

# Glossary

## A

**@** /æt/ The 'at' sign that separates the recipient's name from the domain name in an email address.

**Acrobat Reader** /ˌækroʊbæt ˈriːdər/ *n* Adobe's free software for displaying and printing PDF files.

**ADSL** /ˈædɪsl̩/ *n* Asymmetric Digital Subscriber Line. A broadband communication technology designed for use on telephone lines; it allows a single phone connection to be used for both internet service and voice calls at the same time.

**ADSL modem** /ˌædɪsl̩ ˈmoʊdɪm/ *n* A device used to connect one or more computers to an ADSL phone line.

**adware** /ˈædwɛər/ *n* Software devised to display advertisements; some may include spyware.

**alphanumeric keys** /ˌælʃənɪkjʊːmerɪk/

'kiːz/ *n* Keys that represent letters and numbers, arranged as on a typewriter.

**Amazon.com** /ˈæməzən ˌdɒt ˌkɒm/ *n* A popular online shopping site.

**android** /ˈændrɔɪd/ *n* A robot that resembles a human.

**animations** /ˌæniːmeɪʃnz/ *n* Images made up of a series of independent pictures put together in sequence to look like moving pictures.

**applet** /ˈæplət/ *n* A small Java application, usually designed to run automatically within a web page.

**application software** /ˌæpliːkeɪʃən ˌsɒfwɛər/ *n* Programs that let you do specific tasks, such as word processing, database management or financial planning.

**arcade game** /ɑːˈkeɪd ˌɡeɪm/ *n* A game played in a coin-operated machine, typically installed in pubs, restaurants and amusement arcades.

**arithmetic logic unit (ALU)** /əˌrɪθmətɪk ˈlɒdʒɪk ˌjuːnɪt/ *n* A component of the CPU which performs the actual arithmetic and logical operations asked for by a program.

**ARPANet** /ˈɑːpənɛt/ *n* Advanced Research Projects Agency Network. Developed in the early 70s by the US Department of Defence. This was the precursor to the Internet.

**Artificial Intelligence** /ɑːtɪfɪʃəl ɪnˈtelɪdʒəns/ *n* The study of methods by which a computer can simulate aspects of human intelligence.

**ASCII code** /ˈæskiː ˌkəʊd/ *n* A standard system for the binary representation of characters. ASCII, which stands for American Standard Code for Information Interchange, permits computers from different manufacturers to exchange data.

**aspect ratio** /ˈæspekt ˌreɪʃiəʊ/ *n* The width of the screen divided by its height, e.g. 4:3 (standard PC monitor or TV set) and 16:9 (high-definition TV).

**assembler** /əˈseɪblər/ *n* A special program that converts a program written in a low-level language into machine code.

**assembly language** /əˈseɪblɪ ˌæŋɡwɪdʒ/ *n* A low-level language that uses abbreviations, such as ADD, SUB and MPY, to represent instructions.

**ATA adaptor** /ˈeɪtiːəl əˌdæptər/ *n* An analogue telephone adaptor, which converts the analogue signals of your traditional phone into digital signals.

**Athlon** /ˈæθlɒn/ *n* A processor manufactured by AMD.

**attachment** /əˈtætʃmənt/ *n* A file that has been included as part of an email message.

**attributes** /ˈætrɪbjʊts/ *n* Characteristics that affect the visual representation of lines and polygons, e.g. line styles, rectangle colour, etc.

**authentication** /ɔːθentɪˈkeɪʃən/ *n* Verifying the identity of a user logging onto a network; ways of authentication include passwords, digital certificates and biometrics.

**avatar** /ˈævətər/ *n* An object which represents a participant in a 3-D chat room.

## B

**back up** /ˌbæk ˈʌp/ *v* To copy files from one disk to another.

**backbone** /ˈbækboʊn/ *n* High-speed lines or connections that form the major access pathways within the Internet.

**backup** /ˈbækʌp/ *n* A copy of data or software, usually kept in case the original disk is damaged.

**bandwidth** /ˈbændwɪθ/ *n* The quantity of data that can be transmitted through a network, measured in bits per second (bps).

**bar code reader** /ˈbɑːkəʊd ˌriːdər/ *n* A specialized scanner used to read price labels in shops.

**BASIC** /ˈbeɪsɪk/ *n* A high-level programming language developed in the 1960s, widely used in programming because it was interactive and easy to use. Short for *Beginner's All-purpose Symbolic Instruction Code*.

**binary code** /ˈbaɪnəri ˌkəʊd/ *n* A code made of just two numbers (0 and 1).

**binary digit** /ˈbaɪnəri ˌdɪdʒɪt/ *n* The smallest unit of information in the binary system, 0 or 1. Also called a *bit*.

**binary system** /ˈbaɪnəri ˌsɪstəm/ *n* A notation system in which numbers are represented by the two digits: 0 and 1. Thus the binary number 10 represents 2 in the decimal system, while 100 represents 4.

**biometrics** /baɪəʊˈmetrɪks/ *n* The science that uses computer technology to identify people based on physical features, such as fingerprints or voice scans. From the ancient Greek: *bios* = life, *metron* = measure.

**bit** /bɪt/ *n* See **binary digit**.

**bit-mapped graphics** /bɪtmæpt ˈɡræfɪks/ *n* See **raster graphics**.

**BitTorrent** /bɪt ˈtɒrent/ *n* A protocol for transferring music, films, games and podcasts. It breaks files into chunks and distributes them among a large number of users; when you download a torrent, you are also uploading it to another user.

**BlackBerry** /ˈblækbəri/ *n* A wireless handheld device, developed by Research In Motion, which provides email, phone, text messaging, web browsing, an organizer, as well as instant messaging and corporate data access.

**blind carbon copy (Bcc)** /ˌblaɪnd ˌkɑːbən ˈkɒpi/ *n* Addresses in the Bcc: line of an email program will receive a copy of the message, but the identity of the recipients will be kept secret.

**blog** /blɒɡ/ **1** *n* A user-generated website where people express their opinions. The entries are displayed in a reverse chronological order. The term comes from *web log*, coined by Jorn Barge in 1997 to refer to an online diary. **2** *v* To write entries in a blog.

**blog administrator** /ˌblɒɡ ədˈmɪnɪstreɪtər/ *n* Someone who edits and deletes posts or comments made by contributors to a blog.

**blogger** /ˈblɒɡər/ *n* A person who writes on a blog.

**blogging** /ˈblɒɡɪŋ/ *n* Writing web logs. See **blog**.

**blogosphere** /ˈblɒɡəʊsfɪə/ *n* The collective term including all blogs as a community.

**Bluetooth** /ˈbluːtuːθ/ *n* A wireless technology that allows handhelds, mobile phones and other peripheral devices to communicate over short distances.

**Blu-ray disc** /ˈbluːreɪ ˌdɪsk/ *n* A new optical disc, created by Sony, which can record and play back high-definition TV and computer data. Unlike current DVDs, which use a red laser to read and write data, Blu-ray uses a blue-violet laser, hence its name.

**bookmark** /ˈbʊkmɑːk/ *n* A saved link that takes users directly to a web address. Bookmarks are also called *favourites*.

**Braille** /breɪl/ *n* A system of writing devised by Louis Braille for blind people, in which combinations of raised dots representing letters and numbers can be identified by touch.

**Braille embosser** /ˈbreɪl ɪmˌbɒsər/ *n* An impact printer that produces tactile Braille symbols.

**brightness** /ˈbraɪtnəs/ *n* The amount of light produced by an LCD monitor, measured in *cd/m2*.

**broadband** /ˈbrɔːdbænd/ *n* High-speed transmission, usually referring to internet access via cable and ADSL; about 400 times faster than dial-up access.

**browser** /ˈbraʊzər/ *n* A program designed to fetch and display web pages on the Internet.

**buddy list** /ˈbʌdi ˌlɪst/ *n* A list of people that you may want to communicate with via instant messaging.

**bug** /bʌɡ/ *n* An error in a computer program.

**built-in** /ˈbɪltɪn/ *adj* Integrated; constructed as part of a larger unit.

**bulletin board system (BBS)** /ˌbʊlətɪn ˌbɔːd ˌsɪstəm/ *n* A system that enables its users, usually members of a particular interest group, to share information and programs.

**burn** /bɜːn/ *v* To write data to a CD or DVD.

**bus** /bʌs/ *n* An electrical channel, or highway, which carries signals between units inside the computer.

**bus topology** /ˌbʌs tɒˈpɒlədʒi/ *n* One of the three principal topologies for a LAN, in which all computer devices are connected to a main cable, or bus.

**bus width** /ˈbʌs ˌwɪθ/ *n* The size of a bus, which determines how much data can be transmitted; for example, a 64-bit bus can transmit 64 bits of data.



**byte** /baɪt/ *n* A unit of computer information, consisting of a group of eight bits. See also **kilobyte**, **megabyte**, **gigabyte**, **terabyte**.

## C

**C** /si:/ *n* A high-level programming language developed in 1972 at AT&T Bell Labs. It is used to write system software, graphics and commercial applications.

**C#** /i:si:/ *n* A simplified version of C and C++, developed by Microsoft for applications on the Web.

**C++** /i:si:/ *n* An object-oriented version of C, widely used to develop enterprise and commercial applications. The programmer gives each object (e.g. a piece of text, a graphic or a table) functions which can be altered without changing the entire program.

**cable modem** /'keɪbəl mɒdəm/ *n* A modem designed to operate through a cable TV line.

**call centre** /'kɔ:l sɛntə/ *n* A large office in which a company's employees provide information to its customers, or sell or advertise its goods or services by telephone.

**carbon copy (Cc)** /'kɑ:bən kɒpi/ *n* Addresses on the Cc line of an email program will receive the same message, and the recipients will be able to see the identity of the other recipients.

**Cascading Style Sheets (CSS)** /kæ'skeɪdɪŋ stɑɪl 'ʃi:ts/ *n* A mechanism for adding style (e.g. fonts, colours, spacing) to web documents.

**cathode ray tube (CRT)**

/'kæθəʊd reɪ tju:b/ *n* The picture tube of old PC monitors, made of glass and containing a vacuum. In a colour monitor, the screen surface is coated with triads of red, green and blue phosphor. Three electron beams energize the phosphor dots, causing them to emit coloured light from which the picture is formed.

**CD ripper** /si:di: 'rɪpə/ *n* A program that extracts music tracks and saves them on disk.

**CD-R** /si:di: 'ɑ:/ *n* A write-once CD which lets you duplicate music and data CDs. Short for *compact disc recordable*.

**CD-ROM** /si:di: 'rɒm/ *n* A 'read-only' CD, meaning you cannot change data stored on it. Short for *compact disc read-only memory*.

**CD-RW** /si:di: 'ɑ:/ *n* A CD that allows audio or data to be written, read, erased, and rewritten. Short for *compact disc re-writable*.

**cell** /sel/ *n* An intersection of a column and a row in a spreadsheet.

**cell phone** /'sel fəʊn/ *n* American term for *mobile phone*. The term cell comes from the fact that the phone calls are made through base stations (antennae) which divide the coverage area into cells. As you move from cell to cell, the calls are transferred to different base stations; this is called *roaming*.

