Glossary

This glossary contains definitions for commonly used Macintosh terms (plus a few extras). For explanations of terms and products relating to a specific subject, such as fonts or networking, see the relevant chapter or locate them through the Index.

When a word that's defined below occurs in the definition of another term, we usually put it in italics so you know you can look it up (but we don't always do that for common terms such as *file* and *software*). Words are alphabetized as if spaces and hyphens didn't exist; thus *database* comes before *data fork*, and *e-mail* falls between *ELF radiation* and *emulation*.



accelerator board A *card* containing a faster *processor*, more *memory*, or other electronic wizardry that speeds up a particular aspect of the computer's operation. The three main types are *CPU* accelerators, which speed up the Mac's overall operation; graphics accelerators (or accelerated *video cards*), which provide faster screen redraws; and *DSP* cards, which ramp up the processor-intensive operations common to graphics programs.

active-matrix See LCD.

active window The currently selected window, where the next *command* (or anything you type) will be applied. The active window is always on top of overlapping *windows*, its *title bar* has stripes, and its *scroll bars* are active.

adapter Electronic circuitry that adapts a *device* (such as a *monitor*, *printer*, or *network* cable) so that it's compatible with the Mac. An adapter can be a *card* (such as an *Ethernet* adapter) or a cable (such as the one required to attach a PowerBook to a desktop Mac in *SCSI disk mode*).

ADB Apple Desktop Bus, the standard connection for *input devices* such as keyboards and *mice* for all Macs from the SE onward. ADB connections are different from those on the Plus and earlier Macs.

AIFF Audio Interchange File Format, the standard file format for sound files.

alert box A box that pops on-screen, announced by one or more beeps, to give you information or a warning. Alert boxes don't require any information, but you may have to click a *button* such as OK or Cancel. Also called a message box. Compare *dialog box*.

alias A duplicate file *icon* (about 2K in size) that serves as a remote control for opening a *file*, *folder*, or *disk*. You can put an alias anywhere—on the *desktop*, in a folder, or on the *menu*—and it will find and open the original item when you *double-click* it or *select* it from the menu.

allocation block size This is the size of the blocks recorded on the *bard disk media* that are used to store your *files*. The Mac permits only one file in an allocation block. So if the file is small but the allocation block is big, the rest of the allocation block goes to waste. The allocation block size grows larger for every 32MB of hard disk capacity so you should consider *partitioning* your *drive* if you have many small files.

animation program Software that adds motion to images created in *paint*, *draw*, *presentation*, and *3-D graphics* programs.

anti-aliasing A technique for smoothing the rough edges (the infamous *jaggies*) of *bitmapped graphics*, usually by blurring the edges.

Apple events A System 7 feature that allows one *application* to invoke the features of another (on a single Mac or across a *network*) by sending it a *command* called an Apple event. It's the technology behind *AppleScript* and most *hot links*, and is part of Apple's overall scheme for interapplication communication (*IAC*), which also includes *OpenDoc*.

Apple Guide An *interactive* help system built into System 7.5. You tell Apple Guide what you want to do, and it shows you how to do it by walking you through the process.

€ (Apple) menu The *menu* at the left end of the *menu bar* in the *Finder* and within most *applications*. In System 7 you can make any *file*, *folder*, or *hard disk* appear on the **€** menu by adding it (or its *alias*) to the Apple Menu Items folder; in System 6 the **€** menu only gives you access to *desk accessories* and *control panels*.

ApplePrice The price that Apple believes one of its products will be sold for. Unlike list prices given by other companies, the ApplePrice is usually pretty close to the *street price*.

AppleScript Apple's *scripting language* (distributed as a system *extension*) that lets you write *scripts* to automate common tasks. Some *applications* incorporate AppleScript support, allowing you to create and run scripts within those programs.

AppleShare 1. A *Chooser extension* that lets you access shared files on networked Macs or AppleShare file *servers*. 2. Software that turns a Mac with a *hard disk* into a centralized file server, enabling other Macs on the *network* to access its files.

AppleTalk The *network protocols* built into every Mac. The Mac uses AppleTalk to talk to *laser printers* and other Macs connected to it via a cabling scheme such as *LocalTalk* or *Ethernet*. Compare *TCP/IP*.

application *Software* that does relatively complex tasks and that lets you create and modify *documents*. Common application types include *word processors, spreadsheets, database managers*, and *graphics* programs. Most programs are called applications, unless they're *utilities* or *system software*.

application heap The portion of a Mac's memory used by applications. Compare system heap.

Application menu In System 7, the *menu* at the right end of the *menu bar* that lets you switch between *programs* (and lets you hide the *windows* of programs you're not currently using). The menu's *icon* changes to match whichever program is currently active.

ARA AppleTalk Remote Access, a *protocol* (and product) that provides system-level support for dial-in (*modem*) connections to an *AppleTalk network*. With ARA, you can call your desktop Mac from a PowerBook and remotely access all the available services—*files, printers, servers, e-mail*, and so on.

Archie A service that collects names and locations of *ftp* files on the *Internet* and makes them available for searching at certain Internet sites.

archive 1. A copy of a *file* that's stored on a separate *disk* for safekeeping. 2) A group of files compressed and combined into a single file on the disk.

ASCII The American Standard Code for Information Interchange is a system for referring to letters, numbers, and common symbols by code numbers. (A is 65, for example.) This widely used *file format* is useful for transferring files between Macs and PCs. On the Mac, ASCII files are often called *text files*. Pronounced "askee."

authoring program Software for creating *interactive* software such as presentations, training materials, and games. It typically combines features found in *presentation programs* with a *scripting language*.

A/UX A version of *Unix* designed by Apple for use on the Mac. Pronounced as separate letters.

average access time The length of time in milliseconds that it takes a *drive's heads* to move to the desired track plus latency (the average wait for the desired sector to come around under the heads once they get to the right track).

average seek time The length of time in milliseconds that it takes a *drive's heads* to move to a desired track.

B

background printing A feature provided by the *system software* (accessed via the *Chooser*) and by *print spoolers* that lets you keep using the Mac while it's sending *documents* to the printer "in the background."

backing up Copying some or all of the *files* on your Mac to different *disks* or tape, so you won't lose the information if the original versions are damaged, lost, or stolen. The copied files are called backups.

backup The process of making copies of your important data on another kind of storage medium (another *hard disk*, removable cartridge, *floppy disks*, or tape.)

bad blocks Areas of a *disk* or platter that have become demagnetized through constant use.

balloon help When you point to items on the screen, this System 7 feature pops up cartoon-like message balloons to explain them. You turn it on or off from the *Help menu*.

bandwidth The amount of information that can travel between two points in a given time. The "broader" the bandwidth, the faster the *data* flows. Commonly used to describe how fast data can travel over a *bus*, or from *disk* into *memory*, or from one *modem* to another.

baud The number of signal changes per second transmitted by a modem.

baud rate A measure of the speed at which a *modem* sends and receives *bits* of *data*. Technically, baud is not the correct term for transmission speed (except in ancient 300-baud modems); you should say *bps* (bits per second) instead.

bay See storage bay.

BBS Bulletin Board Service, a noncommercial dial-up service usually run by a *user group* or *software* company. By dialing up a BBS with your *modem*, you can exchange messages with other users (or the *sysop*) and *download* (or *upload*) software. A BBS has fewer features than a commercial *on-line service*, but it's usually free (except for the phone call).

beta version A prerelease version of a *program*, which is still getting the *bugs* worked out.

Bézier curve A type of curve used in *draw programs* that consists of mathematically defined line segments connected by control points. By adjusting the points, you can create complex shapes.

Binhex The method of converting a *data file* into text for transmission to another computer for decoding; used where only standard text characters are accepted for transmission, for example, over the *Internet*.

bit Short for binary digit, this is the smallest unit of information the computer can work with. It can represent only one of two things: yes or no, on or off, 0 or 1 (as it's expressed in the binary numbers used by computers). The computer usually groups bits together into bigger chunks such as *bytes*, *kilobytes*, and so forth.

bit depth Refers to the number of *bits* the Mac's *memory* assigns to each *pixel* on the screen or each sample point on a *scanner*. One-bit color gives you just black and white; 8-bit gives you 256 colors or shades of gray; 16-bit gives you over 32,000 colors or shades of gray; and 24-bit gives you over 16.7 million colors.

bitmap An image made up of dots (or *pixels*).

bitmapped font A font in which each character is made up of a pattern (map) of dots. To display it correctly, you must have a separate set of character maps for each size (10 point, 12 point, and so on)—otherwise, you'll have a bad case of the *jaggies*. Also called a fixed-size or *screen font*. Compare *outline font*.

bitmapped graphic An image made up of dots (bits) rather than discrete objects. Typically produced by paint, image-editing, and 3-D graphics programs. Sometimes called a raster image. Compare object-oriented graphic.

board A piece of fiberglass or pressboard on which *chips* and other electronic parts are mounted. The connections between the chips are normally printed with metallic ink, so it's called a printed circuit (or PC) board. The main board in a computer is called the logic board or *motherboard*. A board that plugs into an *expansion slot* is called an add-in board or *card*.

board See card.

bomb Another word for *crash*. Bombs are usually heralded by an *alert box* with a picture of a bomb, indicating you must restart the Mac. Compare *hang*.

Boolean operator Words such as *and*, *or*, and *not*, that you place between text strings to refine a search. For example, you could search a *database* for "men *and* cook *or* clean *but* not married." Also see *wild card*.

boot blocks Parts of a Mac's *startup disk* that hold information about the *System file* and *Finder*. When you start up the Mac, it checks this area for a pointer toward a valid *System Folder*.

booting Starting up a computer, which loads the *system software* into *memory*. (The idea is that the computer is "pulling itself up by its own bootstraps.") Restarting the computer is called rebooting or a warm boot.

bps Bits per second, the correct way to express the data-transfer speed of a *modem*. Today's modems generally range from 9,600 bps to 28,800 bps; compression can increase the effective *throughput* to higher levels. Compare *baud*.

browse 1. To read messages posted in the public message area of a *bulletin board service*, or the libraries in such a service. 2. To surf pages on the *World Wide Web* and *Usenet* newsgroups.

browser An application which reads and displays World Wide Web pages.

buffer An area of *memory* set aside for the storage of transient *data*. On the Mac it's called the *disk cache*, but other devices, such as *printers* and *modems*, also have buffers, which allow them to process data more quickly.

bug A mistake, or unexpected occurrence, in a piece of *software* (or, less commonly, in a piece of *hardware*). Bugs often cause the Mac to *hang* or *crash*.

bulletin board See BBS.

burst transfer rates The rate of speed in milliseconds that a *drive* can pump out a small amount of *data* loaded into *memory buffers* on the drive's controller.

bus A path over which electronic impulses (*data*) travel between various computer *devices*. Examples include the Apple Desktop Bus (*ADB*), which connects keyboards and *mice* to the Mac, and the *SCSI bus*, which connects *hard disks* and other *peripherals*.

button A control inside a *dialog box* that lets you give a command or select options. The standard rounded-rectangle shape commonly referred to as a "button" is actually a *push button*; *radio buttons* and *checkboxes* are other kinds of buttons.

byte Eight *bits*. A byte typically represents one character (letter, number, or other symbol) on the screen.

C

cache A temporary storage place for information. Also see disk cache.

cache card A *card* that speeds up the Mac by supplying a small amount of high-speed *memory* (called static RAM, or *SRAM*) that the *processor* can use to quickly store and retrieve *data* while it's working.

CAD Computer-Aided Design, a category of high-end *draw programs* used by engineers, architects, and designers. Pronounced "cad."

card A kind of *board* that has connectors on its edges, so you can plug it directly into an *expansion slot* on the Mac. Cards add functionality, such as *24-bit color* or an *accelerator*. Also called an add-in board.

carpal tunnel syndrome A nerve problem that causes pain, numbness, or tingling in the hands (and often in the forearms). Advanced cases can cause permanent nerve damage. It's one type of repetitive stress injury.

cathode ray tube The picture tube inside a Mac's *monitor*. Often abbreviated as *CRT*.

CCDs Charge-Coupled Devices. Light sensors that convert the light energy to electricity. Used in *scanners* and the Connectix QuickCam.

