**Windows Basic**

Are you new to computers? Do you wonder what they do and why you would want to use one? Welcome—you're in the right place. This article gives an overview of computers: What they are, the different types, and what you can do with them.

**What are computers?**

Computers are machines that perform tasks or calculations according to a set of instructions, or programs. The first fully electronic computers, introduced in the 1940s, were huge machines that required teams of people to operate. Compared to those early machines, today's computers are amazing. Not only are they thousands of times faster, they can fit on your desk, on your lap, or even in your pocket.

Computers work through an interaction of hardware and software. Hardware refers to the parts of a computer that you can see and touch, including the case and everything inside it. The most important piece of hardware is a tiny rectangular chip inside your computer called the central processing unit (CPU), or microprocessor. It's the "brain" of your computer—the part that translates instructions and performs calculations. Hardware items such as your monitor, keyboard, mouse, printer, and other components are often called hardware devices, or devices.

Software refers to the instructions, or programs, that tell the hardware what to do. A word-processing program that you can use to write letters on your computer is a type of software. The [operating system](mshelp://windows/?id=2bdd4886-a8d6-4878-8a9e-343ce05a0b64#gtmt_operating_system_def) (OS) is software that manages your computer and the devices connected to it. Windows is a well-known operating system.

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**Types of computers**

Computers range in size and capability. At one end of the scale are supercomputers, very large computers with thousands of linked microprocessors that perform extremely complex calculations. At the other end are tiny computers embedded in cars, TVs, stereo systems, calculators, and appliances. These computers are built to perform a limited number of tasks.

The personal computer, or PC, is designed to be used by one person at a time. This section describes the various kinds of personal computers: desktops, laptops, handheld computers, and Tablet PCs.

**Desktop computers**

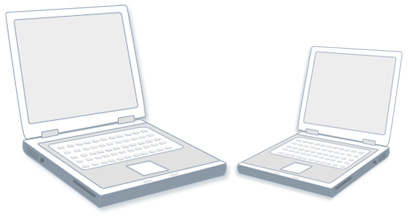
Desktop computers are designed for use at a desk or table. They are typically larger and more powerful than other types of personal computers. Desktop computers are made up of separate components. The main component, called the system unit, is usually a rectangular case that sits on or underneath a desk. Other components, such as the monitor, mouse, and keyboard, connect to the system unit.

Desktop computer

**Laptops and netbooks**

Laptops are lightweight mobile PCs with a thin screen. Laptops can operate on batteries, so you can take them anywhere. Unlike desktops, laptops combine the CPU, screen, and keyboard in a single case. The screen folds down onto the keyboard when not in use.

Netbooks (also referred to as mini notebooks), are small, affordable laptops that are designed to perform a limited number of tasks. They're usually less powerful than laptops, so they're used mainly to browse the web and check e‑mail.

A laptop and a netbook

**Smartphones**

Smartphones are mobile phones that have some of the same capabilities as a computer. You can use a smartphone to make telephone calls, access the Internet, organize contact information, send e‑mail and text messages, play games, and take pictures. Smartphones usually have a keyboard and a large screen.

Smartphone

**Handheld computers**

Handheld computers, also called personal digital assistants (PDAs), are battery-powered computers small enough to carry almost anywhere. Although not as powerful as desktops or laptops, handheld computers are useful for scheduling appointments, storing addresses and phone numbers, and playing games. Some have more advanced capabilities, such as making telephone calls or accessing the Internet. Instead of keyboards, handheld computers have touch screens that you use with your finger or a stylus (a pen-shaped pointing tool).

Handheld computer

**Tablet PCs**

Tablet PCs are mobile PCs that combine features of laptops and handheld computers. Like laptops, they're powerful and have a built-in screen. Like handheld computers, they allow you to write notes or draw pictures on the screen, usually with a [tablet pen](mshelp://windows/?id=bdc3384f-0cdf-4bf7-8178-7789b6329c65#gtmt_tablet_pen_def) instead of a stylus. They can also convert your handwriting into typed text. Some Tablet PCs are “convertibles” with a screen that swivels and unfolds to reveal a keyboard underneath.