**central processing unit (CPU)** /sentrəl 'prəʊsesɪŋ ju:nɪt/ *n* The processor chip that performs the basic operations of a computer, like the 'brain' of the computer. Its basic components are the control unit, the arithmetic logic unit and the registers.

**character** /'kærəktə/ *n* A symbol available on the keyboard (letter, number or blank space).

**chat** /tʃæt/ *n* A real-time interactive conversation on the Internet.

**chat room** /'tʃæt ru:m/ *n* A channel where users can communicate with each other in real time.

**chip** /tʃɪp/ *n* A tiny piece of silicon containing complex electronic circuits. Chips are used to make the hardware components of a computer.

**Chip and Pin** /tʃɪp ˌænd 'pɪn/ *n* A secure method of paying with credit cards. Instead of using a signature to verify payments, customers are asked to enter a four-digit PIN (personal identification number).

**click** /kɪk/ *v* To press and release the left button on a mouse.

**client program** /'klaɪənt ˌprəʊɡræm/ *n* Software running on your PC, used to connect and obtain data from a server.

**client-server** /'klaɪənt ˌsɜ:və/ *n* A network architecture in which various client programs all connect to a central server to obtain information or to communicate.

**clip art** /'klɪp ɑ:t/ *n* Ready-made pictures.

**clipboard** /'klɪpbɔɪd/ *n* A holding place for text or graphics that you have just cut or copied.

**COBOL** /'kəʊbəl/ *n* A high-level programming language developed in 1959 and mainly used for business applications. Short for *Common Business-Oriented Language*.

**coding** /'kəʊdɪŋ/ *n* The process of writing instructions for a computer.

**colour depth** /'kʌlə ˌdepθ/ *n* The number of bits used to hold a colour pixel; this determines the number of colours that a monitor can display.

**colour palette** /'kʌlə ˌpælət/ *n* The collection of colours available in a system.

**colour picker** /'kʌlə ˌpɪkə/ *n* A tool used to select a specific colour in a photo; also called an *eyedropper*.

**column** /'kʌləm/ *n* A vertical line of boxes labelled with a letter in a spreadsheet program.

**command** /kə'mɑ:nd/ *n* An instruction for a computer.

**compact disc (CD)** /kəmˌpækt 'dɪsk/ *n* A storage device which uses optical laser technology. Its storage capacity is from 650MB to 700MB.

**compatible** /kəmˌpæɪtəbəl/ *adj* The ability of a device or program to work with another device or program. Two PCs are compatible if they can run the same software. Programs are compatible if they use the same data formats.

**compiler** /kəmˌpaɪlə/ *n* A special program that converts a source program (written in a high-level language) into object code (machine code) in one go.

**compositing** /kəmˌpɒzɪtɪŋ/ *n* Combining parts of different images to create a single image.

**compression** /kəmˌpreʃən/ *n* The process which makes computer data smaller so the information takes up less space and may be transmitted in less time. Compressed files have extensions like .zip, .arj, and .sit.

**computer security specialist** /kəmˌpjʊ:tə sɪ'kjʊərətɪ ˌspeʃəlɪst/ *n* Someone who works with companies to build secure computer systems.

**computer-aided design (CAD)** /kəmˌpjʊ:tə ˌeɪdɪd dɪ'zain/ *n* Software, and sometimes special-purpose hardware, used by engineers and architects to design everything from cars and planes to buildings and furniture.

**computer-to-plate (CTP)** /kəmˌpjʊ:tə tə 'pleɪt/ *n* An imaging technology used in modern commercial printing, in which DTP files are output directly to the printing plates without using film as an intermediate step.

**configuration** /kənˌfɪɡə'reɪʃən/ *n* The components of a computer system.

**configure** /kənˌfɪɡə/ *v* To set up a computer device or a program to be used in a particular way.

**console game** /'kɒnsəʊl ˌgeɪm/ *n* A game played on a video game console, such as PlayStation or Xbox 360, and displayed on a television or similar audio-video system.

**control unit (CU)** /kənˌtrəʊl ju:nɪt/ *n* A component of the CPU which coordinates all the other parts of the computer system. This unit is also responsible for fetching instructions from the main memory and determining their type.

**cookies** /'kʊkiz/ *n* Small files used by web servers to know if you have visited their site before. Cookies can store user information but do not read your hard disk.

**cracker** /'krækə/ *n* An intruder who breaks into computer systems for fun, to steal information, or to propagate viruses. Compare with **hacker**.

**crash** /kræʃ/ **1** *n* A serious failure which usually requires operator attention before the computer system can be restarted. **2** *v* When a hard disk fails, it is said to have crashed.

**crop** /krɒp/ *v* To cut down the dimensions of a picture.

**cursor control keys** /kɜ:sə kənˌtrəʊl ki:z/ *n* They include arrow keys that move the insertion point up, down, right and left, and keys such as *End*, *Home*, *Page Up* and *Page Down*, used within a word processor to move around a long document.

**CU-SeeMe** /si: ˌju: ˌsi: 'mi:/ *n* A video-conferencing program from Cornell university.

**cybercafé** /'saɪbə ˌkæfeɪ/ *n* A place where you can use computers with internet access for a fee; also called an *internet café*.

**cybercrime** /'saɪbə ˌkraɪm/ *n* Crimes perpetrated over the Net.

**cyberculture** /'saɪbə ˌkʌlfə/ *n* Culture emerging from the use of ICT systems.

**cyberslacker** /'saɪbə ˌslækə/ *n* An employee who uses his company's internet connection during working hours to chat with friends, play games, etc.

**cyberspace** /'saɪbə ˌspeɪs/ *n* A term originated by William Gibson in his novel *Neuromancer*, now used to refer to the virtual world of computers and the Internet.

**cyberstalking** /'saɪbə ˌstɔ:kɪŋ/ *n* Online harassment or abuse, mainly in chat rooms and forums.

**cyborg** /'saɪbə ˌɡ/ *n* A term invented by M. Clynes and N. Kline in 1960 to describe a cybernetic organism, a being that is part robot, part human.

## D

**data** /'deɪtə/ *n* Information in an electronic form that can be stored and processed by a computer.

**data processing** /'deɪtə ˌprəʊsesɪŋ/ *n* The performing of operations on data to obtain information or solutions to a problem.

**data transfer rate** /'deɪtə ˌtrænsfɜ: ˌreɪt/ *n* The average speed at which data can be transmitted from one device to another, often measured in megabytes per second.

**database** /ˌdeɪtəbeɪs/ *n* A file of structured data.

**database program** /ˌdeɪtəbeɪs ˌprəʊɡræm/ *n* An applications program used to store, organize



and retrieve a large collection of data. Among other facilities, data can be searched, sorted and updated.

**debug** /di:'bæg/ *v* To correct program errors, or *bugs*.

**debugger** /di:'bægə/ *n* A program used to test and debug other programs.

**debugging** /di:'bægiŋ/ *n* The techniques of detecting and correcting errors (or *bugs*) which may occur in programs.

**decryption** /di'kriptʃən/ *n* The process of decoding (deciphering) secret data.

**dedicated keys** /'dedikeɪtɪd ,ki:z/ *n* Special keys used to issue commands or to produce alternative characters, e.g. the *Ctrl* key or the *Alt* key.

**desk accessory** /,desk ək'sesəri/ *n* A mini application available on the Apple Menu, e.g. a calculator. In Palm OS, it is a program that you can launch from any program without having to exit the running program.

**desktop PC** /'desktp pi:,si:/ *n* A computer designed to be placed on a desk, used as a home computer or as a workstation for group work.

**desktop publishing (DTP)** /,desktp 'pʌblɪʃɪŋ/ *n* The use of a computer system for all steps of document production, including typing, editing, graphics and printing.

**device driver** /di'vaɪs ,draɪvə/ *n* A program that allows a hardware device, such as a printer, to communicate with a computer.

**dial-up connection** /'daɪəlʌp kə'nekʃən/ *n* A form of internet access through which the client uses a modem connected to a computer and a telephone line to dial into an Internet Service Provider. A dial-up connection is slower than a broadband connection like ADSL.

**dialog box** /'daɪəlɒg ,bɒks/ *n* A message box requiring information from the user.

**digital** /'dɪdʒɪtəl/ *adj* Describes a system that performs operations by means of digits, represented as binary numbers (1s and 0s). The opposite of digital is *analogue*.

**digital camera** /,dɪdʒɪtəl 'kæməɾə/ *n* A still camera that records images in digital form. Instead of using the film found in a traditional camera, it uses a flash memory card.

**digital certificate** /,dɪdʒɪtəl sə'tɪfɪkət/ *n* A file that identifies a user or a web server; like a digital identification card.

**digital radio** /,dɪdʒɪtəl 'reɪdiəʊ/ *n* Radio technologies which carry information as digital signals; also known as *digital audio broadcasting* (DAB).

**digital TV** /,dɪdʒɪtəl ti:'vi:/ *n* A way of transmitting pictures by means of digital signals, in contrast to the analogue signals used by traditional TV.

**digital video camera** /,dɪdʒɪtəl 'vɪdiəʊ ,kæməɾə/ *n* A camera that records moving images and converts them into digital data; also called a *camcorder*.

**digitize** /'dɪdʒɪtaɪz/ *v* To translate into digital form, i.e. convert information into binary codes (1s and 0s) so that it can be processed by a computer. It is possible to digitize images, sound and video.

**directory** /di'rektəri/ *n* An alphabetical or chronological list of files on a disk. Also known as *catalogue*.

**disk drive** /'disk ,draɪv/ *n* A device that reads and writes data on disks. Magnetic drives read

magnetic disks (e.g. hard disks), and optical drives use a laser beam to read optical discs (e.g. CDs and DVDs).

**disk partitioning** /'disk pɑ:ʃɪŋ/ *n* The process of dividing a hard disk into isolated sections. In Windows, each partition will behave like a separate disk drive. This is particularly useful if you want to install more than one operating system (e.g. you can have one partition for Windows and another for Linux).

**display** /di'spleɪ/ **1** *n* A screen or monitor. **2** *v* To show text and graphics on a screen.

**DivX** /'divex/ *n* A format used to compress and distribute movies on DVD or over the Net.

**Dock** /dɒk/ *n* A set of icons at the bottom of the Macintosh screen that give you instant access to the things you use most.

**domain name** /də'meɪn ,neɪm/ *n* A name that identifies internet sites, consisting of two or more parts separated by dots. For example, in the web address <http://www.ibm.com>, the part on the left (*ibm*) is the most specific (a subdomain); the part on the right (*.com*) is the most general (a primary domain); this can be a country (e.g. *.fr* for France, *.uk* for United Kingdom, *.es* for Spain), or the type of organization (e.g. *.com* for commercial, *.org* for organization, *.edu* for educational, *.net* for network, or *.gov* for government). An IP address (e.g. 194.179.73.2) is translated into a domain name by a Domain Name System.

**dot-matrix** /,dɒt 'meɪtrɪks/ *n* A regular pattern of dots.

**dot-matrix printer** /,dɒt 'meɪtrɪks 'prɪntə/ *n* A printer that uses pins to print an array of dots; used to print multi-part forms, self-copying paper and continuous-form labels.