CD-ROM Compact disk, read-only memory. A type of *storage device* that looks just like an audio CD (in fact, you can play audio CDs on a CD-ROM *drive*) and stores as much *data* as a large *bard disk* (600MB or so), making it a popular means of distributing *fonts*, photos, electronic encyclopedias, games, and *multimedia* offerings. As the name indicates, however, you can't save or change *files* on a CD-ROM, only read them. Pronounced "see-dee rom."

cdev Control panel device, the System 6 name for a control panel.

chat A live discussion between two or more people via typing on an *on-line service* or in an *e-mail application* such as QuickMail.

checkbox A *button* that works as a *toggle*—that is, you turn on an option by *clicking* once in the empty checkbox (an x will appear); and click again to turn it off. Unlike *radio buttons*, any or all of a group of checkboxes can be on at once.

chimes of doom A heart-stopping sequence of chords played during startup (instead of the usual *boing*) when a serious problem prevents the Mac from completing the startup procedure. You'll usually also see the *Sad Mac*.

chip The most essential electronic component of a computer: a tiny piece of silicon (about the size of a baby's fingernail) with an electronic circuit embedded in it. The Mac's *processor* and *memory* (*RAM* and *ROM*) are chips, which are normally mounted on *boards* or *SIMMs*.

Chooser A *desk accessory* that displays which *printers* and, on a *network*, which file *servers* and shared *folders* are available to you. You select a printer or other item by clicking its *icon*. The Chooser is also where you turn *background printing* and *AppleTalk* on and off.

Chooser extension An *extension* that displays an *icon* in the Chooser *window*. It's what enables the Mac to communicate (through its *modem* and *printer ports*) with *networks* and with *devices* such as printers and modems. Two common Chooser extensions are the *LaserWriter driver* and *AppleShare*.

CISC Complex instruction set computing; pronounced "sisk." The *processor* design used in the 68000-series Macs. Compare *RISC*.

clean install Installing a *system* so that it makes a new *System Folder* instead of altering the existing one.

clicking Pressing and immediately releasing the *mouse* button. To click on something is to position the *pointer* over it and then click.

client The computer which makes use of the services of a *network server* machine. Your Mac is a client, for example, when it uses a Web *browser* to access a Web server, the computer which makes Web pages available on the *Internet*.

clip art Precreated graphics—from simple line art to full-color photographs—that you can use, royalty-free, in publications and presentations. Also called clip media.

Clipboard A temporary *storage* area in the Mac's *memory* that holds what you last cut or copied. *Pasting* inserts its contents into a *document*. Some programs have a *menu* item that lets you see what's in the Clipboard.

clipping A file that's created by dragging a selection to the *desktop* (or to a *Finder* window), using System 7.5's *Drag and Drop* capabilities.

clock rate A measure of the performance of a computer's *CPU* (or *processor*). The CPU's operations are synchronized to a quartz crystal that pulses millions of times each second. The rapidity of these pulses—measured in *megahertz*—is the clock rate (or speed).

clones Macintosh computers made by companies other than Apple—which have licensed the technology for a legitimate product.

close box A small box at the left end of the *title bar* in the *active window*. Clicking it closes the window. Compare *size box* and *zoom box*.

code The actual statements or instructions (written in a programming language) that make up a piece of *software*.

color management Any of several approaches—including Apple's ColorSync *extension*—that attempt to provide a consistent match between the image colors you see on screen (or that are input from a *scanner*) and those that are printed on paper.

color management system (CMS) A method of providing more accurate representations of color across *devices*—computer *monitors*, proofing *printers*, *imagesetters*, and others—that have varying abilities to reproduce a full range of colors.

command The generic name for anything you tell the Mac to do. Commands are usually listed on *menus* or are invoked using *keyboard shortcuts*.

commercial software Programs sold for profit in stores or by mail-order, with the purchaser paying before taking possession. Compare *shareware*, *freeware*, and *public-domain software*.

communications program Software that enables you to send and receive information through a *modem*.

communications slot A slot made specifically for an internal *modem*.

compact Mac An all-in-one Mac such as the Classic II, SE, or Plus, which have a nine-inch *monitor* built into the same box as the *CPU*. Compare *modular Mac* and *portable Mac*.

compatible Said of *software* and/or *hardware* that work together correctly (that is, without *crashes* or other problems). Also refers to PCs made by other companies that work just like IBM PCs.

compression Making a *file* smaller (using a special *utility* for the purpose) so that it will take up less room on the *disk*.

configuration 1. The components that make up a computer system (which model of Mac and what *peripherals*). 2. The physical arrangement of those components (what's placed where). 3. The *software* settings that enable two computer components to talk to each other (as in configuring *communications software* to work with a *modem*).

contact manager A *database program* that keeps track of the names, addresses, phone numbers, and so forth of your personal and business contacts. TouchBASE is one example of this genre, which is part of a larger software category called *PIMs*.

control panel In System 7, a control panel (lowercase) is a *utility* that lets you set basic parameters such as the speaker volume, *desktop* pattern, date and time, and so on. Control panels are kept in a *folder* called Control Panels (capitalized, plural); one way to open it is by *selecting* Control Panels from the *menu*. In System 6, control panels are called *cdevs*, and they're accessed through the Control Panel (capitalized, singular) command on the menu.

Control Strip A collapsible *palette* that comes with current PowerBooks and provides convenient, on-screen access to features such as battery charge, sleep mode, sound volume, *AppleTalk*, file sharing, and the PowerBook *control panel*.

convergence When the three color beams (red, green, and blue) inside a *monitor's* display tube are adjusted, they converge to hit the right spots on the screen, affecting its sharpness. A few monitors let you adjust for convergence.

Copland The code name for System 8.

coprocessor A *chip* designed specifically to handle a particular task, such as math calculations or displaying graphics on-screen. A coprocessor is faster at its specialized function than the main *processor* is, and it relieves the processor of some work. A coprocessor can reside on the *motherboard* (an *FPU* is one example) or be part of an *expansion card*, as with an *accelerator*.

copy protection Any of the various annoying schemes that companies employ to prevent the unauthorized (and illegal) copying of their *software*.

cps Characters per second. Used to describe the speed of *inkjet* and *dot-matrix printers* or characters per second transmitted by, for example, a *modem*.

CPU Central Processing Unit, the brains of the computer. The CPU interprets and executes the actual computing tasks; one measure of its performance is the *clock rate*. In the Mac, the entire CPU resides in the *processor chip*, which is located on the *motherboard*. Also used to refer to the box that holds the motherboard and its CPU. Sometimes people (including us) use CPU as another word for the processor, motherboard, or the entire computer.

crash A problem (often caused by a *bug*) that causes a *program*, or the entire *operating system*, to unexpectedly stop working. If a program crashes, you sometimes can recover with the *force quit* command, but you often have to restart the Mac. Also see *bomb* and *bang*.

creator The four-letter *code* that a file uses to tell the *Finder* which program "owns" it. It distinguishes a *document* created with Microsoft Word (MSWD) from one created with MacWrite Pro (MWPR), for example, so that the correct file *icon* appears and the correct *application* is launched when you *double-click* the icon. Compare *file type*.

cropping Trimming a photo or other image to eliminate irrelevancies or control the area of major emphasis.

cross-platform Refers to *software* (or anything else) that will work on more than one *platform* (type of computer).

CRT Cathode Ray Tube, the display technology used in virtually all desktop computer *monitors* and television sets. (Portable computers typically use an *LCD* (liquid-crystal display.) Compare *cathode ray tube*.

curly quotes See smart quotes.

cursor 1. The little shape that moves around on the screen when you move the *mouse*. The most common is the *pointer*, the black arrow that you use to select things on the *desktop* and from *menus*. 2. The blinking vertical bar that indicates the insertion point in text. (There's really no such thing as a cursor on the Mac—it's used on more primitive computers—but people often say cursor when they mean pointer.)



DA The common name for a *desk accessory*; pronounced as separate letters. See *desk accessory*.

daisy chain A *bardware* configuration in which *devices* are connected to each other (via *cables*) in a linear series. Typically used to describe a *network* setup (such as the *nodes* on a *LocalTalk* network), or the arrangement of *SCSI devices* attached to your Mac.

DAT Digital Audio Tape, the most common type of tape backup. Commonly used to back up large quantities of *data*. DAT tapes can hold as much as 8GB of data. See *backing up*.

data The generic name for anything you input to a computer, or anything it outputs to you. It's the plural of datum, a single piece of information.

database A *file* created by a *database manager* that contains a collection of information organized into *records*, each of which contains labeled categories (called *fields*). It's sort of like an electronic Rolodex, or a set of 3-by-5-inch file cards.

database manager A *program* that lets you create a *database*, enter *data*, and then search, *sort*, and output it. There are several categories of database managers, including flat-file, relational, and *contact managers*. Also called a database engine, database management system (DBMS), or simply (and confusingly) a database.

data bus The circuitry in a processor which handles the transfer of data as opposed to instructions between memory and processor.

data encryption See encryption.

data file A file on disk which contains information used by a program, but is not itself a program. Memos and letters, address lists, and budget information would be stored in data files and manipulated using word processors, database managers, and spreadsheet programs, respectively.

data fork The part of a Mac *file* that holds user-created data, such as text and graphics. *Documents* always have a data fork; *applications* sometimes do. Compare *resource fork*.

data path The "roadway" along which information travels in a computer; a wider path can mean faster operation. Also called the *data bus*.

data transfer rate The data transfer rate is a measure of how fast a *drive* can deliver *data* to the Mac once it gets to the sectors it's looking for. The transfer rate is counted in megabytes per second (or sometimes, just to confuse things, megabits per second). Today's drives usually have transfer rates between 1.5 and 5 megabytes per second.

daughterboard A *board* that attaches to (rides piggyback on) another board, such as the *motherboard* or an *expansion card*. For example, you can often add a daughtercard containing additional *memory* to an *accelerator card*.

DAV slot Stands for Digital Audio Video. A special *expansion slot* on the AV Macs that gives direct access to their digital-processing *hardware*.

default The option that will be used unless you change it. It often refers to preset parameters such as the margins in a *word processor* or the volume in the Sound *control panel*. Also <u>see *default button*</u>.

default button In a *dialog box*, the button with a heavy border that's activated when you hit Return or Enter.

defragmenter A *utility* program that optimizes *disk* performance by shuffling fragments of files around until each forms a neat, contiguous whole. Also known as a disk optimizer.

demo version A sample copy of commercial *software* (and sometimes *shareware*) that has limited capabilities (usually you can't save or print), but allows you to see how the program works.

desk accessory A mini-application (such as the Alarm Clock) that's normally accessed from the *menu*. In System 6 that's the only way to get to them, but in System 7 they can be kept anywhere. Desk accessories usually only open one *document* at a time and quit automatically when you close their *window*. Commonly called *DAs*.

desktop What you see on the screen when you're in the *Finder*: the *menu bar*, background pattern, *Trash*, disk *icons*, *files*, *folders*, and so forth. It's the Mac's version of home base.

Desktop file An invisible file on every *disk* that stores *data* such as *icons*, the size and location of *windows*, and the information available with the Get Info command. System 6 has one desktop file; System 7 has two. Compare *directory*.

desktop publishing The process of designing printed documents (brochures, newsletters, magazines, books, and so on)—often using a *page layout program*—on a personal computer.

device Another word for *bardware*.

dialog box A box that appears on the screen (often after you issue a *command*) and requests information or a decision. Compare *alert box* and *window*.

