

Computers





Computers make
writing easier.

What Is a Computer?

A computer is a machine that can be programmed to do a range of tasks. Computers organize, process, store, and display information. However, computers are changing so quickly that this description may not be complete for very long.

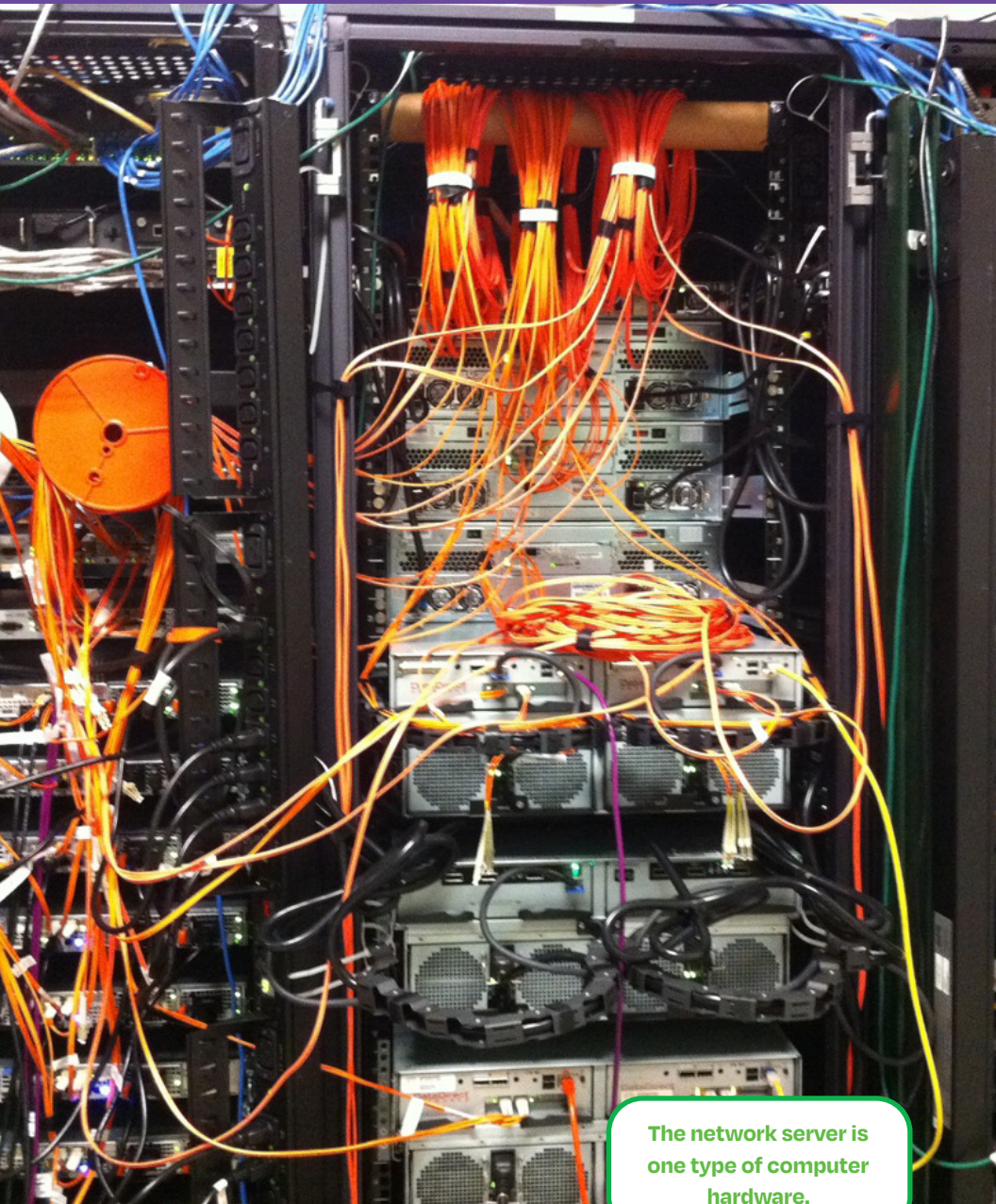
Computers perform their tasks at lightning speed. They are programmed to carry out huge numbers of calculations in seconds. In addition to calculations, they can be used to create, edit, and store books, music, and movies.

Before computers were invented, people wrote everything by hand or with typewriters. Writing in this way did not allow people to change their work easily. With a computer, though, writers can change a few words or a whole paragraph in only a few seconds.

Computers can also communicate with other computers over short or long distances. This feature makes it possible for people to send words, music, and pictures around the world in seconds.

Key Notes:

What tasks are done by computers?



The network server is one type of computer hardware.

Computer Hardware

Most computers contain several components, or pieces. They have a processor and memory, input, and output devices. They also have wiring that connects these components. These computer parts are called hardware.

The processor makes calculations and logical decisions. Memory devices store data and the instructions for what the processor should do with the data. Input devices, like a mouse and keyboard, allow users to tell the computer what to do. Output devices, like a screen and a printer, show users what the computer has done.

Most computers have two kinds of memory devices. Information that's needed often and quickly is stored on memory chips. These chips have no moving parts and store small amounts of data. Larger amounts of information are usually stored on a hard drive, a compact disc (CD), or a digital video disc (DVD). Compact discs, digital video discs, and hard drives are also known as computer hardware.

Key Notes:

What is computer hardware?



Programmers write software for computer applications, such as games.

Computer Software

Computer hardware is useless without software. Software controls what happens inside a computer. Several computer languages have been developed for writing software. For a computer to do a task, the software for that task must be written in the same language as the software that runs the computer. When computers and software use the same language, they are compatible, or able to be used together.

There are two types of computer software. System software manages the computer's hardware. It also does other tasks, such as moving data into memory and showing information on the screen. System software acts like an umbrella, allowing applications to operate underneath it.

Application software does specific tasks, such as processing words and playing music and movies. Application software usually works under the umbrella of the system software. No matter what kind of software is used, though, it must be compatible with the computer that runs it.

Key Notes:

What does computer software do?



A forensic expert looks at a mobile device that was taken during a criminal investigation as part of her job.

Computer Jobs

The wide use of computers has led to many computer-related jobs. Computer hardware engineers design new computers. These engineers work every day on ways to make computers faster and more dependable. People who write computer software are called programmers. Programmers create and test the software that's used by computers. When people have trouble using computers, they call technical support workers. Technical support workers fix the machines and show people how to use their computers properly.

Some companies that have many computers link them to form a network. People called network administrators or systems administrators manage these networks. They make sure that the network runs properly, that the computers can send and receive information, and that the people can get and use the information they need.

Two other computer-related jobs are data entry and information processing. People who do this work enter information into computers so others can use it.

Key Notes:

What are three types of computer-related jobs?

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