**double click** /'dʌbəl ,klɪk/ *v* To press and release the left button on a mouse twice, in rapid succession.

**download** /,daʊn'ləʊd/ *v* To copy files from a host computer to your own computer; compare with **upload**.

**drag** /dræg/ *v* To select a block of text or an object with the mouse button and then move the mouse while keeping the button pressed down.

**Dreamweaver** /,dri:m'wi:və/ *n* A program from Adobe (originally created by Macromedia), used for building websites.

**drop-down menu** /,drɒp ,daʊn 'menju:/ *n* A list of options that appears below a menu item when selected; also called a *pull-down menu*.

**DTP operator** /di:ti:'pi:, ɒpəreɪtə/ *n* Someone who uses page-layout software to prepare electronic files for publication.

**dual-core processor** /,dju:əl ,kə: 'prəʊsesə/ *n* A CPU that combines two execution cores (processors) onto a single chip.

**DVD** /,di:vi:'di:/ *n* A Digital Versatile (or Video) Disc that uses optical technology to store large amounts of audio-visual material. Whereas CDs use only one side, DVDs can be recorded on both sides as well as in dual layers. A basic DVD can hold 4.7GB, and a dual layer DVD can hold 17GB.

**DVD burner** /,di:vi:'di: 'bɜ:nə/ *n* A DVD drive that records information by burning via a laser to a blank DVD disc.

**DVD-R** /,di:vi:'di: 'ɑ:/ *n* A recordable (write-once) DVD, for both movies and data.

**DVD-ROM** /,di:vi:'di: 'rɒm/ *n* A read-only DVD disc used in DVD computer drives for data

archival as well as interactive content (e.g. an encyclopedia, a movie, etc.).

**DVD-RW** /,di:vi:'di: ,ɑ: 'dʌblju:/ *n* A re-writable (write-many) DVD, for movies and data.

## E

**eBay** /'i:beɪ/ *n* An online auction and shopping website where you can buy and sell things.

**e-book** /'i:bʊk/ *n* The electronic counterpart of a printed book.

**e-card** /'i:kɑ:d/ *n* A digital greeting card.

**e-cash** /'i:kæʃ/ *n* Money available as an electronic account, used in internet commerce.

**e-commerce** /,i:'kɒmɜ:s/ *n* The buying and selling of products on the Internet.

**edit** /'edɪt/ *v* To make changes and corrections to text and graphics. Well-known editing techniques are: select, undo, copy, cut, and paste.

**e-learning** /,i:'leɪnɪŋ/ *n* Instruction via computers.

**email** /'i:meɪl/ **1** *n* A facility which allows users to exchange messages electronically; short for *electronic mail*. **2** *v* To send a message by email.

**email address** /'i:meɪl ə,dres/ *n* A unique address used to receive and send email. This is a typical format: [jmartin1984@telefonica.net](mailto:jmartin1984@telefonica.net), where 'jmartin1984' is the user name, '@' means 'at', 'telefonica' is the Internet Service Provider, and 'net' means the server is a network provider.

**email client** /'i:meɪl ,klaɪənt/ *n* A program used to read and send email from a computer.

**embedded** /ɪm'bedɪd/ *adj* Inserted into; fixed into the surface of something.

**emoticon** /i'məʊtɪkɒn/ *n* See **smiley**.

**encrypt** /ɪn'kript/ *v* To encode data so that unauthorized users can't read it.

**encryption** /ɪn'kriptʃən/ *n* The process of saving and transmitting data in encoded form. Data encryption and passwords are important for network security, particularly when sending confidential information such as credit card numbers.

**e-pal** /'i:pæl/ *n* A friend you write email to.

**eraser** /i'reɪzə/ *n* A tool used to delete the part of the picture you drag it over.

**ergonomics** /,ɜ:gə'nɒmɪks/ *n* The study of how people interact safely and efficiently with machines and their work conditions.

**e-signature** /,i:'sɪgnətʃə/ *n* The electronic equivalent of a hand-written signature.

**e-tailer** /'i:teɪlə/ *n* An electronic retailer, or online store.

**Ethernet** /'i:θenet/ *n* A method of connecting computers in a LAN. Fast Ethernet can send data at 100 megabits per second. Most computers come with Ethernet ports that connect internally to circuits on the motherboard.

**Excel** /ɪk'sel/ *n* A spreadsheet program from Microsoft.

**execute** /'eksɪkjʊ:t/ *v* To perform an action, as in executing a program or a command; the same as *run*.

**expandable** /ɪk'spændəbəl/ *adj* Upgradeable; able to increase in size. For example, RAM is expandable in most computers, which means you can add extra chips, usually contained in small circuit boards called *dual in-line memory modules*, or *DIMMs*.

**expansion card** /ɪk'spænʃən ,kɑ:d/ *n* A printed circuit board that can be inserted into an expansion slot to add features like sound,



memory, and network capabilities; the same as *expansion board*.

**expansion slots** /ɪk'spænjən ,slɒts/ *n*

The connectors that allow the user to install expansion cards to improve the computer's performance.

**eyegaze system** /'aɪgeɪz ,sɪstəm/ *n* A system activated by the user's eye movements.

**e-zine** /'i:zi:n/ *n* An electronic magazine.

## F

**FAQ** /,efə'kju:/ *n* Frequently Asked Questions, a file or web page containing answers to questions asked by internet users or visitors to a website.

**fax** /fæks/ *n* A facsimile machine that operates by scanning a paper document so that the image is sent to a receiving machine which produces a copy of the original.

**fibre optic communication** /'faɪbə ,ɒptɪk kə,mju:nɪ'keɪʃən/ *n* A way of transmitting information at high-speed by sending light through an optical fibre (made of glass or plastic). Fibre optic cables are used to transmit internet, cable TV and phone signals.

**field** /fi:ld/ *n* A unit of information in a record. In a database, information is entered via fields.

**file** /faɪl/ *n* 1 A collection of records in a database. 2 A section of information stored on disk – a document or a program.

**file server** /'faɪl ,sɜ:və/ *n* A fast computer that stores the programs and data files shared by users in a network.

**File Transfer Protocol (FTP)** /,faɪl ,trænsfɜ:'prəʊtəkol/ *n* A standard for transferring files from one computer to another over a network.

**filter** /'fɪltə/ *n* A special effect that can be applied to pictures.

**filtering program** /'fɪltərɪŋ ,prəʊgræm/ *n* Software designed to restrict the access to specific aspects of the Web.

**Find and Replace** /,faɪnd ənd rɪ'pleɪs/ *n* A command that lets you find a word or phrase in a document and change it to new text.

**Firefox** /'faɪəfɒks/ *n* A web browser, part of the open-source Mozilla project.

**firewall** /'faɪəwɔ:l/ *n* A software and/or hardware device that allows limited access to an internal network from the Net. This prevents intruders from stealing or destroying confidential data.

**firmware** /'fɜ:mweə/ *n* Permanent software instructions contained in the ROM.

**flame** /fleɪm/ *n* An angry or insulting comment on a discussion group.

**Flash** /flæʃ/ *n* 1 The Adobe Flash Player. 2 The Adobe Flash Professional multimedia authoring program, used to create animations and advertisements. It supports a scripting language called ActionScript, and the streaming of audio and video.

**flash card reader** /'flæʃ ,kɑ:d ,rɪ:də/ *n* A device that reads and writes a flash memory card.

**flash drive** /'flæʃ ,draɪv/ *n* A USB storage device, small enough to fit on a key ring, used to store and transport computer data.

**flash memory** /,flæʃ 'meməri/ *n* A type of non-volatile memory that can be erased and reprogrammed.

**flatbed scanner** /'flætbed ,skænə/ *n* A scanner with a glass scanning surface on which objects are placed; similar to a photocopier.

**flat-rate internet** /,flæt'reɪt 'ɪntənət/ *n* Access to the Internet at any time of the day, at a fixed and cheap tariff.

**Flickr** /'flɪkə/ *n* A website where users can share photos.

**floppy disk** /'flɒpi ,dɪsk/ *n* A disk made of a flexible plastic material upon which data is stored on magnetic tracks. Also known as a *diskette*. A floppy disk drive uses 3.5" disks.

**flowchart** /'fləʊtʃɑ:t/ *n* A diagram which shows the logical steps of a computer program.

**folder** /'fəʊldə/ *n* A directory that holds programs, data files and other folders.

**font** /fɒnt/ *n* The shape, style and size of a particular typeface, e.g. **Times Bold at 10pt**.

**footer** /'fʊtə/ *n* Customized text printed in the bottom margin of a document.

**format** /'fɔ:mæt/ *n* 1 The layout of a document, including page numbers, line spaces, margins, paragraph alignment, headers and footers, etc. 2 **format a disk** *v* To prepare a disk for use. When a disk is initialized, the operating system marks tracks and sectors on its surface.

**formatting toolbar** /'fɔ:mætɪŋ ,tu:lba:/ *n* A toolbar with icons that allow you to edit and style your text. For example, you can change font, align text, increase or decrease indentation, etc.

**formula** /'fɔ:mjələ/ *n* A mathematical equation that helps you calculate and analyse data.

**FORTAN** /'fɔ:træn/ *n* The first high-level programming language and compiler, developed in 1954 by IBM. Today, it is still used in mathematics, science, and engineering. Short for *FORmula TRANslation*.

**fractals** /'fræktəlz/ *n* Geometrical patterns that are repeated at small scales to generate irregular shapes, some of which describe objects from nature.

**fragmentation** /,frægmən'teɪʃən/ *n* The condition of a hard disk in which files are divided into pieces scattered around the disk. This occurs naturally after creating, deleting and modifying many files. When the operating system cannot find enough contiguous space to store a complete file, the file is divided into several separated fragments. As disk fragmentation increases, disk efficiency starts decreasing.

**frames** /freɪmz/ *n* 1 Rectangular areas that allow the display of different pages in the same browser window. 2 Single pictures in films.

**Freehand** /'fri:hænd/ *n* A Macromedia program for creating vector graphics, which use geometrical primitives such as points, lines, curves and polygons to represent images.

**freeware** /'fri:weə/ *n* Software that is available free of charge, but protected by copyright.

**FrontPage** /,frʌnt'peɪdʒ/ *n* A web editor from Microsoft, used for designing web pages.

**function** /'fʌŋkʃən/ *n* A ready-to-use formula that helps you perform a specialized calculation, e.g. SUM, AVERAGE, etc.

**function keys** /'fʌŋkʃən ,ki:z/ *n* Keys that appear at the top of the keyboard and can be programmed to do special tasks.

## G

**gadget** /'gædʒɪt/ *n* A small hardware device. Synonymous with *gizmo* (slang).

**game controller** /'geɪm kən'trəʊlə/ *n* A device used to control video games.

**game genre** /,geɪm 'ʒu:nrə/ *n* A specific type or category of game. For example, a game in which the player solves puzzles would fall into the Puzzle game genre. Other genres are: Action, Adventure, Fighting, First-person shooter, Role-playing, Simulation, Sports, Strategy, etc.

**game platform** /,geɪm 'plætʃɔ:m/ *n* An electronic device on which video games are played. Examples are personal computers and game consoles.