DIF Data Interchange Format, a standard file format for *databases* (and sometimes *spreadsheets*). It preserves *field* names and *data* but not formulas or text *formatting*. Compare *SYLK*.

digital signal processor See DSP.

digitize To turn something from the real (analog) world into digital data on a computer. You might use a *scanner* to *digitize* pictures or text, a sound digitizer to record music or a human voice, or a video-digitizing board to input video from a VCR or camcorder. Also see *sampling*.

dimmed When something, such as a *menu* item, is dimmed (gray) on the Mac's screen, it means that you can't currently access it. When you eject a *disk*, its *icon* is dimmed, as are all *windows* and icons associated with it.

direct memory access A *chip* that handles data transfers between *memory* and various *devices* (*hard disks*, *floppy-disk drives*, and anything connected to the Mac's *ports*), freeing up the main *processor* for other tasks. The AV Macs and Power Macs have a DMA chip.

directory An invisible *file* on every *disk* that keeps track of the name, size, and location of all other files. If this critical file becomes damaged, you can lose access to your *data*. Compare *desktop file*.

dirty ROMs See 32-bit clean.

disabled folders Folders created by *extension managers* to hold *extensions* and *control panels* that are turned off through the extension manager control panel.

disk A thin round platter on which computer *data* is stored in either magnetic or optical form. Although the disk is circular, its case is usually rectangular. The main types are *floppy disks*, *hard disks*, and *CD-ROMs*.

disk cache An area of *RAM* reserved for *data* recently read from *disk*, which allows the *processor* to quickly retrieve it if it's needed again. You adjust the cache's size in the Memory *control panel* (96K or 128K is usually optimal). In System 6 it's called the RAM cache. Also see *cache card* and *RAM disk*.

disk drive See drive.

disk driver The disk driver is an invisible *program* written to a *hard disk* or removable cartridge during *formatting*. Disk drivers transfer *data* from *memory* to storage media.

display Another word for screen or *monitor*.

display card A card that controls an external monitor. Also called a video card.

display port A *port* where you can plug in a *monitor*. They were formerly called video ports, but some Macs now have ports for connecting to camcorders, TVs, and VCRs, which are also called video ports.

dock 1. (noun) A piece of *hardware* that attaches to a PowerBook Duo and gives it desktop-Mac features (such as a *floppy-disk drive*, *ports*, and *expansion slots*). 2. (verb) To connect a PowerBook to a desktop Mac in *SCSI disk mode*.

document The *file* that you create and modify with an *application*. Examples are a letter, a drawing, and a mailing list.

dogcow His name is Clarus, and he appears in the Page Setup *dialog box* (File menu). The dogcow demonstrates the options (like Flip Vertical) by acting them out when you*select* them. Clarus says "Moof!"

DOS Pronounced "dahss," it refers to MS-DOS or PC-DOS, the (disk) *operating systems* used on IBM personal computers and *compatible* machines.

dot-matrix printer An impact printer, such as Apple's ImageWriter II, that forms images from a pattern of dots, which are created by an array of pins striking an inked ribbon against the paper.

dot pitch On a *monitor*, it is the distance between individual dots of phosphor on the screen, and affects the overall clarity of the image. Generally, anything below .30mm is acceptable.

double-clicking Positioning the *pointer* and quickly clicking the *mouse* button twice without moving the mouse. You double-click to open *applications* and *documents* (when the pointer is an arrow) and to *select* entire words (when the pointer is an *I-beam*).

double-sided disk A double-density *floppy disk* that stores information on both surfaces (top and bottom) and can hold 800K of *data*. Compare *single-sided* and *high-density disks*.

download 1. To retrieve a *file* from another computer using a *modem*. For instance, you might download some *shareware* from an *on-line service*. Opposite of *upload*. 2. To send a *font* or *PostScript file* from the Mac to a *printer*. In general, any font installed on your Mac is a downloadable font, and downloading can be done automatically or manually. Compare *resident font*.

dpi Dots per inch, a measure of the *resolution* of a *printer*, *scanner*, or *monitor*. It refers to the number of dots in a one-inch line. The more dots per inch, the higher the resolution.

drag To move the *pointer* while holding down the *mouse* button. Depending on the situation, dragging can move an object, *select* an area (indicated by a *selection rectangle*), or move you down a *menu*.

Drag-and-Drop 1. The capability, introduced in System 7.5, that lets you *drag* selected items directly from one *document* to another (even across *applications*) or onto the *desktop*. 2. Also refers to the editing option in some *word processors* that lets you drag selected text and drop it elsewhere within the same document. 3. Formerly used to identify the ability to drag a document *icon* onto an application icon and have it open.

DRAM Dynamic Random Access Memory, commonly called *RAM*.

draw program Software that lets you create finely detailed illustrations and save them as object-oriented graphics. Some draw programs are based on PostScript, and there are specialized applications for charting and CAD. Compare paint program.

drive A motorized *device* that reads information from, and writes information onto, *disks* or tapes. The main types are *floppy disk drives* and *bard disk drives*, but there are also drives for *CD-ROMs*, *removable media*, and tape.

drive heads The magnetic attachments on the positioning arms which read and write the binary information on a disk (floppy or hard).

driver A piece of *software* that tells the Mac how to operate an external *device*, such as a *printer*, *bard disk*, *CD-ROM drive*, or *scanner*. For instance, you can't print unless you have a printer driver (such as the LaserWriter file) installed in the Extensions *folder* inside the *System Folder*. Hard-disk drivers are invisible *files* that are loaded into *memory* when you start the Mac, while scanner drivers are usually *plug-ins* accessed from within a particular *application*.

drop caps Enlarged initial capital letters whose baselines drop down a few lines to mark the beginning of a section. Drop caps are decorative and functional, serving to guide the eye to the beginning of a section.

droplet A special type of *application* created with *AppleScript* that acts upon the items dropped onto its *icon*.

DSP Digital Signal Processor, a *coprocessor* that specializes in heavy-duty number crunching, making it ideal for speeding up the *processor*-intensive operations associated with graphics, video, and audio programs. The 68040-based AV Macs have a built-in DSP *chip*, or you can buy DSP *cards* for things such as Photoshop *acceleration* and JPEG *compression*.

dual-scan See LCD.

dumb quotes Straight quotation marks (and apostrophes) such as those found on a type-writer. They look like this: "'. They're a big faux pas on a computer unless you're referring to feet, inches, hours, or minutes. Compare *smart quotes*.

DXF Drawing Interchange Format, a standard *file format* for 3-D *graphics* and *CAD* programs.

dye-sublimation printer A *printer* that creates images by heating special pigments that become gaseous (sublime) and then diffuse into the paper's special coating. Also called dye-diffusion or continuous-tone printers.



edutainment A combination of the words education and entertainment, it usually refers to children's *software* that provides educational value in an entertaining way—for example, by using games, animations, and sounds.

8-bit color See bit depth.

ELF radiation Extremely Low Frequency electromagnetic radiation (between 60 Hz and 75 Hz), which is generated by computer *monitors* and other electrical *devices* (including hair dryers). Compare *VLF radiation*.

e-mail Electronic mail—that is, private messages sent between users on different computers, either over a *network* or via a *modem* connection to an *on-line service* or *BBS*.

emulation A way to allow *software* to run on a *processor* it was not designed for. When you run an *application* written for a *68K processor* (such as the Quadra) on a Power Mac (which has a *PowerPC chip*), it runs in emulation mode (which is slower than native code would be). Emulation mode requires an emulator, a piece of software that imitates the native processor. For example, the Power Macs have a 68LC040 emulator built into their *ROM* chips and can come with SoftWindows, an emulator that lets you run PC programs. Compare *native*.

Enabler See System Enabler.

encryption Scrambling the *data* in a *file* to prevent unauthorized access. Accessing the information requires a password.

Energy Star A government program that requires all computer equipment the feds buy to drop their power consumption below 30 watts when not in use. Most manufacturers are redesigning their products to meet this energy saving standard.

EPS Encapsulated PostScript, a standard *file format* for high-resolution *PostScript* illustrations. It usually has two parts: the PostScript *code* (which tells the *printer* how to print the graphic) and a *PICT* image (for on-screen previews).

ergonomics The study of the relationship between people and their work environment. Working ergonomically means minimizing work-related health threats and setting up a comfortable, efficient workplace.

Ethernet A *network* cabling scheme for *AppleTalk* networks (as well as other types of networks) that's much faster than *LocalTalk*. Ethernet support is built into some Macs (otherwise you must install an Ethernet *card*), and it can be used with a variety of wiring systems.

expansion card See card.

expansion slot A connector inside the Mac where you can plug in a *card* that adds capabilities such as *acceleration* or *24-bit color*. The number and types of *slots* vary among Macs; the main types are *NuBus*, *processor direct (PDS)*, *DAV*, and (soon) *PCI*.

export To save *data* from one *application* in a *file format* that another program can *import* or *open*. Some programs have an Export *command* that's separate from the Save command.

extension Software (including many popular commercial *utilities*) that extends the *system's* capabilities by, say, enabling it to display QuickTime movies or use a particular type of *printer*. There are two main types: system *extensions* (*QuickTime*, *AppleScript*, and so on) and Chooser extensions (such as printer drivers and *AppleShare*). Extensions in the Extensions *folder* in the active *System Folder* are automatically *loaded* into *memory* when the Mac starts up. (Some extensions are also *control panels*.) Called an *init* in System 6.

extension manager A *utility* that lets you control which extensions are loaded at startup.

F

fat binary The name given to *software* that contains *code* for both *68K* and *PowerPC processors*. A fat-binary *application* automatically uses whichever type of code is appropriate for the Mac it's running on.

fax modem A type of *modem* that can send (and, in most cases, receive) faxes in addition to transferring *data files*. Unlike regular fax machines, fax modems can't send printed documents—only *disk* files.

FDHD Refers to the 1.4MB *SuperDrive* that comes with current Macs. FDHD stands for *Floppy Disk*, *High Density*, and it's pronounced "fud-hud."

field The smallest element of a *database* record; a container in a database designed to store one particular type of information, such as a last name, ZIP code, or salary amount.

file A discrete collection of information on a *disk*, usually a *document* or a *program*, that's represented by an *icon*. Mac files usually consist of a *resource fork* and a *data fork*.

file server See server.

file format The structure that the *data* for a particular *document* is stored in (e.g., ASCII, RTF, PICT, TIFF). Most *applications* can save documents in one or more standard formats as well as in their native format. Also see *file type*.

file-transfer protocol A set of conventions for determining how *files* will be packaged, sent, and verified over telephone lines. An ftp (such as Zmodem or Kermit) is independent of the computer, *modem*, and *communications software*. See *ftp*.

file type The four-letter code that identifies the nature of a *file* to the *Finder*. All *applications* have the file type APPL; *text files* have the code TEXT; and many graphics are *PICT* (the same as their *file format*). Compare *creator*.

filter A piece of *software* that an *application* uses for *file-format* conversion or special effects. PageMaker, for example, has a filter that lets it import Microsoft Word files, while Photoshop has dozens of filters for effects such as image blurring. Filters can be part of the main application or external programs called *plug-ins*, as with Claris *XTND* system.

Finder The basic program that generates the *desktop* and lets you access and manage *files* and *disks*. Together with the *System file* and the *ROMs*, it comprises the Mac's *operating system*. There are Finder substitutes, such as Apple's At Ease, that perform the same basic tasks (and usually give you other capabilities as well).

FireWire Apple's new interface standard for connecting *peripherals* to the Mac. It will be phased in over the next few years, gradually replacing the current *SCSI* standard.

flame A derisive message posted in the public area of a *bulletin board system*, *on-line service*, or in a *Usenet* newsgroup on the *Internet*.

flicker Also called strobe. Seen if a screen refreshes too slowly. See redraw.

floating-point processor A *coprocessor* (or part of a main *processor*) that handles sophisticated calculations, such as those used in *spreadsheet*, *CAD*, and scientific programs. The functions of the chip, called an FPU (floating-point unit) or a *math coprocessor*, are built into the 68040 (but not the 68LC040) and PowerPC chips.

floppies Commonly used name to describe *floppy disks*.

floppy disk A 3.5-inch removable disk that's flexible (although it's usually protected by a hard plastic case). Newer floppy disks can store up to 1.4MB of *data*. Also called a diskette. Compare *bard disk*.

floptical A technology for *removable media* that stores *data* magnetically but uses optical techniques to position the *read/write head*. Floptical disks, which resemble *floppy disks*, currently hold up to 21MB. Also <u>see *magneto-optical*</u>.

folder A grouping of *files* and/or other folders that's represented by a folder-shaped *icon* on the *desktop*. (Its equivalent on DOS machines is a subdirectory.) Also see *HFS*.

font The *software* that creates a *typeface* on the Mac. In olden (precomputer) times, it referred to a single size and style of a typeface, such as 9-point Times Italic.

font family A group of *typefaces* that's designed to work together. A typical family (say, Palatino) has four members: regular, bold, italic, and bold italic.

footer Similar to *header*; but at the bottom of a page. The page number of a document often appears in a footer.

footprint The amount of space a piece of *bardware* takes up on your desk (and its dimensions).

force quit A System 7 feature that lets you return safely to the *Finder* (usually) when a program *bangs* or *crashes*. The *command* is GROption Esc. You lose unsaved work in the crashed *application*, but you'll usually be able to save work in other programs before restarting the Mac.

format All *storage* devices and *media* must be formatted or initialized to prepare the disk to store Macintosh data. See *file format*.

formatting 1. For text, all the information above and beyond plain text that's added to a *document*, including character *styles* (bold, italic), spacing, indents, tabs, and so on. 2. Another term for initializing a *disk*.

forum leader See Sysop.