Tablet PC

**What can you do with computers?**

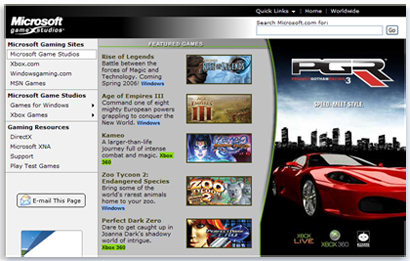
In the workplace, many people use computers to keep records, analyze data, do research, and manage projects. At home, you can use computers to find information, store pictures and music, track finances, play games, and communicate with others—and those are just a few of the possibilities.

You can also use your computer to connect to the Internet, a network that links computers around the world. Internet access is available for a monthly fee in most urban areas, and increasingly, in less populated areas. With Internet access, you can communicate with people all over the world and find a vast amount of information.

Here are some of the most popular things to do with computers:

**The web**

The World Wide Web (usually called the web, or web) is a gigantic storehouse of information. The web is the most popular part of the Internet, partly because it displays most information in a visually appealing format. Headlines, text, and pictures can be combined on a single webpage—much like a page in a magazine—along with sounds and animation. A website is a collection of interconnected webpages. The web contains millions of websites and billions of webpages.



Example of a webpage (Microsoft Game Studios)

Surfing the web means exploring it. You can find information on the web about almost any topic imaginable. For example, you can read news stories and movie reviews, check airline schedules, see street maps, get the weather forecast for your city, or research a health condition. Most companies, agencies, museums, and libraries have websites with information about their products, services, or collections. Reference sources, such as dictionaries and encyclopedias, are also widely available.

The web is also a shopper's delight. You can browse and purchase products—books, music, toys, clothing, electronics, and much more—at the websites of major retailers. You can also buy and sell used items through websites that use auction-style bidding.

**E‑mail**

E‑mail (short for electronic mail) is a convenient way to communicate with others. When you send an e‑mail message, it arrives almost instantly in the recipient's e‑mail inbox. You can send e‑mail to many people simultaneously, and you can save, print, and forward e‑mail to others. You can send almost any type of [file](mshelp://windows/?id=4c7a98ab-e99e-485d-ae81-28110bfe3b9c#gtmt_file_def) in an e‑mail message, including documents, pictures, and music files. And with e‑mail, you don't need a postage stamp!

For more information about using e‑mail, see [Getting started with e-mail](mshelp://windows/?id=645b0e95-2985-484c-b819-4331ba14b68b).

**Instant messaging**

Instant messaging is like having a real-time conversation with another person or a group of people. When you type and send an instant message, the message is immediately visible to all participants. Unlike e‑mail, all participants have to be online (connected to the Internet) and in front of their computers at the same time. Communicating by means of instant messaging is called chatting.

**Pictures, music, and movies**

If you have a digital camera, you can move your pictures from the camera to your computer. Then you can print them, create slide shows, or share them with others by e‑mail or by posting them on a website. You can also listen to music on your computer, either by [importing](mshelp://windows/?id=4683248c-38af-4d22-808d-f9e89d81431e#gtmt_import_def) music from audio CDs or by purchasing songs from a music website. Or, you can tune in to one of the thousands of radio stations that broadcast over the Internet. If your computer comes with a DVD player, you can watch movies too.

**Gaming**

Do you like to play games? Thousands of computer games in every conceivable category are available to entertain you. Get behind the wheel of a car, battle frightening creatures in a dungeon, or control civilizations and empires! Many games allow you to compete with other players around the world through the Internet. Windows includes a variety of card games, puzzle games, and strategy games. For more information, see [Learn about games in Windows 7](mshelp://windows/?id=a0061a8f-0c03-4520-812c-7ab16389c95a).

ENIAC

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