**Geographic Information System (GIS)** /dʒi:ə,græfɪk ɪnfə'meɪʃən ,sɪstəm/ *n* A type of graphics software that allows us to analyse geographic data and then make maps, plan the use of land, predict natural disasters, etc.

**gigabyte** /'gɪɡəbaɪt/ *n* 1,024 megabytes.

**gigahertz** /'gɪɡəhɜ:ts/ *n* A unit of one thousand million hertz, or cycles per second, used to measure processor speed.

**Global Positioning System (GPS)** /,gləʊbəl pə'zɪʃənɪŋ ,sɪstəm/ *n* A navigation system formed by various satellites orbiting the earth and their corresponding receivers on the earth. It allows GPS receivers to determine their location, speed and direction.

**Google** /'gu:ɡəl/ *n* 1 A popular search engine on the Web. 2 *v* To search the Web for something.

**grammar checker** /'græmə ,tʃekə/ *n* A software utility that analyses the grammar of a written text.

**graphical user interface (GUI)** /,græfɪkəl 'ju:zə ,ɪntəfeɪs/ *n* A user-friendly interface based on graphics. A GUI uses a WIMP environment: windows, icons, menus and pointer. Typical examples are the Mac OS and Microsoft Windows.

**graphics tablet** /'græfɪks ,tæblət/ *n* An input device which allows the user to enter drawings and sketches into a computer

## H

**hacker** /'hækə/ *n* Someone who invades a network's privacy. Originally, all skilled programmers were known as hackers, but in the 1990s, the term became synonymous with *cracker*, a person who breaks security on computers. Today, the general public uses hacker for both. In the computer industry, hackers are known as *white hats* and crackers as *black hats* or *darkside* hackers.

**handheld game** /'hændheld ,geɪm/ *n* A game played on portable gaming devices, such as the Sony PSP and the Nintendo DS.

**handheld scanner** /'hændheld ,skænə/ *n* A scanner that is moved by hand, ideal for capturing small pictures, logos and bar codes.

**hard disk** /'hɑ:d ,dɪsk/ *n* See **hard drive**.

**hard drive** /'hɑ:d ,draɪv/ *n* A magnetic storage device that reads and writes data on metal disks (called platters) inside a sealed case. A hard drive is commonly known as a hard disk. Strictly speaking, drive refers to the entire unit, containing multiple platters, a read/write head and a motor, while hard disk refers to the storage medium itself.

**hardware** /'hɑ:dweə/ *n* The physical units which make up a computer system. See **software**.

**hardware engineer** /'hɑ:dweə endʒɪnɪə/ *n* Someone who designs and develops IT devices.

**header** /'hedə/ *n* Customized text printed in the top margin of a document.



**help desk technician** /'help ,desk tek,nɪʃən/ *n* Someone who helps end users with their computer problems in person, by email or over the phone.

**hertz** /hɜːts/ *n* A unit of frequency equal to one cycle per second, named after Heinrich Hertz.

**high-level language** /,haɪ ,levəl 'læŋgwɪdʒ/ *n* A language in which each statement represents several machine code instructions, e.g. COBOL, Pascal or C.

**home cinema** /,həʊm 'sɪnəmə/ *n* A system that tries to reproduce the cinema experience in the home. It is also called *home theatre* and typically includes a large-screen TV, a hi-fi system with speakers for surround sound, and a DVD recorder.

**home page** /'həʊm ,peɪdʒ/ *n* **1** The first page on a website, that usually contains links to other pages. **2** The default start-up page on which a web browser starts.

**host** /həʊst/ *n* A computer containing data or programs that other computers can access via a network or modem.

**hotspot** /'hɒtspɒt/ *n* The geographic boundary covered by a Wi-Fi wireless access point.

**HTML** /,eɪtʃtiːem'el/ *n* The language used to create hypertext documents (e.g. web pages); short for *Hypertext Markup Language*.

**HTML tags** /,eɪtʃtiːeməl 'tægz/ *n* The codes used to define text fonts, format paragraphs, add links, etc. HTML tags are surrounded by the angle brackets < and >.

**HTTP** /,eɪtʃtiːtiː'piː/ *n* The method by which web pages are transferred from a website to your PC; http appears at the beginning of web addresses and means *hypertext transfer protocol*.

**hybrid hard disk** /,haɪbrɪd 'hɑːd ,dɪsk/ *n* A hard disk with integrated flash memory, intended for new laptops and mobile PCs.

**hyperlink** /'haɪpələŋk/ *n* A text, image or button that, when clicked, takes you to other destinations on the Web.

**hypermedia** /'haɪpəmiːdiə/ *n* A form of enriched multimedia which supports linking graphics, sound, and video elements in addition to text elements.

**hypertext** /'haɪpətekst/ *n* Text that contains links to other documents.

## I

**icon** /'aɪkɒn/ *n* A picture representing an object, such as a document, program, folder or hard disk.

**ICT system** /,aɪsiːtiː 'sɪstəm/ *n* A system that uses information and communications technologies.

**IM server** /,aɪəm 'sɜːvə/ *n* A central system that provides presence information about online users, and passes instant messages between them.

**iMac** /'aɪmæk/ *n* A desktop computer from Apple, intended for home, school, and small offices.

**imagesetter** /'ɪmɪdʒ ,setə/ *n* A professional printer that generates high-resolution output on paper or microfilm.

**inch** /ɪnʃ/ *n* The equivalent of 2.54 cm, or 72.27 points. It is represented by the symbol ".

**indentation** /,ɪnden'teɪʃən/ *n* The space between the page margins and where the text aligns.

**InDesign** /'ɪndɪzaɪn/ *n* A desktop publishing program created by Adobe Systems.

**ink cartridge** /'ɪŋk ,kɑːtrɪdʒ/ *n* A replaceable container that holds the ink of an inkjet printer.

**inkjet printer** /'ɪŋkdʒet ,prɪntə/ *n* A printer that generates an image by spraying tiny drops of ink at the paper. By heating the ink within the print head, individual drops are expelled to make a matrix of dots on the paper.

**input** /'ɪnpʊt/ **1** *n* The process of transferring information into the memory from a peripheral unit. **2** *v* To transfer data, or program instructions, into the computer.

**input devices** /'ɪnpʊt dɪ ,vaɪsɪz/ *n* Units of hardware which allow the user to enter information into the computer, e.g. the keyboard, mouse, voice recognition devices, etc.

**Instant Messaging (IM)** /,ɪnstənt 'mesɪdʒɪŋ/ *n* Exchanging text messages in real-time between two or more people logged into IM services such as AIM, Windows Live Messenger and Yahoo! Messenger. Modern IM services also have audio and video capabilities.

**Intel** /'ɪntel/ *n* The company that designs and produces the processors used in most PCs.

**Intel Core 2 Duo** /,ɪntel ,kɔː ,tuː

'dʒuː/ *n* Technology that includes two cores, or processors, into a single chip, offering twice the speed of a traditional chip.

**interactive whiteboard** /ɪntə ,æktɪv

'waɪtbɔːd/ *n* A touch-sensitive projection screen that allows the user to control a computer directly, by touching the board instead of using a keyboard. Used in presentation situations such as teaching.

**interface** /'ɪntəfeɪs/ *n* Channels and control circuits which provide a connection between the CPU and the peripherals. See also **user interface**.

**Internet** /'ɪntənət/ *n* A global network of computer networks which offers services such as email, file transfer, online chats, newsgroups, and information retrieval on the Web. It evolved from the Arpanet of the 70s and uses the TCP/IP protocol.

**internet auction** /,ɪntənət 'ɔːkʃən/ *n* A website on which bids are received and transmitted electronically.

**Internet Explorer** /,ɪntənət ɪk'splɔːə/ *n* A popular web browser from Microsoft.

**Internet Service Provider (ISP)** /,ɪntənət 'sɜː vɪs prəʊ ,vɑːdə/ *n* The company which gives you access to the Internet.

**internet telephony** /,ɪntənət tɪ'leɪfəni/ *n* See **VoIP**.

**internet TV** /,ɪntənət tiː'viː/ *n* A TV set used as an internet device.

**interpreter** /ɪn'tɜːprɪtə/ *n* A special program that translates the source code line by line, as the program is running.

**Intranet** /'ɪntrənət/ *n* A company network that uses public internet software but makes the website only accessible to employees and authorized users.

**invoice** /'ɪnvɔɪs/ *n* A document showing the items purchased, quantities, prices, etc., and requesting payment for a credit order.

**IP address** /aɪ'piː ə ,dres/ *n* A number which identifies a computer on the Internet. Every computer on the Net has a unique IP address, e.g. 194.179.73.2.

**IP spoofing** /aɪ ,piː 'spuːfɪŋ/ *n* Making one computer look like another to gain unauthorized access.

**iPhone** /'aɪfəʊn/ *n* A device from Apple that combines three products in one: an iPod, a mobile phone and an internet communicator.

**iPod** /'aɪpɒd/ *n* A family of portable media players from Apple. Popular models include the iPod Nano, the iPod Shuffle and the full-sized iPod that can also be used as a portable hard disk.

**iTunes** /'aɪtjuːnz/ *n* A program from Apple that lets you play and organize music and video files, on computer or on an iPod. With an internet connection, iTunes can also connect to the iTunes Store in order to download purchased music, videos and podcasts.

## J

**Java** /'dʒɑːvə/ *n* The programming language from Sun Microsystems for building internet applications. Java programs (called applets) let you watch animated characters and moving text, play music, etc.

**Java ME** /'dʒɑːvə e'miː/ *n* The Java platform, Micro Edition, used to create applications that run on mobile phones, PDAs, TV set-top boxes, and printers. For example, many phones are configured to use Java games.

**joystick** /'dʒɔɪstɪk/ *n* An input device with a vertical lever, used in computer games.

**JPEG** /'dʒeɪpeg/ *n* A standard for compressing and decompressing image files; developed by the Joint Photographic Experts Group. A .jpg extension is added to many image files on the Web.

## K

**Kerning** /'kɜːnɪŋ/ *n* The process of adjusting the spaces between letters to achieve even, consistent letter spacing.

**keyboard** /'kiːbɔːd/ *n* A set of keys on a terminal or computer, including the standard typewriter keys (for letters and numbers), function keys and several special keys.

**kilobit** /'kɪləbɪt/ *n* One thousand bits.

**kilobyte** /'kɪləbaɪt/ *n* A unit for measuring the memory or disk space in thousands of bytes. Also called **k**. Equals 1,024 bytes.

## L

**laptop** /'læptɒp/ *n* A small type of portable computer.

**laser printer** /'leɪzə ,prɪntə/ *n* A printer that uses a laser beam to fix the ink (toner) to the paper.

**lightpen** /'laɪtpen/ *n* A highly sensitive photo-electric device which uses the screen as the positioning reference. The user can pass the pen over the surface of the screen to draw or modify images displayed on the screen.

**link** /lɪŋk/ *n* See **hyperlink**.

**link up** /,lɪŋk 'ʌp/ *v* To form a connection in order to operate together.

**Linux** /'lɪnəks/ *n* Open-source software developed under the GNU General Public License. This means anybody can copy its source code, change it and distribute it.