FPU Floating-Point Unit, a specialized *math coprocessor*. See *floating-point processor*.

fragmentation A condition in which parts of a *file* are stored in different locations on a *disk*. When a file is fragmented, the *drive's read/write head* has to jump from place to place to read the *data*; if many files are fragmented, it can slow the drive's *performance*. The problem can be resolved using a disk optimizer or defragmenter.

freeware Software that may be freely copied and used, but the copyright for which is retained by the author, who usually forbids you to alter or sell the program. Compare *public-domain software* and *shareware*.

ftp File-transfer protocol. The *protocol*, or set of rules, by which files are transferred over the *Internet*. Use it as a verb: "I'll ftp that file."



generic icon An icon that has lost all its identifying features, and possibly its link to its parent *application*. A generic *document* icon looks like a page of paper with its upper-right corner turned down.

GeoPort A special type of *printer port* or *modem port* that can serve as a built-in *modem*, *fax modem*, speakerphone, and answering machine.

gigabyte A measure of computer *memory*, *disk* space, and the like that's equal to 1,024 megabytes (1,073,741,824 bytes), or about 179 million words. Sometimes a gigabyte is treated as an even billion bytes (giga means billion), but that's almost 74 million bytes short. Abbreviated G, GB, or gig. Compare *kilobyte* and *megabyte*.

gopher A method of presenting information on *Internet* resources in a directory for easy navigation.

graphics The display of pictures, shapes, and colors to convey information, to decorate, or to amuse.

graphics tablet An *input device* that lets you draw with a *stylus* (pen) on a flat piece of plastic. You can make more precise movements than with a *mouse*, making it a great adjunct to *draw* and *paint programs*, particularly if the stylus is pressure-sensitive. Also called a *digitizing* or pressure-sensitive tablet.

grayscale Anything that contains shades of gray as well as black and white, such as a grayscale *monitor*, which typically displays 256 grays.

GUI Graphical User Interface. See user interface.

GX font An *outline font*, in either *PostScript* or *TrueType* format, that takes advantage of *QuickDraw GX*. GX fonts can have larger character sets and can include special programming that lets the fonts decide for themselves when to use alternate characters (such as ligatures) or include other special features.



halftone A way of converting (*rasterizing*) a *grayscale* or color image (a photograph, say) into a pattern of dots for output on a *printer* or *imagesetter*.

handshaking The process computers and *modems* go through in order to establish a connection and agree on the speed and *protocols* for *data* transmission.

hang A *crash* where the Mac ignores input from the *mouse* and keyboard. Sometimes you can escape with the *force quit command*; otherwise you must restart the Mac. Also called a freeze. Compare *bomb*.

hard disk A rigid (usually nonremovable) *disk*, and/or the *drive* that houses it. Actually, *bard disks* usually have several disks (or platters, made of aluminum and which are magnetically coated), and they store much more data and access it more quickly than *floppy disks*. Also called a hard drive or hard-disk drive.

hard disk formatter A *program* used to prepare *hard disk* and removable cartridges for use on the Macintosh.

hard drive See hard disk.

hardware The parts of your computer system you can bump into—physical components such as *hard disks*, *printers*, *modems*, *scanners*, *cards*, keyboards, *mice*, and the Mac itself. Compare *software*.

HDI-30 High-Density Interface, the special, smaller *SCSI connector* used on PowerBooks.

header 1. Identifying text (such as the date or page number) that appears at the top of each *document* page (versus the *footer*, which is at the bottom). 2. The part of a document's *code* that tells a program how to interpret its contents; the header defines the *file format*, for example.

Help menu The menu near the right end of the *menu bar* that lets you turn *Balloon Help* on and off and, in System 7.5, access *Apple Guide*. (Its title is a question mark inside a balloon.) In some programs, you can also use it to access on-line help.

Hertz Times Or cycles per second.

HFS Hierarchical File System, the Mac's method of organizing files on a *disk*, in which *files* and *folders* can be nested (contained) within other folders. See *folder*.

hierarchical menu A menu that has submenus (indicated by arrows) attached to it.

high-density disk A floppy disk that can store 1.4MB of data when used on a Mac with a *SuperDrive*. Compare *single-sided* and *double-sided disks*.

highlight To make something stand out from its background in order to show that it's *selected* or active. The Mac usually handles this by reversing the colors (for example, switching black and white) or, in the case of text, by placing a colored bar over the words.

home page The default page, which Net surfers first see when visiting a *World Wide Web* site.

hot link A special "live" link between *applications* that lets you select an element in a *document* (say, an illustration in PageMaker) and, using a special key combination, open it directly into the program that created it (such as FreeHand). You can make changes to the element, then return to the original document and instantly see those changes.

hot spot The single spot on a *mouse* cursor that "counts" when you're pointing or dragging.

HTML Hypertext Markup Language. A programming/formatting language for creating *platform*-independent pages on the *World Wide Web*.

HyperTalk A programming language used to interact with *HyperCard* stacks.

hypertext A text-linking strategy that lets you jump between related information in a *document* by clicking on a *button* or highlighted word. *On-line* help systems often use hypertext links, as do some programs designed for the electronic distribution of documents (see *PDD*). On the *Internet*, Web pages use hypertext, typically to link to text at another location, locally or at another site, but also to link to graphics, downloadable files, and so on.

I

I/O Input/Output. Used to describe the *ports* on the back of the Mac.

IAC Interapplication Communication. An underlying technology in System 7 whereby one *application* can send a message to another, either to exchange information or to make something happen. *Apple events* and *OpenDoc* are two implementations of IAC.

I-beam The shape (x) the *pointer* normally takes when dealing with text. You use the I-beam to create an insertion point or to select a range of text. Also called the text cursor.

icon The little picture that represents a *file*, *folder*, *disk*, or tool. It's a key component of the Mac's user *interface*. Click it once to *select* it; *double-click* it to open a file, folder, or disk.

icon parade The *extension* and *control panel* icons that appear one at a time across the bottom of the screen during startup, indicating they are *loading* into *memory*.

IDE Integrated Drive Electronics. IDE drives are installed inside Macs such as the PowerBook 150 and 190 and the Duo 2300 and 5300 series.

image-editing program Software that lets you alter existing images, such as photographs captured with a *scanner*, and saves them as *bitmapped graphics*. Compare *paint program*.

imagesetter A high-quality (usually *PostScript*) *printer* that can output pages (on paper or film) at resolutions of 1,200 *dpi* or greater. They're usually found at *service bureaus*.

impact printer See dot-matrix printer.

import To bring *data* into a *document* from another document, often generated by a different *application*. For instance, you can import text and graphics into a page layout program, or import *spreadsheet* data into a *word processor*. This data sharing is made possible by the applications' support of common *file formats*. Compare *open*.

init What an *extension* is called in System 6. It's short for initialization program and pronounced "in-it."

initialize To set up a *disk* (any kind) to receive information. When a disk is initialized, its magnetic media is divided into tracks and sectors, and a *directory* and *Desktop* file are created. Also called *formatting*.

inkjet printer A *printer* that forms text and images out of little dots created by tiny jets of ink.

input device Anything you use to directly input information to the computer: a *mouse*, keyboard, *trackball*, *graphics tablet*, joystick—even a *scanner* or digital camera. Also <u>see *pointing device*</u>.

insertion point The place in a *document* or *dialog box* where the next keystroke will add or delete text. The insertion point is represented by a blinking vertical line and is placed by clicking with the *mouse*.

installer A *utility* that copies *system software* or an *application* from *floppy disks* or a *CD-ROM*, *server*, or another *hard disk* to your hard disk. An Installer may also decompress the new *files*, remove obsolete files, place *extensions* and *control panels* in their proper *folders*, and/or create new folders.

integrated software A single *application* that includes several types of basic programs, such as a *word processor, spreadsheet, database manager, draw, paint,* and (often) *communications*.

interactive Said of *software* (particularly *multimedia*) that gives you some control over what's going on. You might click *buttons* to play a movie or jump to a different point in a presentation, or type in questions or answers that cause the program to respond in different ways. System 7.5's *Apple Guide* is an interactive help system.

interchange format A file format that's supported by most programs of a certain type (such as *word processors* or *paint programs*), allowing you to exchange files among them. *ASCII* is the standard interchange format for text, for example, while *PICT* and *TIFF* are common graphics formats. Compare *native*.

interface Sometimes referred to as *user interface*, the way a computer user interacts with their computer. For example, the Mac OS provides a graphical user interface that uses pictures (icons) to simplify overall computer use.

interleave ratio Setting the interleave ratio for a *hard disk* can be achieved using a hard disk formatter. The Mac Plus requires an interleave ratio of 3:1; for the SE, the Classic, and the PowerBook 100, the requisite ratio is 2:1. All recent Macs use a 1:1 ratio.

Internet A worldwide super-network that links thousands of individual *networks* and *on-line services*. You can gain access to the Internet—and its millions of users and thousands of newsgroups (discussion forums), *databases*, directories, and other digital goodies—if your computer is on one of the corporate, government, or university networks it connects to, or if you have an account with an *Internet service provider*. You also can send *e-mail* across the Internet from almost any on-line service.

Intranet A *network* inside an organization based on Internet protocols. Network users thus use Internet tools such as Web *browsers* to access network *documents*.

IRC Internet Relay Chat. Live discussion between two or more people on the *Internet*, much like chat on the commercial *on-line services*.

ISDN Integrated Services Digital Network, a type of telecommunications service based on an all-digital line between the local computer and the remote host.

ISP Internet Service Provider. Any enterprise which supplies access to the Internet, typically through a dial-up connection. ISP usually refers to a local independent provider.

J

jaggies The blocky, stair-stepped look common to *bitmapped graphics* and bitmapped *fonts*. *Anti-aliasing* can minimize this effect.

JPEG A sophisticated technique (it's not really a file format, per se) for compressing full-color *bitmapped graphics*, such as photographs. It stands for Joint Photographic Experts Group.

K

K An abbreviation for kilobyte, as in "an 800K file."

keyboard layouts A *system resource* that defines what character is typed when you press a key on your keyboard.

keyboard shortcut A combination of keystrokes (almost always involving (3) and often Shift), Option), and/or Control as well) that executes a command without your having to choose it from a *menu*. Also called a key combination or keyboard equivalent.

kilobyte A measure of computer *memory*, *disk* space, *document* size, and the like that's equal to 1,024 bytes, or about 170 words. Abbreviated *K*. Compare *megabyte* and *gigabyte*.

I

label One of seven descriptive names and colors that you can attach to *files* and *folders* using the Label *menu* in the *Finder*. You can sort files and folders by label to group related files and folders together (to do so, choose By Label from the View menu). To change the names and colors of labels, use the Labels *control panel*.

LAN Local Area Network. A *network* that's physically connected (via cables) and confined to a relatively small area, like one office or one building. Often just called a network. Compare *WAN*.

landscape Most *monitors* display a landscape view, which is wide from left to right with a short height.

laserdisc A 12-inch disk that's similar to an audio CD but holds visual images (such as high-quality movies) as well as music. Some laserdisc players can be hooked up to the Mac. Also called a videodisc.

laser printer A *printer* that creates images by drawing them on a metal drum with a laser. An ink powder, called toner, sticks to the imaged portion of the drum and is then transferred and fused to the paper (as with a photocopying machine). Apple established the popularity of *PostScript*-based laser printers with its LaserWriter line.

LaserWriter 35 The standard set of 35 resident *fonts* that most *PostScript laser printers* have built into their *ROM*. So named because they first appeared in Apple's LaserWriter Plus.

latency The time in milliseconds it takes for a spinning *disk* platter to bring the desired sector to the *read/write heads*.

