b>Binary</b>	Binary is a way of representing information that computers understand
<b>Hardware</b>	Is the physical components of computers
<b>Software</b>	Control programs and many application
<b>Bitmap image</b>	A picture created on a visual display unit where each pixel corresponds to one or more bits in memory
<b>Pixels</b>	The smallest element of an image that can be individually processed in a video display system
<b>Internet</b>	A global computer network providing a variety of information and communication facilities
<b>URL</b>	Uniform Resource Locator: a protocol for specifying addresses on the Internet
<b>DNS</b>	Domain Name Service convert web addresses into numbers known as IP (Internet Protocol) addresses
<b>IP Address</b>	A code that identifies a computer network or a particular computer or other device on a network
<b>Search engine</b>	A computer program that searches the World Wide Web, for a specified word or words and provides a list of documents in which they are found.
<b>Fauxtography</b>	Refers to fraudulent photography, where photographs are manipulated to change the information they convey
<b>Fake News</b>	Is a type of journalism that consists of deliberate misinformation or hoaxes