**liquid crystal display** /,lɪkwɪd

'krɪstəl dɪ ,spleɪ/ *n* A flat-screen display made of two glass plates with a liquid crystal material between them. The crystals block the light in different quantities to create the image. Active-matrix LCDs use TFT (thin film transistor) technology, producing very sharp images.



**lithium-ion battery** /ˌliθiəm aɪən 'bætəri/ *n* A type of a battery composed of Lithium, a metallic chemical element, used in PDAs, cameras and mobile phones.

**load** /ləʊd/ *v* To read program instructions into the main memory.

**Local area network (LAN)** /ˌləʊkəl ˌeəriə 'netwɜ:k/ *n* A group of computer devices interconnected within a small physical area, like a home or office building.

**log in/on** /ˌlɒg 'ɪn/ /ˌlɒg 'ɒn/ *v* To gain access to a computer system or network.

**log out/off** /ˌlɒg 'aʊt/ /ˌlɒg 'ɒf/ *v* To sign off; to end a computer session. The opposite of *log in/on*.

**login/logon** /'lɒɡɪn/ /'lɒɡɒn/ *n* The process of identifying yourself when entering a computer system or network. You usually type your user name and password.

**low-level language** /ˌləʊ ˌlevəl ˌlæŋɡwɪdʒ/ *n* A programming language that is very close to machine language. See **assembly language**.

## M

**Mac OS** /ˌmæk əʊ'es/ *n* An operating system created by Apple and used on Macintosh computers.

**MacBook** /'mækbʊk/ *n* A Macintosh notebook computer.

**machine code** /mæ'ʃi:n ˌkəʊd/ *n* Binary code numbers; the only language that computers can understand directly.

**magnetic storage devices** /mæɡˌnetɪk 'stɔ: rɪdʒ dɪˌvaɪsɪz/ *n* devices that store data by magnetizing particles on a disk or tape (e.g. hard drive, tape drive).

**magnetic tape** /mæɡˌnetɪk 'teɪp/ *n* A sequential storage device used for data collection, backup and archiving. A tape consists of a magnetic coating on a thin plastic strip.

**mail merging** /'meɪl ˌmɜ:ɪdʒɪŋ/ *n* The process of combining a database file with a word processor to personalize a standard letter.

**mail server** /'meɪl ˌsɜ:və/ *n* The computer where your Internet Service Provider stores your emails.

**mailbox** /'meɪlbɒks/ *n* The place where your email program stores new email for you.

**mailing list** /'meɪlɪŋ ˌlɪst/ *n* A system used to distribute email to many different subscribers at once.

**main memory** /ˌmeɪn 'meməri/ *n* The section which holds the instructions and data currently being processed; also referred to as the *immediate access store* or *internal memory*. PCs make use of two types of main memory: RAM and ROM.

**Macintosh** /'mækɪntɒʃ/ *n* A popular computer from Apple, introduced in 1984; the first computer with a graphical user interface.

**mainframe** /ˌmeɪnfreɪm/ *n* The largest and most powerful type of computer. Mainframes process enormous amounts of data and are used in large installations.

**malware** /'mælwɛə/ *n* Malicious software, created to damage computer data. It includes viruses, worms, Trojan horses and spyware.

**markup language** /'mɑ:kʌp ˌlæŋɡwɪdʒ/ *n* A computer language that uses instructions, called markup tags, to format and link web documents.

**marquee select tools** /mɑ:ˌki: sɪ'lekt ˌtu:lz/ *n* Tools used to select a particular part of an image.

**master page** /'mɑ:stə ˌpeɪdʒ/ *n* A page you design which can be applied to any document page. You can place text and picture boxes, headers and footers, and page rules, etc. on a master page, which ensures a consistent look on all pages.

**media player** /'mi:diə ˌpleɪə/ *n* Software that plays audio, video or animation files.

**megabit** /'megəbɪt/ *n* A million binary digits (1,024 kilobits).

**megabyte** /'megəbaɪt/ *n* 1,024 kilobytes.

**megahertz** /'megəhɜ:tɪz/ *n* A unit of a million cycles per second, used to measure processor speed.

**megapixel** /'megəpɪksəl/ *n* One million pixels.

**memory card** /'meməri ˌkɑ:d/ *n* A removable module used to store images in digital cameras, to record voice and music on MP3 players, or to back up data on PDAs. They are made up of flash memory chips (e.g. CompactFlash, Secure Digital). See **flash memory**.

**menu bar** /'menju: ˌbɑ:/ *n* A row of words at the top of the screen that open up menus when selected.

**message threads** /'mesɪdʒ ˌθredz/ *n* A series of interrelated messages on a given topic.

**microchip** /'maɪkrətʃɪp/ *n* See **chip**.

**Microsoft Access** /ˌmaɪkrəsɒft 'ækses/ *n* A relational database management system.

**Microsoft Office** /ˌmaɪkrəsɒft 'ɒfɪs/ *n* An integrated package that includes some combination of Word, Excel, PowerPoint, Access and Outlook, along with various internet and other utilities.

**MIDI** /'mɪdi/ *n* A standard for connecting computers and musical instruments. MIDI files contain the .midi extension, short for *Musical Instrument Digital Interface*.

**millisecond** /'mɪlɪˌsekənd/ *n* One thousandth of a second.

**mobile (phone)** /'məʊbaɪl/ *n* (US: **cell phone**) A phone connected to the telephone system by radio, rather than by a wire.

**modem** /'məʊdem/ *n* A device that converts the digital signals used by computers into the analogue signals used by the telephone lines, thus allowing access to the Internet. Short for *MODulator/DEModulator*.

**modem-router** /'məʊdem ˌru:tə/ *n* A device that connects various computers (e.g. a home LAN) to the Internet.

**monitor** /'mɒnɪtə/ *n* An output device with a screen on which words or pictures can be shown. Also called a *display screen*.

**motherboard** /'mʌðəbɔ:d/ *n* The main circuit board of a computer, which contains the processor, memory chips, expansion slots and controllers for peripherals, connected by buses.

**mouse** /maʊs/ *n* A small input device used to specify the position of the cursor or to make choices from menus. A *mechanical mouse* has a rubber or metal ball underneath that is rolled by the user. An *optical mouse* uses light (a laser) to detect the mouse's movement, and can be wired or wireless.

**MP3** /ˌempi:'θri:/ *n* 1 A standard format that compresses music files, enabling them to be transmitted over the Net more easily. 2 A file containing a song or other audio data that is encoded using the MP3 standard.

**MP3 player** /ˌempi:'θri: ˌpleɪə/ *n* A digital music player that supports the MP3 format.

**MP4 player** /ˌempi:'fɔ:r ˌpleɪə/ *n* A portable media player that plays video in the MPEG-4 format; it is like an MP3 player that can play video files.

**MPEG** /'empeg/ *n* A standard for compressing and decompressing video files; developed by the Moving Pictures Experts Group.

**multi-format playback** /ˌmʌltiˌfɔ:mæt ˌpleɪbæk/ *n* The feature of a media player that makes it compatible with many file formats, including DVD-video, DivX, MP3 music or JPEG images.

**multi-function printer** /ˌmʌltiˌfʌŋkʃən ˈprɪntə/ *n* An 'all-in-one' device that can work as a printer, a scanner, a fax and a photocopier.

**multimedia** /ˌmʌltiˌmi:diə/ *n* The integration of text, graphics, audio, video and animation in a single application.

**multitasking** /'mʌltiˌtɑ:skɪŋ/ *n* The execution of several tasks at the same time.

**multi-threaded** /'mʌltiˌθredɪd/ *adj* Refers to a computer program that has multiple threads (parts), i.e. many different things processing independently and continuously. This enables the program to make the best use of available CPU power.

**MySpace** /'maɪspeɪs/ *n* A social networking site that allows users to share messages, interests, blogs, photos, music and videos with friends.

## N

**nanobot** /'nænəʊˌbɒt/ *n* A microscopic robot, built by means of nanotechnology.

**nanocomputer** /ˌnænəʊkəmˈpjʊ:tə/ *n* A molecule-sized computer, the size of a grain of sand, e.g. a quantum computer, a DNA computer, etc.

**nanotechnology** /ˌnænəʊtekˈnɒlədʒi/ *n* The science of making small devices from single atoms and molecules.

**nanotube** /'nænəʊˌtju:b/ *n* Extremely small tube made from pure carbon. Nanotubes are expected to be used in the development of materials for buildings, cars, airplanes, clothes, etc.

**netiquette** /'netɪket/ *n* 'Net etiquette'; good manners when communicating online.

**NetMeeting** /'netˌmi:tɪŋ/ *n* A VoIP and video-conferencing program from Microsoft.

**Netscape Navigator** /ˌnetskeɪp ˈnævɪgeɪtə/ *n* A web browser developed by Netscape Communications.

**network** /'netwɜ:k/ *n* A system of computer devices or 'nodes' (e.g. PCs and printers), interconnected so that information and resources can be shared by a large number of users.

**network administrator** /ˌnetwɜ:k əd'mɪnɪstreɪtə/ *n* Someone who manages the hardware and software that comprise a network.

**newsgroups** /'nju:zɡru:ps/ *n* The public discussion areas which make up Usenet. The contents are contributed by people who send articles (messages) or respond to articles.

**newsreader** /'nju:zˌri:də/ *n* A program that reads and sends articles to newsgroups.

**nickname** /'nɪkneɪm/ *n* A name used by a participant on mailing lists or chat sessions instead of the real name.

**node** /nəʊd/ *n* Any computer device in a network.



**non-volatile memory** /nɒn,vɒlətaɪl 'meməri/ *n* Permanent memory, able to hold data without power. ROM and Flash memory are examples of non-volatile memory.

**notebook computer** /nəʊtbʊk kəm'pjʊ:tə/ *n* A light, portable computer that is generally thinner than a laptop.

**numeric keypad** /njuː,merɪk 'ki:pæd/ *n* A small key section that appears to the right of the main keyboard and contains numeric and editing keys.

## O

**object-oriented programming** /ˌɒbdʒɪkt ˌɔːrientɪd 'prəʊgræmɪŋ/ *n* A technique that allows the creation of objects that interact with each other and can be used as the foundation of others. Used to develop graphical user interfaces.

**offline** /ˌɒf'laɪn/ *adj* or *adv* Not connected to the Internet.

**online** /'ɒnlaɪn/ *adj* or *adv* Connected to the Internet.

**online banking** /ˌɒnlaɪn 'bæŋkɪŋ/ *n* Performing transactions and payments through a bank's website. Also known as *internet banking*.

**onscreen keyboard** /ɒn,skriːn 'ki:bɔːd/ *n* A graphic representation of a keyboard on the computer screen, allowing people with mobility problems to type data using a joystick or pointing device.

**open-source** /'əʊpən ˌsɔːs/ *adj* Refers to the source code (of software) that is free and available to anyone who would like to use it or modify it.

**operating system** /'ɒpəreɪtɪŋ ˌsɪstəm/ *n* A set of programs that control the hardware and software of a computer system. Typical functions include handling input/output operations, running programs and organizing files on disks.

**optical character recognition** /ˌɒptɪkəl 'kærəktə rekəg,nɪʃən/ *n* Technology that allows computers to recognize text input into a system with a scanner. After a page has been scanned, an OCR program identifies fonts, styles and graphic areas.