Launcher A *control panel* that arranges the *icons* of selected *applications* and *documents* in a special *window*. To open a *file*, you click once on its icon.

launch Open (start) an *application*—that is, load it into *memory* from a *disk*.

layout An arrangement of *fields*, field labels, *graphics*, and static text in a *database*. Different layouts are used to display or print different things, such as data entry information, help text, mailing labels, and reports.

LCD Liquid-Crystal *Display*, the screen technology used in PowerBooks. *Active-matrix* LCDs are clearer and faster; *passive-matrix* LCDs are not quite as sharp and are sometimes slow to respond. Dual-scan passive-matrix screens, refreshed at twice the rate of standard ones, offer considerable improvement.

Lilon Lithium-ion, a battery technology for laptop computers.

list box A box with *scroll bars* that appears within a *dialog box* and lists things—*files, fonts*, or whatever.

list view One of five text-based ways—Name, Size, Kind, Label, and Date—that you can view a *folder's* contents in the *Finder*. In System 7, these are also called outline views because they can display a folder's contents in outline form, without opening another *window*.

load Get something ready to use. It can mean install (as in loading new *fonts*) or open (as in loading *extensions* into *memory* when the Mac starts up).

LocalTalk This refers to the networking *hardware* built into the Mac as well as to Apple's cabling scheme for connecting Macs on a *network*. Compare *PhoneNet* and *Ethernet*.

lock To prevent a *file* or *disk* from being changed. You can lock (or unlock) a file or *floppy disk* by clicking the Locked *checkbox* in its Get Info *window*. You also can lock a floppy disk by moving the plastic tab in the upper-left corner of its back side so that you can see through the little square hole. Locked disks are also called write-protected.

logic board See motherboard.

log on Establish a connection to a *server*, *BBS*, or *on-line service*, usually by entering a *user name* (or identification number) and a password. Disconnecting is called logging off.

lurkers People who read public messages in any *on-line service* but don't post any.



MacBinary A format for transferring Mac *files* over a *modem* or to another type of computer that ensures that all component parts (including the *data fork*, *resource fork*, and *icons*) stay together, so that you wind up with a usable file. Virtually all file-transfer and communications programs support MacBinary.

macro A user-defined *keyboard shortcut* that executes a series of *commands*. Macros are easy to create; all you need is a macro *utility* to record your keystrokes and *mouse* clicks. If you want to automate complex tasks, however, you'll probably need a *scripting language*.

magneto-optical A technology for *removable media* that combines magnetic and optical techniques. MO disks resemble *floppy disks*, but in terms of capacity and speed they're more like *bard disks*. Also called erasable-optical disks.

mail merge The merging of *database* information (such as names and addresses) with a letter *template* in a *word processor*, in order to create personalized letters.

marquee The rectangle of moving dots (called "marching ants") that surrounds a *selected* area in some programs.

marching ants See marquee.

math coprocessor Another name for *floating-point processor*.

MB An abbreviation for Megabyte.

MTBF Abbreviation for Mean Time Between Failures. The number of average power-on hours a *drive* will last before some component gives out.

media 1. The physical component of a *floppy disk*, *hard disk*, cartridge, tape, or *CD-ROM* that stores computer *data*. The main storage strategies are *magnetic* and *optical*. 2. The various ways of communicating, including print, video, and audio. See *multimedia*.

megabyte A measure of computer *memory*, *disk* space, *application* size, and the like that's equal to 1,024K (1,048,576 bytes) or about 175,000 words. Abbreviated MB or meg. Compare *kilobyte* and *gigabyte*.

megahertz A million cycles (occurrences, alterations, pulses) per second. Used to describe the speed at which a computer's *processor* (or *CPU*) operates. A 25-MHz processor can handle 25 million operations per second.

memory In general, another word for dynamic *RAM*, the *chips* where the Mac stores *system software*, *programs*, and *data* you are currently using. Other kinds of memory you may encounter are parameter RAM (*PRAM*), video RAM (*VRAM*), and static RAM (*SRAM*). Most computer memory is volatile—that is, its contents are lost when the computer shuts down. Also see *ROM*.

memory buffer A block of memory set aside for an emergency or special use.

menu A list of *commands*. To select one, *drag* down the menu until the desired command is highlighted, then release the *mouse* button. (If a command is unavailable, it will be *dimmed*.) Also see *pop-up menu*, *pull-down menu*, and *submenu*.

menu bar The horizontal strip across the top of the screen that contains the *menu* titles.

MHz An abbreviation for Megahertz.

microprocessor See processor.

MIDI Musical Instrument Digital Interface, a technology that enables a computer to record and play musical performances. The MIDI standard provides a common language and *interface*, so that the Mac and the electronic instruments and *software* can reliably connect and communicate with one another. Pronounced "middy."

mirror An *ftp* site on the *Internet* which contains an exact copy of another site, helping to increase the bandwidth to accommodate mass downloading.

modem A piece of *bardware* that lets computers talk to each other over telephone lines (you also need a *communications program*). The modem translates back and forth between the computer's digital data and the sounds carried over the phone lines. (The word is a contraction of modulator/demodulator.) Also see *fax modem*.

modem port A *serial port* on the Mac's back panel that's ordinarily used for attaching a modem. You also can use the port to attach other serial *devices*, such as a *graphics tablet* or *inkjet printer*. Compare *printer port* and *GeoPort*.

moderator See Sysop.

modifier key A key that modifies the effect of the character key being pressed. In most Mac applications, for example, (公服) saves the document you're working on. The standard keyboard has five modifier keys: (Shift), Option), (公服), Control), and Caps Lock).

modular Mac A desktop Mac whose *monitor* isn't built into the same box as the *CPU*. Most Macs sold today are modular, except for the PowerBooks and 500-series Performas and LCs. Compare *compact Mac* and *portable Mac*.

monitor The piece of *hardware* that contains the screen that you look at while you work. It's also called a *display* or *CRT* and can be *monochrome* (black and white), *grayscale*, or color. You connect it to the *Mac's display port* or to a *video card*.

monochrome Anything that contains just one color (and shades thereof). A monochrome *monitor*, for example, is either black and white (black is the color, white is the background) or *grayscale*.

MooV The *file format* for *QuickTime* movies. It can include video, audio, and animations.

morphing A special effect used in graphics, video, and animation that produces a smooth transformation of one shape into another, such as a pop star turning into a panther.

motherboard The heart, soul, and brains of the Mac. This plastic *board* resembles a miniature city, but its buildings are actually *chips* for things such as the *processor*, *RAM*, and *ROM*, and the tiny roads connecting them are circuit traces. Also called the logic board. See *daughterboard*.

mount Make a *storage device* available as an *icon* on the *desktop*. The Mac can't access a *disk* until it's mounted on the desktop; to dismount a disk, you drag its icon to the *Trash*.

mouse The standard *pointing device* supplied with every Mac. Moving the mouse causes the pointer on-screen to move in the same direction.

MUD Multiuser Dungeon or Dimension. An open-ended virtual world in which the users can typically extend the rules or capabilities of the "game."

MultiFinder A System 6 program that allows several *applications*, including the *Finder*, to be open at the same time. (This capability is built into System 7.)

multimedia Any presentation or program that combines several media, such as *graphics*, sound, video, animation, and/or text. Multimedia is everywhere these days—business presentations, *CD-ROM* games, educational *software*, and training systems—and it's often *interactive*.

multiscan monitor A *monitor* that can operate at different *resolutions* and *scanning* frequencies, allowing it to be used on a variety of computers. Multiscan monitors are not to be confused with MultiSync monitors, which are a brand name monitor used by NEC Technologies. See *MultiSync*.

MultiSync A brand name monitor used by NEC Technologies for *multiscan monitors*.

multitasking Said of a computer that can do more than one thing at a time, such as sorting a *database* and recalculating a *spreadsheet*. The Mac isn't a true multitasking machine (yet).

multiuser Said of an *operating system* (such as *Unix*), *application*, or piece of *hardware* that can be used by more than one person at one time.

N

nanosecond A billionth of a second. Used to measure the speed of *memory (RAM) chips*, among other things. Abbreviated ns.

native 1. Said of *software* that's written specifically to run on a particular *processor*. For example, a program optimized for a 68K processor runs in native mode on a Quadra, but it runs in *emulation mode* (which is slower) on a *PowerPC*-based Power Mac. 2. The *file format* in which an *application* normally saves its *documents*. The native format is generally readable only by that application (other programs can sometimes translate it using *filters*). Compare *interchange format*.

network In general, a group of computers set up to communicate with one another. Your network can be a small system that's physically connected by cables (a *LAN*), or you can connect separate networks together to form larger networks (called *WANs*). The *Internet*, for example, is made up of thousands of individual networks.

network protocol The rules describing the transfer of data and communication between devices on a network.

NiMH Nickel-Metal Hydride, a battery technology for PowerBooks.

node Any *device* that's directly connected to a *network*. This usually includes computers, *printers*, and file *servers*.

noise Inaccurate *data* picked up by a *scanner* and produced by the *CCD*. The less noise there is in relation to total data collected, the more usable information the scanner can deliver.

NuBus A type of *expansion slot* within the Mac where you can insert NuBus *cards* that add capabilities such as *acceleration* or *24-bit color*. The number of NuBus slots varies among Mac models.

null modem cable A *serial-port* cable that lets you connect a Mac directly to another computer, such as a PC, for direct data transfers.



object-oriented graphic An image made up of individual, mathematically defined objects, rather than a collection of *bits*. Typically created by *draw programs*, which are based on either *PostScript* or *QuickDraw*. Also called a *vector graphic*; compare *bitmapped graphic*.

OCR Optical Character Recognition, a technology that lets you scan a printed page (with a *scanner*) and convert it into a text *document* that you can edit in a *word processor*. Some OCR software also works with files received by a *fax modem*.

OEM Original Equipment Manufacturer. A company that produces a product that isn't sold on its own but instead is incorporated into another company's product. For example, Quantum is an OEM that makes *hard disks* sold under different names by other companies. Sometimes OEM is used as a verb: "Quantum OEMs *disk drives* for Apple."

OLE (OLE 2) Object Linking and Embedding. A Microsoft technology that gives programs a standard way to incorporate objects, such as *graphics* and *spreadsheet* charts, into *documents*. Objects can be embedded into documents or merely linked (a reference to the original object is stored in the document rather than a copy of the actual object).

on-line Actively connected to other computers or devices. You're on-line when you've *logged* on to a network, BBS, or on-line service. A device such as a printer is on-line when it's turned on and accessible to the Mac. (It can even refer to software: An on-line help system is one you can call up via your software, as opposed to opening a manual.) If you're not on-line, then you're off-line.

on-line service A commercial service that (for a price) provides goodies such as *e-mail*, discussion forums, tech support, *software* libraries, news, weather reports, stock prices, plane reservations, even electronic shopping malls. To access one, you need a *modem*. Popular on-line services include America Online and CompuServe. Compare *BBS* and *Internet*.

one-pass scanner A *scanner* that only needs to scan the original once, rather than once each for red, green, and blue.

OOP Object-Oriented Programming. A programming technology in which program components are put together from reusable building blocks known as objects.

open 1. Start up an *application* and/or make a *document* visible on the screen—that is, *load* its contents into *memory* from a *disk*. Compare *import* and *save*. 2. Expand a *folder* or disk into a *window* by *double-clicking* on its *icon*. Also see *Drag-and-Drop*.

OpenDoc An architecture that lets you use several *applications* to work on different types of *data* within a single *document* (called a compound document because of the multiple formats it contains).

operating system The basic *software* that runs the computer itself. On the Mac, it consists of the *System file*, the *ROMs*, the *Finder*, and related *system software*. Often called the OS (pronounced as separate letters) or just the system.

optimizers See defragmenter.

outline font A font in which each character's shape is stored as a mathematical outline. It can be scaled to any size with no loss of quality and will print at the highest available resolution. *PostScript*, *TrueType*, and *GX fonts* are outline-font formats. Also called a scalable font. Compare *bitmapped font*.

P

page A window full of text and graphics on the World Wide Web, as displayed by a Web browser.

Paged memory management unit See PMMU.

page layout program Software designed to combine text and graphics on a virtual *page*, giving you extensive control over the design and typography. The cornerstone of *desktop publishing*.

