4 **Floppy Drive:** Here you insert a 3.5-inch floppy disk (see Chapter 11). Most floppy disks hold 1.44 MB of data, the equivalent of 500 pages of typed, unformatted, double-spaced text— a short novel. It's also used to make backup copies of files in case something happens to the original files on the hard drive, but the size of hard drives and the universal inclusion of more capacious CD and DVD drives is driving floppies into extinction.(see Chapter 10).

5 **Disk Controllers:** The motherboards of most new PCs have two types of connections for passing data and instructions to disk drives. The older IDE controller is used for floppy and optical drives, which are inherently slower that the controllers' ability to pass signals to the drives via flat, wide ribbons containing 40-80 wires. The newer Serial-ATA (SATA) connectors are reserved for hard drives, which take better advantage of the speed with which SATA passes information along a slim four-wire cable.

6 **Expansion Slot:** Like disk controllers, expansion slots used to integrate new circuit boards into the motherboard, are combinations of the newest technology and legacy slots for compatibility with expansion boards still lagging behind in the engineering.

7 **Video Card:** Translates image information into the varying electrical currents needed to display an image on the monitor (see Chapter 17).

8 **Sound Card:** Contains the circuitry for recording and reproducing multimedia sound. This might be an expansion card or some computers might have it built into a few chips on the motherboard and attached by cables to external connections for amplified speakers, headphones, microphone, and CD player input (see Chapter 22).

9 **RAM:** Random Access Memory is a collection of microchips aligned on small circuit boards that fit into slots with a couple of hundred or more connectors. RAM is where the computer stores programs and data while it uses them. When the computer is turned off, the contents of RAM are lost (see Chapter 4)

10 **Real-Time Clock:** A vibrating crystal in this component is the drummer that sets the pace and synchronizes the work of all the other components (see Chapter 2).

11 **CMOS:** This is a special type of memory chip that uses a small battery to retain information about your PC's hardware configuration even while the computer is turned off (see Chapter 2).

12 **BIOS:** If the microprocessor is your PC's brains, this is the heart. It is one or two chips that define the personality, or individuality, of your computer. The BIOS (*Basic Input/Output System*) knows the details of how your PC was put together and serves as an intermediary between the operating software running your computer and the various hardware components (see Chapter 3).

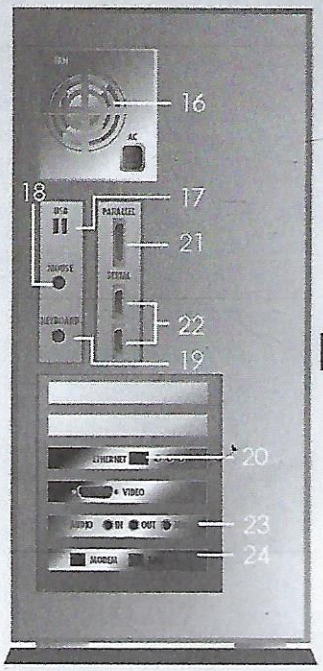
13 **CMOS Battery:** Rarely needs changing, but if you ever have to, be sure you have a file backup of the information the CMOS chip contains (see Chapter 2).

14 **Microprocessor:** Often called the brains of a computer, the microprocessor or central processing unit (CPU) is a tight, complex collection of transistors arranged so that they can be used to manipulate data. The processor handles most operations of your computer, the design of which dictates how software must be written to work correctly (see Chapter 5).

15 **Heat Sink:** Because microprocessors produce so much heat, a heat sink is used to dissipate the heat so that internal components of the chip don't melt.

16 **Fan:** A fan built into the power supply draws cool air over the heat-critical components inside the case. Be sure the opening to the fan is not blocked.

17 **USB Ports:** *Universal serial bus* ports are a solution to PCs' lack of interrupts and other system resources to let software connect directly to peripherals. USBs can connect keyboards, input devices (mice, trackballs, etc.), flash memory drives, printers, and other devices without encountering resource conflicts (see Chapter 16).



18 **Mouse Port:** Also called a PS2 port, this is a standard, but waning, feature on all current PCs. Personal computers can use a mouse that connects to a serial port or USB port.

19 **Keyboard Port:** Keyboards are usually separate from the CPU housing and connect to a mini-DIN port, which looks identical to the PS2 port. The keyboard connection might be a larger, 5-pin round port on older systems and a USB port on newer systems.

20 **Network Connector:** The network connecter allows you to connect your PC to a local area network (LAN) or a broadband cable or DSL modem for high-speed Internet access (see Chapter 27).

21 **Parallel Port:** Although falling into disuse, when the parallel port is used, it's most often to connect a printer, but some drives and other peripherals can piggyback on the port.

22 **Serial Ports:** Some PCs still have one or two serial ports, but they are all but obsolete because of the USB port. A PC can have four serial ports, but only two are usable at one time because one pair uses the same hardware resources as the other pair.

23 **Sound Card Connections:** External jacks on the sound card or motherboard enable you to attach a microphone, speakers, or an external sound source. The PC's optical drive (CD or DVD) is attached to the sound card internally (see Chapter 22).

24 **Modem:** Connects your PC to a telephone line so that you can get to information services and the Internet. Modems also come as external devices that connect to a serial port (see Chapter 26).