**optical disc** /ˌɒptɪkəl 'dɪsk/ *n* A storage device in which data is recorded as microscopic 'pits' by a laser beam. The data is read by photoelectric sensors which do not make active contact with the storage medium.

**output** /'aʊtpʊt/ **1** *n* The results produced by a computer. **2** *v* To transfer information from a CPU to an output device.

**output devices** /'aʊtpʊt dɪˌvaɪsɪz/ *n* The units of hardware which display the results produced by the computer (e.g. plotters, printers, monitors).

## P

**.pdf** /ˌpiːdiː'ef/ *n* A portable document format from Adobe, commonly used to distribute text files over the Internet, and read with Acrobat Reader.

**page description language** /ˌpeɪdʒ dɪ'skrɪpʃən ˌlæŋɡwɪdʒ/ *n* A computer language that describes how to print the text and images on each page of the document.

**Page-layout program** /ˌpeɪdʒ ˌleɪaʊt ˌprəʊgræm/ *n* Application software used to import texts and illustrations, and to combine and arrange them all on a page; e.g. Adobe InDesign or QuarkXPress.

**paint bucket** /ˈpeɪnt ˌbʌkɪt/ *n* A tool used to fill in an area with a colour.

**Palm OS** /ˌpɑːm əʊ'es/ *n* An operating system used on Palm hand-held devices.

**palmtop** /'pɑːmtɒp/ *n* A hand-held personal computer.

**Pascal** /pæs'kæl/ *n* A high-level language created in 1971, named after the mathematician Blaise Pascal. Its highly structured design facilitates the rapid location and correction of coding errors. Today, it's used in universities to teach the fundamentals of programming.

**password** /'pɑːswɜːd/ *n* A secret word which must be entered before access is given to a computer system or website.

**paste** /peɪst/ *v* To insert a copy of text or graphics, held in the computer's memory, at a chosen position of a document.

**PC** /ˌpiː'siː/ *n* A personal computer, which carries out processing on a single chip. PCs are often classified by size and portability: desktop PCs, laptops, tablet PCs and PDAs.

**PC game** /ˌpiː'siː ˌgeɪm/ *n* A game played on a personal computer.

**peer-to-peer** /ˌpiə tə ˈpiə/ *n* A network architecture in which all the computers have the same capabilities, i.e. share files and peripherals, without requiring a separate server computer.

**peer-to-peer file-sharing** /ˌpiə tə ˈpiə ˌfaɪlˌʃeərɪŋ/ *n* A form of P2P networking which eliminates the need for central servers, allowing all computers to communicate and share resources (music files, videos, etc.) as equals.

**pen drive** /ˈpen ˌdraɪv/ *n* See **flash drive**.

**peripherals** /pəˈrɪfərənz/ *n* The units attached to the computer, classified into three types: input devices, output devices and storage devices.

**Personal Digital Assistant (PDA)** /ˌpɜːsənəl ˌdɪdʒɪtəl əˈsɪstənt/ *n* A tiny computer which can be held in one hand. The term PDA refers to a variety of hand-held devices, palmtops and pocket PCs. For input, you type at a small keyboard or use a stylus. It can be used as a personal organizer, a mobile phone or an internet device.

**phishing** /'fɪʃɪŋ/ *n* Getting passwords of online bank accounts or credit card numbers by using emails that look like real organizations, but are in fact fake; short for *password harvesting fishing*.

**phosphor** /'fɒsfə/ *n* The material or substance of the CRT screen that lights up when struck by an electron beam.

**Photoshop** /'fəʊtəʊʃɒp/ *n* An image manipulation program developed by Adobe Systems.

**PictBridge** /'pɪkbrɪdʒ/ *n* A technology developed by Canon that lets you print images from a memory card in a digital camera or a camera phone directly to the printer (no computer is necessary).

**piracy** /'paɪrəsi/ *n* The illegal copying and distribution of copyrighted programs and files.

**pixel** /'pɪksəl/ *n* The smallest unit on a display screen or bitmapped image (usually a coloured dot).

**plasma screen** /'plæzmə ˌskriːn/ *n* A display that generates images by a plasma discharge, which contains noble, non-harmful gases. It allows for larger screens and wide viewing angles.

**platesetter** /'pleɪtsetə/ *n* A machine that creates the printing plates.

**platform-independent** /ˌplætfɔːm ɪndɪ'pendənt/ *adj* Refers to software that can run on any computer system.

**platter** /'plætə/ *n* A magnetic plate, or disk, that constitutes part of a hard disk drive. There may be only one or several platters in a drive.

**PlayStation** /'pleɪˌsteɪʃən/ *n* A video game console from Sony.

**plotter** /'plɒtə/ *n* A graphics output device which is used to make various types of engineering drawings.

**plug-ins** /'plʌɡɪnz/ *n* Special programs which extend the capabilities of a web browser so that it can handle audio, video, 3D and animation elements.

**podcast** /'pɒdkɑːst/ *n* An audio recording that is distributed by subscription (paid or unpaid) over the Internet using RSS feeds, for playback on mobile devices and PCs; coined from *iPOD* and *broadCAST*.

**point** /pɔɪnt/ *n* A unit used to measure font types and the distance between baselines. A point is a subdivision of a pica: there are 12 points in a pica and 72.27 points in an inch.

**pointer** /'pɔɪntə/ **1** A small picture that follows the mouse movements. **2** The cursor which locates the insertion point on the screen, i.e. indicates where the next character will be displayed.

**port** /pɔːt/ *n* A socket or channel in the rear panel of the computer into which you can plug a wide range of peripherals: modems, scanners, digital cameras, etc. See **USB port**.

**portable DVD player** /ˌpɔːtəbəl dɪˌviː'diː ˌpleɪə/ *n* A handheld device with a built-in DVD drive and a screen.

**portable hard drive** /ˌpɔːtəbəl ˈhɑːd ˌdraɪv/ *n* An external hard drive that is connected to the USB or FireWire port of the computer.

**portable media player** /ˌpɔːtəbəl ˈmiːdiə ˌpleɪə/ *n* A handheld device that plays audio and video files.

**PostScript** /'pəʊsskrɪpt/ *n* A page description or graphics language developed by Adobe Systems. A PostScript font is any font defined in this language, e.g. Times or Helvetica.

**power-line internet** /ˌpaʊəlaɪn ˌɪntənət/ *n* A technology that provides low-cost internet access via the power plug.

**PowerPoint** /'paʊəpɔɪnt/ *n* A presentation graphics program from Microsoft.

**Pretty Good Privacy (PGP)** /ˌprɪti ˌɡʊd ˈprɪvəsi/ *n* A freeware program, written by Phil Zimmerman, designed to send email privately.

**primary colours** /ˌpraɪməri ˈkʌləz/ *n* These are red, green and blue (RGB) in computers. Compare with the colours considered basic in inks (magenta, yellow and cyan).

**primitives** /'prɪmɪtɪvz/ *n* The basic shapes used to construct graphical objects: lines, polygons, etc.

**print preview** /ˌprɪnt ˌpriːvjʊː/ *n* A function that shows how pages will look when printed.

**printer** /'prɪntə/ *n* An output device which converts data into printed form. The output from a printer is referred to as a *print-out* or *hard copy*.

**printer driver** /'prɪntə ˌdraɪvə/ *n* A program installed to control a particular type of printer.

**printing plate** /ˌprɪntɪŋ ˌpleɪt/ *n* A metal surface that carries the image to be printed.

**processor** /'prəʊsesə/ *n* The chip that processes the instructions provided by the software. See **central processing unit (CPU)**.



**program** /'prəʊgræm/ *n* A set of instructions that tells the computer how to do a specific task. The task can be anything from the solution to a Maths problem to the production of a graphics package.

**programmer** /'prəʊgræmə/ *n* Someone who writes computer programs.

**programming** /'prəʊgræmɪŋ/ *n* The process of writing a program using a computer language.

**protocol** /'prəʊtəkɒl/ *n* A set of rules which determine the formats by which information may be exchanged between different systems.

**proxy** /'prɒksi/ *n* A computer server which controls the traffic between the Internet and a private network.

## Q

**QuarkXpress** /,kwɔ:k tk'spres/ *n* A page layout application produced by Quark.

**query** /'kwɪəri/ *n* A request for data; in a database, a function that allows you to extract data according to certain conditions or criteria.

**QuickTime** /'kwɪktaim/ *n* Software from Apple that enables users to play, edit, and manipulate multimedia files.

## R

**radio tags** /'reɪdiəʊ ,tægz/ *n* Microchips attached to, or embedded into, products, animals or people, for the purpose of identification.

**radio-frequency identification (RFID)** /,reɪdiəʊ ,fri:kwəntsi aɪdɪntɪfɪ'keɪʃən/ *n* Technology that uses radio waves and chip-equipped tags (called RFID tags) to automatically identify people or things.

**random access memory (RAM)** /,rændəm 'æksɪs ,meməri/ *n* The part of the main memory which stores information temporarily while you are working. RAM requires a continuous power supply to retain information. Compare with **ROM**.

**raster graphics** /'ru:stə ,græfɪks/ *n* Images stored and displayed as pixels, which can become distorted when manipulated. Also called *bit-mapped graphics*.

**read-only memory (ROM)** /,ri:d'əʊnli ,meməri/ *n* Chips of memory containing information which is present and permanent. Also known as *firmware*.

**read/write head** /,ri:d ,raɪt 'hed/ *n* The part of a disk drive that reads and writes data on a magnetic disk.

**RealPlayer** /'ri:əpleɪə/ *n* A media player, created by RealNetworks, that plays a variety of audio and video formats.

**real-time** /'ri:əltaim/ *adj* Refers to something live, simultaneous (without delay), e.g. real-time chat.

**reboot** /ri:'bu:t/ *v* To restart the computer.

**record** /'rekɔ:d/ *n* A unit of a file consisting of a number of interrelated data elements (fields).

**register** /'redʒɪstə/ *n* The component in the processor or other chip which holds the instruction from the memory while it is being executed.

**relational database** /rɪ'leɪʃənəl ,deɪtəbeɪs/ *n* A database system that maintains separate, related files (tables), but combines data elements from the files for queries and reports.

**rendering** /'rendərɪŋ/ *n* A technique that generates realistic reflections, shadows and highlights.

**resolution** /,rezə'lʊ:ʃən/ *n* The maximum number of pixels in the horizontal and vertical directions of the screen; also refers to the number of pixels per inch.

**rewritable** /ri:'raɪtəbl/ *adj* Able to be rewritten many times.

**right click** /,raɪt 'klɪk/ *v* To press and release the right button on a mouse; this action displays a list of commands.

**RIM** /rɪm/ *n* An operating system used on BlackBerry communication devices, developed by Research In Motion.

**ring topology** /,rɪŋ tɒ'pɒlədʒi/ *n* One of the three principal topologies for a LAN, in which all devices are interconnected in a continuous loop, or ring.

**ringtone** /'rɪŋtəʊn/ *n* A digital sound file played by a telephone to announce an incoming call.

**ripping** /'rɪpɪŋ/ *n* Converting music tracks from a CD to the MP3 format.

**rotation** /rə'teɪʃən/ *n* Turning an object around its axis.

**router** /'ru:tə/ *n* A device used to transmit data between two computers or networks. See also **modem-router** and **wireless router**.