Paint A nearly obsolete *file format* (file type PNTG) that holds low-resolution black-and-white *bitmapped graphics*. Compare *TIFF*.

paint program Software that lets you create digital paintings from scratch and saves them as *bitmapped graphics*. Compare *image-editing* and *draw programs*.

palette A floating *window* within an *application* that sits above open *documents* so that you can easily access its contents. It can contain tools, *buttons*, colors, *styles*, or whatever is appropriate to the program. Also called a windoid.

parallel port A type of *port* that transmits *data* in parallel—several *bits* side by side. The Mac doesn't have parallel ports, but they are common printer interfaces on PCs.

parameter RAM See PRAM.

partition A section of a *hard disk* that's *formatted* so the Mac will treat it as a separate *disk*. Partitioning can reduce wasted space and make file management easier, especially on a large disk. Also called a volume.

passive-matrix See LCD.

paste To insert something into a *document* from the *Clipboard* by choosing Paste from the Edit *menu* (or typing G).

patch A small piece of *code* added to an existing program to enhance *performance* or fix a *bug*.

path menu The *menu* that appears when you hold (3) and press on the title of a *Finder window*. It lists the *folder* that window belongs to, and the folder that folder's in, and so on, describing the path up to the *disk*.

PC Personal Computer. While the Mac is, of course, a PC, the term refers almost exclusively to those other computers: IBM PCs and their *compatibles*.

PCI Peripheral Component Interconnect. A new kind of *expansion slot* built into new Power Macs. PCI replaces Apple's *NuBus* expansion *bus*.

PCMCIA A standard format for credit-card-size *expansion cards*, used to add features (such as *bard disks, modems*, and *memory*) to 500-series PowerBooks, hand-held computers such as the Apple Newton MessagePad, and (in the future) desktop computers. The unpronounceable acronym stands for Personal Computer Memory Card International Association (whew!), but an easier mnemonic is People Can't Memorize Computer Industry Acronyms.

PDD Portable Digital Document. A *file format* introduced with *QuickDraw GX*. A *document* saved as a PDD file can be viewed and printed accurately on any Mac that has QuickDraw GX (or System 7.5), even if that Mac doesn't have the file's original *application* or *fonts*.

PDS See processor-direct slot.

peer-to-peer A *network* setup that allows every Mac to both offer and access *network* resources, such as shared files, without requiring a centralized *AppleShare server*.

performance In computer parlance: speed. (How well your computer actually performs, however, is based on much more than its raw speed.)

peripheral A piece of *hardware* that's outside (peripheral to) the main computer. In practice, it usually refers to external hardware—such as *disk drives*, *printers*, and *scanners*—sold by a third party.

PhoneNet A popular implementation of *LocalTalk* cabling that uses ordinary telephone wire to connect devices on an *AppleTalk network*.

Photo CD A technology developed by Eastman Kodak for *scanning* and storing photographs on *CD-ROM*. Many film developers will turn a roll of 35mm film into high-quality digital photos that you can access using a Photo CD-compatible CD-ROM drive.

PICS A standard *file format* for animation files.

PICT A standard *file format* for graphics files. It can contain both *object-oriented* and *bitmapped graphics*, and is the standard format for graphics that are cut or copied to the *Clipboard*.

PIM Personal Information Manager. Used to describe programs that keep track of information you need to conduct day-to-day personal business. They usually offer some combination of an address book (or *contact manager*), calendar and scheduling, and to-do lists.

piracy Copying commercial *software* (or *shareware*) without permission and without paying for it. Also called theft.

pixel One of the little points of light that make up the picture on a computer (or TV) screen. (The name is short for picture element.) The more pixels there are in a given area—that is, the smaller and closer together they are—the higher the *resolution*. Often, pixels are simply called dots.

PlainTalk A voice-related *system enhancement* that has two parts. Text-to-speech enables *applications* that support it to read text aloud. Voice recognition works in conjunction with *AppleScript* to let you control the Mac with spoken commands.

platform Usually refers to a particular type of computer running a particular operating system. The Mac is one platform, a PC running Windows is another, and a Unix machine is still another. Also see cross-platform.

platters A rigid *disk* typically made out of aluminum and magnetically coated to retain saved data.

plug-in A software module that adds capabilities to an *application*. Pop a plug-in *file* into the appropriate *folder*, and the *program* will sprout new features.

PMMU Paged Memory Management Unit, the *chip* that makes virtual memory possible (provided the appropriate *software* is installed). Its functions are built into the 68030, 68040, and *PowerPC processors*.

pointer The little *icon* that moves on the screen when you move the *mouse* (or other *pointing device*). Its most common shapes are the arrow ($\mbox{\cite{h}}$), the I-beam ($\mbox{\cite{l}}$), and the wristwatch $\mbox{\cite{l}}$). It takes on other shapes and names—such as the lasso ($\mbox{\cite{l}}$)—in other applications.

pointing device A *mouse, trackball,* or other *input device* that moves the *pointer* on-screen.

POP Post Office Protocol. An *Internet protocol* for handling *e-mail*.

pop-up menu A *menu*, typically found in a *dialog box* or *palette*, that pops up (or down or to the side) when you press the *mouse* button on its title (a box with a drop shadow around it). Compare *pull-down menu*.

port A connection for plugging in external computer *devices*. Most Macs have an *ADB* port, a *SCSI* port, a *display* port, a *printer* port, a *modem* port, and so forth.

portable Mac A smallish, (relatively) lightweight Mac, such as a PowerBook or the Portable, that includes the *CPU*, *monitor*, and keyboard in a single, fold-up unit. Compare *compact Mac* and *modular Mac*.

portrait monitor A *monitor* designed to show a full letter-size page. The word portrait indicates the monitor's tall, rectangular shape. Portrait monitors are most commonly called full-page displays.

post To upload a message to the public message area of a bulletin board system or on-line service.

PostScript A programming language developed by Adobe that's designed to describe, in precise detail, how the text and graphics on a printed page should look. It's often referred to as a page-description language and is used on many types of *printers* and *imagesetters*. Compare *QuickDraw*.

PostScript font An *outline font* format defined in PostScript. With *system software* versions before 7.5, *PostScript fonts* (also called *printer fonts*) must be used in conjunction with *bitmapped fonts* (the *screen fonts*). Compare *TrueType font*.

PowerPC A type of *processor chip*, based on powerful *RISC* technology and made by IBM and Motorola. Apple introduced PowerPC chips with the Power Macs and plans to phase out the 68K processors used in other Macs.

PPP Point-to-Point Protocol. A *protocol* that allows your Mac to make an *Internet* connection by dialing up an *ISP*.

PRAM Parameter RAM (pronounced "pee-ram"), a small portion of the Mac's RAM set aside to hold basic information such as the date and time, speaker volume, desktop pattern, and keyboard and mouse settings. PRAM is powered by a battery, so it doesn't lose the settings when you shut down. Sometimes, however, the PRAM data gets corrupted, causing crashes or other problems. That's where zapping the PRAM comes in.

pre-emptive multitasking An efficient method of dividing up the *processor's* attention to accomplish several tasks at a time.

preferences The user-adjustable features of a *program*. Many programs create separate Preferences (or Prefs) *files*, which are usually stored in the *System Folder*.

presentation program Software that lets you combine text, charts, and illustrations—and, if you wish, animation, video, and sound—into electronic slide shows or *multimedia* presentations. You also can output the results to 35mm slides or videotape.

printer A device that takes the text and graphics sent from the Mac and puts them on a piece of paper. Most are computers in their own right, with CPUs and memory. The range of printer types includes laser, inkjet, dot-matrix, thermal-fusion, dye-sublimation, and imagesetters.

printer driver See driver.

printer font Another name for a *PostScript font*, which is an outline font designed to be used by printers. For screen display, you use a companion *screen font*.

printer port A *serial port* on the Mac's back panel that lets you connect to a *printer* or *LocalTalk network*. Compare *modem port* and *GeoPort*.

PrintMonitor A *print spooler* that comes with the *system software*; it shows you which *files* are printing as background tasks.

print spooler Software that intercepts a *document* on its way to the *printer*, temporarily storing it on *disk* until the printer is ready for it. It feeds the printer while you continue to work, providing *background printing*. System 7 has a built-in spooler, *PrintMonitor*; you can also buy a spooler *utility*.

processor The all-important *chip* that contains the computer's brains, or *CPU*. Sometimes called a microprocessor, it's located on the *motherboard*. Also <u>see *coprocessor*</u>.

processor-direct slot A type of *expansion slot* that connects to the *CPU* directly, rather than via a *bus* as with *NuBus slots*. Abbreviated *PDS*.

program Another word for *software*.

programmer's switch A small piece of plastic that comes with your Mac. It contains the reset button (which lets you restart the Mac in virtually any situation) and the interrupt button (used mainly by programmers). Also see *force quit*.

protected memory An approach that lets the system and each running *application* exist in *memory* so that if one *crashes*, the others are not affected.

protocol The set of connection and data transfer rules which a pair of computers must agree on.

public domain Software to which the author has given up all legal rights. Public domain software is actually extremely rare; the phrase is usually mistakenly applied to *shareware* and *freeware*.

Publish and Subscribe A data-linking strategy built into System 7 that's sometimes called "live cut and paste." You can *select* and publish (make available) *data* in one *document*, then subscribe (create a link) to it from one or more other documents. Whenever you change the original information, all the copies are automatically updated.

pull-down menu The kind of *menu* you find on the *menu bar*. It pops down when you click on its title; to keep it extended, you hold down the *mouse* button. Compare *pop-up menu*.

push button See button.



QuickDraw The Mac's native graphics language, which tells it how to draw everything on the screen: text, images, *dialog boxes*, *menus*, *icons*, you name it. QuickDraw, which is built into the Mac's *ROM*, is also responsible for producing *PICT graphics* and for outputting text and images to non-PostScript *printers*. Compare *PostScript*.

QuickDraw GX A *system enhancement* that makes big improvements in the way the Mac handles printing, graphics, *fonts*, and exchanges of formatted *files* between Macs.

QuickDraw printer A non-PostScript printer, which relies on the Mac's *QuickDraw* language to tell it how to print text and images.

QuickTime Apple's technology for recording and playing back time-based *data* (video, animation, and sound). Physically, QuickTime is an *extension* that provides a standard *user interface*, a special *file format* (MooV), and *compression* (movies can be huge).

quitting Leaving a *program* and returning to the *Finder* (or its equivalent).

R

radio button One in a group of buttons of which only one can be on at a time (such as the presets on a car radio). When you select one radio button, the others are automatically deselected. Compare *checkbox*.

RAM Random Access Memory, the *chips* in a desktop Mac that contain most of its *memory*. RAM is the most common type of computer memory, and it's where the Mac stores *system software*, *programs*, and *data* you are currently using. It's formally called dynamic RAM (*DRAM*) because it's volatile—that is, the contents are lost when you turn off the Mac (or *crash*). It's pronounced "ram" and measured in megabytes. Compare *PRAM*, *SRAM*, and *VRAM*, and *ROM*.

RAM cache See disk cache.

RAM disk It's not a disk at all, but rather a portion of *memory* set aside to act as a temporary disk. The Mac sees it as a *hard disk*, but because RAM is faster, the *files* and *programs* stored on it will run faster. (You get to decide how big the RAM disk is and what *files* it contains.) It's especially useful in PowerBooks, because the Mac won't waste battery power spinning up the *bard disk* if the needed data is on the RAM disk.

rasterizing The process of converting the outlines of an *object-oriented graphic* or *font* into the *bitmap* (a pattern of dots or *pixels*) required for display on a *monitor* or output on a *printer*. In printers, this step is usually handled by a *RIP*.

readme file A disk document that accompanies *software* and gives you information that's either very important or was left out of the printed manual.

read-only Refers to something you can view and print but not write (save changes) to. Locked *files* or *disks* are read-only, as are *CD-ROMs*.

read/write head The part of a *drive* mechanism that actually deposits information on (writes) and extracts information from (reads) the *disk*.

reboot See booting.

recent folders Folders created by the Apple Menu Options *control panel* to hold *aliases* of recently used *documents*, *applications*, and *file servers*. With the *folders* listed in the menu, you can select recent items from their *submenus*.

record A grouping of all defined *fields* for one subject of a *database*, such as a single person, recording artist, or recipe. In an address database, for example, a record would consist of all address data for one person, such as Mike Jones.

redraw The process of a graphics program re-displaying a graphic on the screen, for example, after you've made a change to the object. Also called refresh.

refresh rate The rate that an image is redrawn on the *monitor*. The lower the refresh rate the better.

removable media Any storage *media* you can insert and remove from a *drive*. SyQuest, Iomega Zip, and *magneto-optical* cartridges are examples of removable media.

rendering The process of drawing the final image in some *graphics programs* (such as 3-D graphics), which includes applying the specified colors, textures, shadows, movements, and so forth, and outputting the image at the specified *resolution*.

resident font A *font* that's built into a *printer's ROM* (or stored on an attached *bard disk*), so it's always available for printing. Compare *download*.

resolution The granularity of output or display. Usually presented in dots per inch and dot pitch (width of the dots).

resource A special component of Mac *software* that's separate from the main programming instructions that make the software work. Resources include *dialog boxes, icons, fonts*, and sounds.

resource fork The part of a Mac *file* that holds program-specific resources such as *menus*, *dialog boxes*, sounds, *icons*, and formatting instructions. *Applications* always have a resource fork. Compare *data fork*.

RGB monitor A generic name for a color monitor, which uses three separate signals—red, green, and blue—to create the screen image.

RIP Raster Image Processor, *hardware* or *software* that converts (*rasterizes*) *object-oriented* graphics and *fonts* into the *bitmaps* required for output on a *printer* or *imagesetter*.

RISC Reduced Instruction Set Computing; pronounced "risk." A type of *processor* design that uses a relatively small set of instructions for faster operation. The *PowerPC chip* in the Power Macs is based on RISC technology. Compare *CISC*.

ROM Read-Only Memory; rhymes with "mom." ROM is permanent *memory* that's programmed on a *chip* (called the RAM chip) and can't be altered. It contains parts of the *system software* responsible for very basic things, such as starting up and drawing images on the screen. Compare *RAM*.

RSN Real soon now. Used disparagingly to describe the timeline of oft-promised but latearriving products and upgrades.

RTF Rich text format, a *file format* for text files that includes *formatting* instructions. Also called *interchange format*.

run-time player A limited version of an *application*, such as a *database manager* or *presentation program*, that lets you access a database or play back a presentation, but not modify it or create new ones. You often can freely distribute the run-time player with *documents*, so others can use them without having to install the full program.



Sad Mac The glum Mac face that appears on-screen (accompanied by the *chimes of doom*) when the Mac can't start up due to a serious problem with its *hardware* or *system software*. When everything is OK, the Happy Mac appears during startup.

sampling Taking audio snapshots (called samples) of a sound wave (such as music or a voice) at regular intervals and turning them into a digital recording on the computer. The number of samples taken per second is called the sampling rate. Also see *digitize* and *sequencing*.

save To transfer information (usually a *document*) from *memory* to a *disk*. Compare *open*.

scanner A *device* that converts images (such as photographs) into digital form, so that they can be stored and manipulated on computers. When used in conjunction with *OCR software*, a *scanner* can convert a page of text into an editable document.

Scrapbook A *desk accessory* where you can permanently store material (text, graphics, sounds, movies) and then easily access it from within any *program*.

screen font Another name for a *bitmapped font*. Screen fonts are required for the on-screen display of *PostScript fonts*. With *TrueType fonts*, they're often supplied to speed up the screen display of common type sizes.

screen name <u>See user name</u>.

screensaver A *utility* that temporarily replaces the current screen image with a blank screen or an amusing/attractive/silly moving image. It's designed to prevent a static image from being permanently burned into the screen phosphor.

script A series of *commands* (saved as a *file*) that automates everyday tasks, such as file backups, or adds capabilities to a program or presentation. A script is, in essence, a simple program that you write using a *scripting language*. Also <u>see *macro*</u>.

scripting language A simple programming language, such as *AppleScript* or HyperCard's *HyperTalk*, that you use to create scripts.

scroll arrow A scroll bar component.

scroll bar The rectangular strip that appears on the right and/or bottom edges of a *window* when there's more information than is currently displayed. You can click in its gray area and/or use the *scroll arrows* and *scroll box* to move the window's contents.

scroll box A *scroll bar* component.

scrolling Moving through the contents of a *window* or *list box* in order to see things not currently displayed. It's normally done with the *scroll bar*.

SCSI Small Computer Systems Interface; pronounced "scuzzy." The standard *interface* for connecting *peripherals* to the Mac. You can attach up to seven SCSI *devices* to your Mac in a *daisy chain*. SCSI *ports* have been built into all Macs (except dockless Duos) since 1986. Compare *FireWire*.

SCSI connector The parts at each end of a SCSI cable which attach to the matching connector on your computer or other SCSI device.

SCSI device A *peripheral* that you connect to the Mac via a SCSI *port*. Examples include *hard disks*, *CD-ROM drives*, tape backup units, *scanners*, and some personal *printers*.

SCSI disk mode A way of connecting a PowerBook to a desktop Mac so the PowerBook behaves as if it were an external *bard disk*, allowing you to swap files back and forth. It's supported by most PowerBook models, but you need a special *adapter* cable.

SCSI ID The number assigned to a SCSI *device* so the Mac can distinguish it from other SCSI devices. Each device must have a unique number in the range from 0 to 6 (most *peripherals* let you change the ID with a switch or dial); the Mac itself is number 7. Also called the SCSI address.

select To choose something (text, graphic, object, region) that you want to change. You do this by clicking on an object or button, Shift-clicking on several objects, or dragging across an area. The chosen area (the *selection*) is either *highlighted* or surrounded by a *marquee*. Selecting by itself doesn't change anything, it just tells the Mac what you want to be affected by the next command or action. You deselect something by clicking elsewhere.

selection rectangle The dotted box that appears (in the *Finder* and many *applications*) when you click on an empty spot and *drag*. When you release the *mouse* button, the box disappears (or becomes a *marquee*) and everything within it is *selected*.

self-extracting archive A compressed *file* that contains all the information needed to decompress itself so that a user doesn't need a special program to access the file; *double-clicking* on a self-extracting archive decompresses it. Most such archives have names ending in ".sea".

sequencing To record music instrument by instrument (track by track). You record and edit the music in a *program* called a sequencer, and the resulting *MIDI file* is naturally called a sequence.

serial port A type of port that transmits *data* serially, one *bit* after another. The Mac's *modem* and *printer* ports are serial ports. Compare *parallel port*.

server A computer that provides shared, centralized resources—such as *files*, *e-mail*, *databases*, *modems*, and *printers*—to other computers on a *network*. Server can also refer to the *software*, such as *AppleShare*, that runs on such a computer. Compare *peer-to-peer*.

service bureau A business that can output your *documents* on specialized (read "expensive") equipment such as *laser* and *dye-sublimation printers*, large-format color printers, and *imagesetters*. Most service bureaus also let you rent time on computers, send faxes, and do photocopying.

sfil The standard *file format* for System 7 sound resources, which are stored in the *System file* and appear in the Sound *control panel*. To hear one, *double-click* its *icon*.

shareware Software you can try before you buy. It's distributed on the honor system, passed around through *user groups*, *on-line services*, and *BBSs*. If you like it enough to keep using it, you send the (usually nominal) fee to the author. Compare *freeware* and *public domain*.

Shift-click To hold down the Shift key while clicking the *mouse* button. Shift-clicking lets you select multiple objects or large amounts of text, depending on the program.

SIG Special Interest Group, a subgroup of a computer *user group*.

SIMM Single In-line Memory Module, a small *card* that holds memory *chips*. To add more *RAM* to your Mac, you buy SIMMs and plug them into *slots* on the *motherboard*. Pronounced "sim."

single-sided disk An older type of double-density *floppy disk* that stores just 400K of *data* on one surface. Compare *double-sided* and *high-density disks*.

68K Shorthand for Motorola's 68000 series of *processor chips*—the 68000, 68020, 68030, 68040, and 68LC040—used in every Mac model prior to 1994. Also called the 680x0 series. They're being replaced by *PowerPC chips*.

size box A small box found in the bottom-right corner of most *active windows*. Clicking and dragging it lets you change the window's size and shape. Compare *close box* and *zoom box*.

sleep A powered-down state that saves energy. A fact of life for PowerBook users running on battery power, but it's now available on several desktop Macs.

slot See expansion slot.

smart quotes True (curly) quotation marks that should be used for professional-looking text. They look like this: "'. Most *fonts* have them as Option characters. Compare *dumb quotes*.

SMTP Simple Mail Transport Protocol. A protocol for transferring *e-mail* on the *Internet*.

snd The *resource* responsible for making the sounds you hear in programs and HyperCard *stacks*. In System 7, system sounds are *sfil* resources.

sneakernet A file-sharing strategy that uses hand-carried *disks* as the exchange *media*. Transfer speed depends on the efficiency of your footwear.

software The instructions that tell a computer what to do. It takes many forms, from an application on a disk to the code in a Mac's ROM. Also called programs or, redundantly, software programs. Compare hardware.

software suite Programs sold by a software company as a group. The intent is to provide users with all the major *applications* needed for common business functions in one package. A *spreadsheet* and *word processor* typically form the core of a software suite. (Programs in a suite are usually not as well-integrated as those found in an integrated package.)

sort To order selected information (in a *database*, say, or a *word-processing* document) by one or more criteria, such as alphabetically.

spreadsheet program Software that processes number-related information, allowing you to apply calculations and formulas to *data* that's organized in rows and columns of cells. Its documents are sometimes called worksheets.

SQL Structured Query Language. An English-like language designed to obtain information from and to modify *data* in large relational *databases*.

SRAM Static RAM, a speedy but expensive form of *memory* found in *cache cards*. It boosts the Mac's performance by reducing the time the *processor* spends waiting for data from the slower dynamic *RAM*.

stack A *document* created by HyperCard.

startup disk The disk containing the *System file* and *Finder* that the Mac is currently using (which is usually the *disk* it started up from). If you have several disks mounted at the same time, you can designate which will be the startup disk using the Startup Disk *control panel*.

stationery A feature of System 7 (and some *applications*) that lets you create *templates—documents* that, when *double-clicked*, open an exact duplicate of themselves, leaving the original untouched. In System 7, you can turn most *documents* into stationery by clicking the Stationery Pad *checkbox* in their Get Info window.

storage Any type of *media* that you can store *files* on, including a *hard disk*, *floppy disk*, SyQuest cartridge, *magneto-optical* disk, or DAT tape.

storage bay A space inside the Mac where you can install additional *disk drives*. There are two sizes: 3.5-inch (the standard size for *floppy-disk drives*, *hard disks*, and some cartridge drives) and 5.25-inch (*CD-ROM* drives, some hard disks, and cartridge drives).

street price The average price that a product sells for through mail order or dealers. It's usually significantly less than a company's official list price. Also see *ApplePrice*.

style Formatting that's applied to text in a *document*. A character style is an attribute—such as *font* and size, and whether it's bold or italic—that affects only individual letters. A paragraph style also includes information such as line spacing, indents, and tab settings.

style sheet 1. A list of the style definitions used in a *document*. 2. A collection of character and paragraph styles that has a name, allowing you to quickly apply several formatting changes at once.

stylus A small, tipped object, similar in appearance to a pen or pencil used to emulate a writing/drawing device on a *graphics tablet* or similar medium.

submarining An unsettling effect sometimes found on *passive-matrix* PowerBook screens: If you move the *pointer* too fast, it disappears until you stop moving it.

submenu The secondary *menu* that appears next to an existing menu when you choose a command name that has a small, right-pointing arrow.

suitcase A file that stores *fonts*, sounds, or *desk accessories*; its *icon* looks like a little suitcase. In System 7, suitcases operate like *folders*: You can *double-click* them to open a *window* showing their contents, and drag items into and out of them. In System 6, you move items into and out of a suitcase file with Font/DA Mover.

SuperDrive The 1.4MB floppy-disk *drive* that comes with all current Macs. It can read and write *single-sided* (400K) disks, *double-sided* (800K) disks, and *high-density* (1.4MB) disks. With the appropriate *software*, it can also read 3.5-inch disks from PCs and Apple II machines. It used to be called the *FDHD* (floppy disk, high density) drive.

support 1. Help with *hardware* or *software* problems, usually in the form of advice from the technical support staff at the company that sold you the product. 2. To say that a piece of hardware or software supports something means that it works with it, or enables it to work. For example, System 7 supports *TrueType fonts*, and System 6 doesn't (normally).

surge protector A *device* that protects computer equipment from being damaged by variations in electrical current.

sustained transfer rates The speed at which a *drive* can deliver large amounts of *data*. Burst rates are much higher, so some vendors focus on those, but for most purposes the sustained rate is more important.