**routine** /ru:'ti:n/ *n* A piece of code which performs a specific task in the operation of a program or system.

**row** /rəʊ/ *n* A horizontal line of boxes, labelled with a number, in a spreadsheet program.

**RSS feed** /ɑ:es'es ,fi:d/ *n* A web feed format that allows subscribers to receive updates of blogs, news, podcasts, etc.

**run a program** /,rʌn ə 'prəʊgræm/ *v* To execute a specific program; to use a program.

## S

**save** /seɪv/ *v* To copy information from the RAM to a storage device.

**scale** /skeɪl/ *v* **1** To magnify or shrink a particular font. **2** To make an object larger or smaller in any direction.

**scan** /skæn/ *v* To digitize an image by passing it through a scanner.

**scanner** /'skænə/ *n* An input device that scans (reads) the image as a series of dots and introduces the information into the computer's memory.

**screen magnifier** /'skri:n ,mægnɪfaɪə/ *n* Software that enlarges text and images on the screen, making the content more readable for users with low vision.

**screen reader** /'skri:n ,ri:də/ *n* Software for the blind that converts screen contents into spoken words.

**screensaver** /'skri:n ,seɪvə/ *n* A program that darkens the screen after you have not worked for several minutes. Designed to protect an unchanging image from burning into the screen.

**screen size** /'skri:n ,saɪz/ *n* The viewing area of a monitor; measured diagonally, in inches.

**scroll** /skrɔ:l/ *v* To move a document in its window by using scroll bars so that text in another part of the document is visible.

**scroll bar** /'skrɔ:l ,bɑ:/ *n* A horizontal or vertical bar containing a box that is clicked and dragged to the desired direction.

**search** /sɜ:tʃ/ *v* To look for specific information.

**search engine** /'sɜ:tʃ ,endʒɪn/ *n* A program that allows users to search a large database of web addresses and internet resources. Examples are Google and Yahoo!

**Second Life** /,sekənd 'laɪf/ *n* A 3-D virtual world on the Internet, entirely built and owned by its residents.

**sector** /'sektə/ *n* A part of a track on a magnetic disk.

**seek time** /'si:k ,taɪm/ *n* The average time required for the read/write head of a disk drive to move and access data, measured in milliseconds. Also called *access time*.

**set up** /,set 'ʌp/ *v* To install and configure hardware or software.

**set-top box** /,set ,tɒp 'bɒks/ *n* A device that connects to a TV and to an external source of signal (e.g. a satellite dish or cable TV) and converts the signal into content then displayed on the TV screen.

**setup** /'setʌp/ *n* The way in which a program or device is configured.

**shareware** /'ʃeəweə/ *n* Software distributed similarly to freeware, but requiring payment after a trial period. Also known as 'try before you buy' software.

**shopping cart** /'ʃɒpɪŋ ,kɑ:t/ *n* Software that lets you choose products from a website and processes the order through the payment gateway.

**sign up** /,saɪn 'ʌp/ *v* To register in a service.

**signature** /'sɪɡnətʃə/ *n* A file with personal information that is automatically attached at the end of an email message.

**silicon chip** /'sɪlɪkən ,tʃɪp/ *n* A device made up of a semi-conducting material (silicon), which contains a set of integrated circuits.

**simulation** /,sɪmjə'leɪʃən/ *n* Using computer models (programs) to imitate real life or make predictions.

**sip-and-puff** /sɪp ,ænd 'pʌf/ *n* A technology that allows someone with quadriplegia to control the computer by sipping and puffing air through a mouth-controlled tube or joystick.

**site** /saɪt/ *n* See **website**.

**Skype** /skaɪp/ *n* A program that allows you to make voice and video calls from a computer.

**slide scanner** /'slaɪd ,skænə/ *n* A device used to scan 35mm slides or film negatives; also called a *film scanner*.

**smart device** /'smɑ:t dɪ'vaɪs/ *n* An object containing a microchip and memory.

**smart home** /'smɑ:t ,haʊm/ *n* A home where all the systems (security, lights, appliances, sensors, audio-video devices, etc.) are interconnected to allow the automatic and remote control of the home.

**smart phone** /'smɑ:t ,fəʊn/ *n* A mobile phone with advanced functions, providing voice service as well as any combination of email, text messaging, web access, voice recorder, camera, MP3, TV or video player and organizer.

**smileys** /'smaɪlɪz/ *n* Faces made from punctuation characters to express emotions in email messages, e.g. :- ) for happy, :- o for surprised, etc. Also called *emoticons*.

**software** /'sɒfweə/ *n* The set of program instructions that tell the computer what to do. See **hardware**.

**software engineer** /'sɒfweə endʒɪ'nɪə/ *n* Someone who writes computer programs; also known as *programmer* or *programmer analyst*.

**Solaris** /sə'lɑ:ɪs/ *n* A Unix-based operating system, developed by Sun Microsystems, which runs on SPARC computers and other workstations.



**solid modeling** /ˌsɒlɪd ˈmɒdəlɪŋ/ *n* A technique for representing solid objects; this includes specifying and filling the surfaces to give the appearance of a 3-D solid object with volume.  
**sort** /sɔ:t/ *v* To classify; to reorder data into a new sequence.

**sound card** /ˈsaʊnd ˌkɑ:d/ *n* An expansion card that processes audio signals; also called a *sound board*.

**source code** /ˈsɔ:s ˌkɑ:d/ *n* **1** Computer instructions written in a high-level language like C or Pascal. **2** The HTML codes of a web page.

**spam** /spæm/ *n* Unsolicited, junk email.

**spamming** /ˈspæmɪŋ/ *n* Posting unsolicited advertising messages.

**speaker** /ˈspi:kə/ *n* A device that provides sound output; also called a *loudspeaker*. A pair of speakers usually plug into the computer's sound card.

**speech-synthesizer** /ˈspi:tʃ ˈsɪnθesaɪzə/ *n* A device that produces audio output.

**spell checker** /ˈspel ˌtʃekə/ *n* A utility to correct typing mistakes.

**spit** /spɪt/ *n* Spam (unwanted messages) over internet telephony.

**spooler** /ˈspu:lə/ *n* A utility which makes it possible to send one document to the printer (by creating a temporary file for it) so that the user can work on another.

**spreadsheet** /ˈspredʃi:t/ *n* A program for financial planning which allows the user to analyse information presented in tabular form, by manipulating rows and columns.

**spyware** /ˈspaɪweə/ *n* A type of software that collects information from your computer without your consent.

**standard toolbar** /ˈstændəd ˌtu:lba:z/ *n* A row of icons that, when clicked, activate certain commands of a program. For example, in a word processor, it allows you to save or print a document, include a hyperlink, check the spelling, etc.

**star topology** /ˌstɑ: tɒˈpɒlədʒi/ *n* One of the three principal topologies for a LAN, in which all data flows through a central hub, a common connection point for the devices on the network.

**storage device** /ˈstɔ: rɪdʒ dɪˌvaɪs/ *n* A hardware device used to record and store data, e.g. a hard disk, DVD or flash memory card.

**store** /stɔ:/ *v* To copy data from the computer's internal memory to a storage device, such as a disk, tape or flash memory card.

**streaming** /ˈstri:mɪŋ/ *n* A technique for transmitting sound and video so that it can be processed as a continuous stream. The files are played while they are downloading.

**stylus** /ˈstɑɪləs/ *n* A pen-shaped tool that is used to draw images or point to menus on pressure-sensitive screens (e.g. on PDAs).

**subject** /ˈsʌbdʒɪkt/ *n* The line that describes the content of an email.

**subroutine** /ˈsʌbrʊ:ti:n/ *n* A set of instructions which performs a specific function of the program.

**surf** /sɜ:f/ *v* To navigate and search for information on the Web.

**Symbian OS** /ˌsɪmbi:ʃən əʊˈes/ *n* An operating system used by some phone makers, including Nokia and Siemens.

**system clock** /ˈsɪstəm ˌklɒk/ *n* A clock that measures and synchronizes the flow of data.

**system software** /ˈsɪstəm ˌsɒfweə/ *n* The programs that control the basic functions of a computer, e.g. operating systems, programming software, device drivers and utilities.

## T

**tablet PC** /ˌtæblət pi:ˈsi:/ *n* A type of notebook computer that has an LCD screen on which you can write with a stylus or digital pen. The screen can be easily folded or rotated.

**telecommunications** /ˌtelɪkəˌmju:nɪˈkeɪʃən/ *n* The transmission of signals over a distance for the purpose of communication.

**telegraph** /ˈtelɪgrɑ:f/ *n* A communications system that transmits and receives simple electromagnetic impulses. A message transmitted by telegraph is a *telegram*.

**telemarketing** /ˈtelɪˌmɑ:kɪtɪŋ/ *n* The process of selling goods and services over the telephone.

**teletext** /ˌtelɪˈteks/ *n* A method of communicating information by using TV signals. An extra signal is broadcast with the TV picture and translated into text on the screen by a decoder.

**teleworking** /ˈtelɪˌwɜ:kɪŋ/ *n* The practice of working at home and communicating with the office by phone and computer. Also called *telecommuting*.

**Telnet** /ˈtelnet/ *n* A protocol and a program which is used to log directly into remote computer systems. This enables you to run programs kept on them and edit files directly.

**terabyte** /ˈterəbaɪt/ *n* 1,024 gigabytes.

**terminal** /ˈtɜ:mɪnəl/ *n* A hardware device, often equipped with a keyboard and a video screen, through which data can be entered or displayed.

**text flow** /ˈteks ˌfləʊ/ *n* A feature that enables you to wrap text around images on the page.

**textphone** /ˈtekstfəʊn/ *n* A phone with a small screen and a keyboard that transcribes spoken voice as text; it is used by people with hearing or speech difficulties.

**texturing** /ˈtekstʃərɪŋ/ *n* Adding paint, colour and filters to an object in order to achieve a given look and feel.

**thermal transfer printer** /θɜ:məl ˈtrænsfɜ:ˌprɪntə/ *n* A printer that produces colour images by adhering wax-based ink onto paper.

**thesaurus** /θɪˈsɔ:əs/ *n* A utility for searching synonyms and antonyms.

**three-dimensional (3-D)** /θri:ˌdiˈmenʃənəl/ *adj* Having three dimensions e.g. width, length, and depth. 3-D drawings represent objects more accurately.

**tilt-and-swivel stand** /ˌtɪlt ˌænd ˌswɪvəl ˈstænd/ *n* A kind of stand that lets you move the monitor up or around, so you can use it at the right angle and height.

**toner** /ˈtəʊnə/ *n* A special ink powder used in copy machines and laser printers.

**toolbar** /ˈtu:lba:z/ *n* A row of icons on a computer screen that, when clicked, activate certain functions of a program. Toolbars are used in programs like MS Word or as add-ons for web browsers (e.g. the Google toolbar).