SYLK Symbolic Link format, a standard *file format* for *spreadsheets* (and sometimes *databases*). It preserves formulas and text formatting as well as *data*. Compare *DIF*.

sysop A person who manages a *BBS* or moderates a forum (discussion group) on an *on-line service*. Short for system operator and pronounced "siss-op."

system 1. A computer setup. 2. Short for *operating system*.

system disks A CD or set of *floppy disks* that contain *system software* installation information. Compare *startup disk*.

System Enabler A file in the *System Folder* that makes the Mac *compatible* with the current version of the *system software* (starting with System 7.1). Different Mac models have different enablers.

system enhancement A *program* (often an *extension*) that extends the capabilities of the *system software*, such as *AppleScript*, *QuickDraw GX*, or *QuickTime*. Some work in the background, adding features (such as movies) to *applications*, while others—such as At Ease and PowerTalk—are stand-alone programs that you can access directly.

System file The program the Mac uses to start itself and to provide certain basic information to all *applications*. Together with the *Finder* and *ROM*, it comprises the Mac's *operating system*.

System Folder The all-important *folder* on a Mac *disk* that contains the *System file*, *Finder*, and other *system software*. Only disks with a System Folder can be *startup disks*.

system heap The portion of a Mac's memory reserved for the *system software*. Compare application heap.

system resource Resources which are used by and "belong to" the System, such as fonts.

system software A catchall term for the basic programs that make the Mac work. It creates the *desktop*, provides universal commands such as Open, Save, and Cut, and includes features such as the *Clipboard*. Part of the system software is in *ROM*, and the rest is on disk in the *System Folder*.

T

TCP/IP The *network protocols* used on the *Internet* and on many multiplatform networks (especially those with *Unix* machines). It stands for Transmission Control Protocol/Internet Protocol. The Mac can speak TCP/IP using the MacTCP *extension*. Compare *AppleTalk*.

tear-off Refers to a *menu* (or *palette*) that you can detach from the main menu (or main palette) and move around on the screen like a palette. A tear-off menu/palette stays fully extended and remains in front of open *document windows*.

telecommunications The transfer of information between computers over telephone lines. Just plug in a *modem*, fire up some *communications software*, and you can make contact with the office computer, an *on-line service*, a *BBS*, or the *Internet*.

Telnet A function of the Internet that allows you to log onto a remote computer.

template A master *document* that you can use repeatedly without altering the original contents. Many *applications* provide templates (and/or let you create them). System 7 has a seldom-used template feature called *stationery*.

terminator A small *device* that eliminates echoes and other unwanted electrical signals from a *SCSI bus* or *network*. In a SCSI chain, it usually plugs into the *SCSI port* of the last device in the chain.

text box An area, usually in a *dialog box*, where you insert text. Also called a text field.

text editor A simple, no-frills word processor that works with plain ASCII text.

text file An ASCII file—just characters, no formatting.

text tool Another name for the *I-beam pointer*.

thermal-fusion printer A *printer* that produces output via tiny heated elements in the print head that push a ribbon against the page, bonding a waxy ink to the paper.

thermal-wax transfer printer A printer that creates images using tiny heated elements that push rolls of plastic film against a page, bonding a waxy ink to the paper. Also called heat-fusion or *thermal-fusion printers*.

third party You are the first party; Apple (the maker of your computer) is the second party; and the companies that make *hardware* and *software* for the Mac are third parties. It also refers to companies who make add-on software for major *applications*—for example, a *plug-in* for Adobe Photoshop (the second party in this case).

32-bit addressing A method of handling *memory* in System 7 that enables most Macs to work with as much *RAM* as the machine can hold. Without it, Macs have 24-bit addressing, which limits total RAM to 8MB.

32-bit clean A phrase used to describe *software* (including what's in *ROM*) that's written to work correctly—that is, without crashing—with *32-bit addressing*. A few older Macs, such as the IIcx, aren't 32-bit clean and are said to have "dirty ROMs."

32-bit color Color that uses 32 *bits* to store each *pixel's* color value. Like 24-bit color (see *bit depth*), it offers 16.7 million colors; the extra 8 bits per pixel don't offer more colors; they're reserved for special operations such as masking.

thread A message posted in a public area of a *bulletin board system* or *on-line service*, plus the replies and replies to replies.

3-D graphics Graphics that are made to look three-dimensional by using shading, perspective, and other techniques to give the illusion of depth in addition to the height and width (two dimensions) actually available on a computer screen.

throughput The rate at which *data* can be transferred between two computers or other *devices*. With *modems*, it refers to the number of *bits* exchanged per second. See *bps*.

TIFF Tagged Image File Format, the standard *file format* for high-resolution *bitmapped graphics*, including those generated by most *scanners*.

tile 1. To arrange *windows* side by side, as if they were floor tiles. 2. To print an oversized image across several pieces of paper (which can then be taped together). 3. To repeat a pattern or texture across an image in a *graphics program*.

title bar The horizontal strip across the top of a *window* that contains its name. When the window is *active*, its title bar has horizontal stripes, a *zoom box*, and a *close box*. To move a window, you *drag* it by the title bar.

toggle A feature that changes its status (on or off) each time you use it. For example, the common type *styles* (bold, italic, and so on) are toggles, because the first time you choose them they turn on, and the next time they turn off. Other toggles include *checkboxes* and certain *menu* items (e.g., Show Ruler, Hide Ruler).

toolbox 1. A special *palette* containing *buttons* and tools that floats above a *document* for easy access. Also called a tool palette, unless it's a toolbar (a ribbon across the top of the screen). 2. The Toolbox is a collection of predefined software routines (*code*) built into the Mac's *ROM* that performs basic tasks such as drawing *dialog boxes* and displaying *menus*.

trackball A pointing *device* that resembles an upside-down mouse. Instead of sliding a *mouse* across the desk, you roll a ball in a stationary holder.

tracking speed The relationship between the motion of a *mouse* or on a *trackpad* and how fast the cursor moves on the screen.

trackpad The touch-sensitive *pointing device* built into late-model PowerBooks. Instead of moving about the screen by rolling a *trackball*, you run a fingertip across the trackpad.

Trash The *icon* on the *desktop* into which you put *files* to be deleted; they aren't actually deleted, however, until you choose Empty Trash from the Special *menu*. You can also eject a *floppy disk* or dismount a *hard disk* (or *AppleShare* volume) by dragging its *icon* to the Trash.

TrueType An outline *font* format developed by Apple and supported by System 7. Unlike *PostScript fonts*, a single TrueType font file works for both the screen and any *printer*.

Tune-Ups Free *utilities* from Apple that fix *bugs* and enhance features of System 7 and 7.0.1. For System 7.1, they're called System Updates.

24-bit color See *bit depth*.

Type 1 font The primary format for *PostScript fonts*, developed by Adobe Systems.

typeface A collection of letters, numbers, punctuation marks, and symbols with an identifiable and consistent design. A typeface, such as Helvetica or Times, can include many different weights (light, semibold, bold, and so on) and styles (regular, italic, and so on). Compare *font*.

typography The craft of setting type so it is both readable and attractive. It includes selection of appropriate *typefaces* and control over horizontal and vertical spacing.



Undo The Mac's most beloved *command* ((3)), it lets you, well, undo the last thing you did in a *program*. Undo is often a *toggle*, so you can flip back and forth between two versions of something, and the cool programs have multiple undo, allowing you to go back more than one step.

Unix This multiuser, multitasking, multiplatform *operating system* was developed by Bell Labs and is pronounced "you-nix." Apple's implementation of Unix is called *A/UX*.

upload To send a *file* to another computer using a *modem*. Opposite of *download*.

URL Uniform Resource Locator. A unique address that specifies the exact location of every accessible resource on the *Internet*.

Usenet News The discussion forums of the *Internet*.

user group A bunch of people who get together to share help and advice about their computers and *software*. Mac-specific user groups are often called MUGs, the largest of which are BMUG (in Berkeley, California) and the Boston Computer Society.

user interface The way a computer (or a *program*) interacts with the user. For example, the Mac's interface uses graphical elements—*icons*, *windows*, *buttons*, *menus*, *dialog boxes*—which is why it's called a graphical user interface, or GUI (pronounced "gooey").

user name Also known as a user ID or screen name. A name you use to identify yourself on an *on-line service*.

utility A program that provides support to the *system software*, other *applications*, or even the Mac *hardware*. You don't need utilities unless you're using your Mac to do other things. Spelling checkers, *disk* recovery tools, *extension* managers, *screensavers*, and *compression* programs are all utilities.



value list A set of values associated with a *database field* from which the user can choose rather than typing an entry. Associating a value list with a field can speed *data* entry and help ensure consistency.

vaporware A product that a company keeps promising to deliver but never does (or at least is very, very late in shipping).

VAR Value Added Reseller. A person or company that buys *bardware* and *software*, packages it all together, and sells it to you as a complete system. A VAR will discuss your needs, make the buying decisions, install the system, train you, and provide support. For a price, of course.

vector graphics Another term for object-oriented graphics.

video card 1. A card that controls an external *monitor*. It can include features such as 24-bit color and/or a graphics accelerator. 2. A card that digitizes the video signal from a TV, VCR, or camcorder. Also called a digitizing board or a digitizer.

video editor Software that lets you create and edit *QuickTime* movies, record video and audio (with the appropriate *digitizing* hardware), and output the movies in various formats.

video port 1. A port where you can attach an external *monitor*. Now called the *display port*. 2. A port where you can attach a VCR, camcorder, or TV. Video-in ports let you *digitize* the video signal coming from one of these *devices*, and video-out ports send digital data to them.

virtual memory A System 7 strategy that expands the available *memory* by treating vacant space on a *hard disk* as if it were *RAM*.

virus A program that replicates itself from one *file* or *disk* to another without your consent. Viruses can spread through *floppy disks*, *networks*, and *on-line services* and can go undetected (unless you have an antiviral *utility*) until something goes wrong. Some viruses deliberately destroy *data*, and even those designed to be "benign" can cause *crashes*, slowdowns, and file corruption.

VLF radiation Very Low Frequency electromagnetic radiation (between 10KHz and 30KHz), which is emitted by the *CRTs* in *monitors* and televisions. Compare *ELF radiation*.

voice recognition The ability of the Mac to interpret and execute spoken commands (and even, with the right *software*, to take dictation). PlainTalk is one implementation.

VRAM Video RAM, a type of *memory* dedicated to handling the image displayed on a *monitor*. VRAM is built into many Macs, and it also comes on *display cards*.



WAN Wide Area Network, a network that spans geographically separated areas, usually by using *modems* and dedicated, high-speed telephone lines. Compare *LAN*.

Web Short for *World Wide Web*, a graphical portion of the *Internet*.

wild card A character (usually * or ?) that can stand for one or more unknown characters during a search. Searching for some text or a *file* using Mac* would find Macintosh, MacUser, and macadamia.

window A rectangular frame on the Mac's screen that has a *title bar* and *scroll bars*. *Disks* and *folders* open into windows, and *documents* appear in windows when you're working on them. Compare *dialog box*.

Windows Microsoft software that adds a Mac-like graphical user interface to PCs.

WorldScript A technology that enables the Mac to handle non-Roman-based language systems.

word processor Software that lets you enter, edit, and *format* text. Not only that, but it also provides goodies such as spelling checkers, outlining, tables, footnotes, and tables of contents.

World Wide Web The portion of the *Internet* which allows the display of *formatted* pages of text and graphics.

wristrest A little cushion that provides support for the wrists and helps prevent repetitive stress injury.

wristwatch The *icon* the *pointer* normally turns into while you wait for the Mac to do something.

WYSIWYG Means "what you see is what you get"—that is, the image you see on-screen matches what will print on paper. Pronounced "wizzy-wig."

Z

zoom box A small box at the right end of the *title bar* in most *active windows*. Clicking it expands the window to display all the contents; clicking again restores the previous size and shape. Compare *close box* and *size box*.