**toolbox** /ˈtu:lbo:ks/ *n* A collection of drawing and painting tools.

**topology** /tɒˈpɒlədʒi/ *n* The layout or shape of a network. See **bus**, **star** and **ring topologies**.

**touch screen** /ˈtʌtʃ ˌskri:n/ *n* A display screen that is sensitive to the touch of a finger or stylus. Used in PDAs, portable game consoles, and many types of information kiosks.

**touchpad** /ˈtʌtʃˌpæd/ *n* A pointing device consisting of a soft pad which is sensitive to finger movement or pressure. Used on portable PCs.

**track** /træk/ *n* An area marked on the surface of a disk. When a disk is initialized, the operating system divides its surface into circular tracks, each one containing several sectors. Tracks and sectors are used to organize the information stored on disk.

**trackball** /ˈtrækbo:l/ *n* A stationary device that works like a mouse turned upside down. The ball spins freely to control the movement of the cursor on the screen. Used in laptops and CAD workstations.

**translation** /trænzˈleɪʃən/ *n* Moving an object to a different location.

**Trojan horse** /ˌtrɒdʒən ˈhɔ:s/ *n* Malicious software disguised as a useful program.

**two-dimensional (2-D)** /tu:ˌdiˈmenʃənəl/ *adj* Having only two dimensions, length and width. 2-D drawings look flat.

**type style** /ˈtaɪp ˌstɑɪl/ *n* A visual characteristic of a typeface, e.g. plain text, *italic*, **bold**, etc.

**typeface** /ˈtaɪpˌfeɪs/ *n* The design of a set of printed characters, such as Arial and Courier. The words *typeface* and *font* are used interchangeably, but the typeface is the primary design, while the font is the particular use of a typeface, such as the size (e.g. 12 points) and style (e.g. normal, *italic*, **bold**).

## U

**Undo** /ʌnˈdu:/ *n* A command that reverses or erases the last editing change done to the document.

**Uniform Resource Locator (URL)** /ˌju:nɪfɔ:m ˌrɪˈzɔ:s ˌləʊˌkeɪtə/ *n* The address of a file on the Internet, e.g. <http://www.bbc.co.uk/radio>.

**UNIX** /ˈju:nɪks/ *n* An operating system, designed by Bell Laboratories in the USA, found on mainframes and workstations in corporate installations.

**update** /ʌpˈdeɪt/ *v* To make something more modern or suitable for use now by adding information or changing its design.

**upgradable** /ʌpˈɡreɪdəbl/ *adj* Can be upgraded or expanded.

**upgrade** /ʌpˈɡreɪd/ *v* To add or replace hardware or software in order to expand the computer's power.

**upload** /ʌpˈləʊd/ *v* To send files to a central, often remote computer. Compare with **download**.

**USB** /ˌju:esˈbi:/ *n* A Universal Serial Bus, a hardware interface that allows peripheral devices (disc drives, modems, cameras, etc.) to be easily connected to a computer.

**USB port** /ˌju:esˈbi: ˌpɔ:t/ *n* A USB socket on a computer device into which you can plug a USB cable.

**Usenet** /ˈju:znet/ *n* A large collection of discussion areas (called newsgroups) on the Internet.

**user interface** /ˌju:zə ˈɪntəfeɪs/ *n* The standard procedures for interaction with specific computers.

**user-friendly** /ˌju:zə ˈfrendli/ *adj* A system that is easy to learn and easy to use.

**username** /ˌju:zəneɪm/ *n* **1** the part of an email address that identifies the user of the service. **2** The name you use to identify yourself when you log onto a computer system or network; also called *user ID*.



**utility** /ju:'tɪləti/ *n* A small program designed to improve the performance of the system. *System utility* refers to a diverse field covering anything from software designed to help you back up your hard disk or locate files, to anti-virus programs or routines used by the system.

## V

**Vector graphics** /'vektə ,græfiks/ *n* Images represented through the use of geometric objects such as lines, curves and polygons, based on mathematical equations. They can be changed or scaled without losing quality.

**video adapter** /'vɪdiəʊ ə,dæptə/ *n* A expansion card that processes images and sends the video signals to the monitor; also called *video graphics board*.

**video editing** /'vɪdiəʊ ,editɪŋ/ *n* The process of manipulating video images.

**video projector** /'vɪdiəʊ prə,dʒektə/ *n* A device that projects images on a large screen using a lens system.

**videoblog** /'vɪdiəʊblɒg/ *n* A blog that includes video.

**videoconferencing** /'vɪdiəʊ,kɒnfərəntsɪŋ/ *n* A technology that allows organizations to create virtual meetings with participants in multiple locations, enabling them to talk to and see each other.

**virtual interface** /,vɜ:tɪfʊəl 'ɪntəfeɪs/ *n* A type of interface based on virtual reality techniques. The user puts on a head-mounted display, and uses data gloves and other devices which make you feel as if you are in a 3-D world.

**virtual reality** /,vɜ:tɪfʊəl rɪ'æləti/ *n* A computer-generated space in which the user interacts with artificial objects through 3-D computer simulation. This is done by using sensory peripherals, such as data gloves and head-mounted displays, to give the feeling of being immersed into an illusionary, yet sensate, world.

**virus** /'vaɪrəs/ *n* A piece of software which attaches itself to a file. Once you run an infected program, the virus quickly spreads to the system files and other software. Some viruses can destroy the contents of hard disks.

**VisualBASIC** /,vɪʒuəl 'beɪsɪk/ *n* A high-level programming language, developed by Microsoft in 1990, used to create graphical user interfaces in Windows applications.

**VoIP** /vɔɪp/ *n* Voice over Internet Protocol, which allows you to make phone calls using the Internet instead of the regular phone lines.

**voice recognition** /,vɔɪs rekəg'nɪʃən/ *n* A technology that allows computers to interpret human speech, converting spoken words into digitized text or instructions.

**VoiceXML** /,vɔɪs ɛksem'el/ *n* A markup language which makes web content accessible via voice and phone. Short for *Voice Extensible Markup Language*.

**volatile memory** /,vɒlətaɪl 'meməri/ *n* Temporary memory (e.g. RAM); it doesn't hold its contents without power.

## W

**wearable computer** /,weəəbəl kəm'pjʊtə/ *n* A computer that is worn on the body, or integrated into the user's clothing.

**Web** /web/ *n* A network of documents that works in a hypertext environment, i.e. using text that contains links to other documents. It's also

known as the *World Wide Web*, *WWW* or *W3*. By using a special program known as a browser, you can find information on nearly any topic you can imagine.

**Web Accessibility Initiative (WAI)** /,web əksesə'bɪləti ɪ,nɪʃətɪv/ *n* A project that tries to make the Web accessible to people with disabilities.

**web editor** /'web ,editə/ *n* Software that lets you design web pages without writing HTML codes.

**web page** /'web ,peɪdʒ/ *n* An individual document on the Web, identified by its own unique URL. Web pages contain different elements, such as text, pictures, video, links, etc.

**webcam** /'webkəm/ *n* A web camera used to send live video images via the Internet.

**webcasting** /'webkɑ:stɪŋ/ *n* Sending audio and video live over the Internet.

**webmaster** /'web,mɑ:stə/ *n* Someone responsible for designing, developing, marketing or maintaining websites.

**website** /'websaɪt/ *n* A collection of web pages (usually including a homepage), set up by an organization or an individual, which are usually stored on the same server. The pages are all linked together; you can move from one page to another by clicking on words or pictures called *hyperlinks*.

**wide area network (WAN)** /,waɪd ,eəriə 'netwɜ:k/ *n* A network that extends outside a building or small area. For long distance communications, LANs are usually connected into a WAN. The largest WAN is the Internet.

**Wi-Fi** /'waɪfaɪ/ *n* A term from the Wi-Fi Alliance, which certifies that network devices comply with the IEEE 802.11 wireless specifications. A typical Wi-Fi setup contains one or more wireless access points (base stations) and various computer devices acting as clients.

**Wi-Fi phone** /,waɪfaɪ 'fəʊn/ *n* A mobile phone that can switch from the cellular network to a wireless VoIP network and vice versa.

**Wii** /wi:/ *n* A video game console from Nintendo, introduced in 2006.

**wiki** /'wiki:/ *n* A collaborative website whose content can be edited by anyone who has access to it, e.g. WikiWikiWeb, Wikipedia, etc.

**WiMAX** /'waɪmæks/ *n* A technology that enables the delivery of wireless broadband access as an alternative to cable and ADSL; short for *Worldwide Interoperability for Microwave Access*.

**window** /'wɪndəʊ/ *n* A scrollable viewing area on screen, which can contain files or folders.

**Windows** /'wɪndəʊz/ *n* The operating system from Microsoft that runs on most PCs. The most recent versions are Windows 2000, Windows XP and Windows Vista.

**Windows Mobile** /,wɪndəʊz 'məʊbaɪl/ *n* An operating system used on many PDAs and smartphones.

**Windows Vista** /,wɪndəʊz 'vɪstə/ *n* The new Windows, released in 2007. It includes security improvements, a new graphical user interface, and new ways of searching information

**wired** /waɪəd/ *adj* Equipped with a system of wires (cables).

**wireframe** /,waɪə'freɪm/ *n* The drawing of a model by tracing features like edges or contour lines.

**wireless** /'waɪələs/ *adj* Having no wires; without the use of cables.

**Wireless access point (WAP)** /,waɪələs 'ækses ,pɔɪnt/ *n* A device that connects wireless communication devices together to form a wireless network.

**wireless adapter** /,waɪələs ə'dæptə/ *n* A device that adds wireless connectivity to a computer or PDA. It is attached via a PC card or a USB port. There are three main types of wireless adapters: Bluetooth, cellular (for mobiles) and Wi-Fi (for laptops and desktop PCs).

**wireless LAN** /,waɪələs 'læn/ *n* A wireless local area network, linking two or more computers without cables.

**wireless network** /,waɪələs 'netwɜ:k/ *n* Any type of network that uses electromagnetic waves, such as radio waves, to transmit data. These are the main types: satellites for long distances, WiMAX for connecting Wi-Fi hotspots, Wi-Fi for medium-range distances, Bluetooth for short distances, and GSM for mobile phones.

**wireless router** /,waɪələs 'ru:tə/ *n* A device which allows computers to communicate via radio waves. Also called *wireless access point* or *base station*.

**Word** /wɜ:d/ *n* A word processor from Microsoft.

**word processor** /'wɜ:d ,praʊsesə/ *n* An application that manipulates text and produces documents suitable for printing.

**word wrap** /'wɜ:d ,ræp/ *n* An editing facility which automatically moves a word to the next line if there is not enough space for the complete word on the current line.

**workstation** /'wɜ:k,steɪʃən/ *n* 1 A high-performance computer, typically used for graphics, CAD, software development and scientific applications. 2 Any computer connected to a network.

**World Wide Web** /,wɜ:ld ,waɪd 'web/ *n* See **Web**.

**worm** /wɜ:m/ *n* A self-copying program that spreads through email attachments; it replicates itself and sends a copy to everyone in a contact list.

## X

**Xbox 360** /,eksbɒks ,θri: 'sɪksti/ *n* A video game console from Microsoft.

**XML** /,ɛksem'el/ *n* Extensible Markup Language. While HTML uses pre-defined tags, XML allows us to create our own tags to better describe data.

## Y

**Yahoo!** /ja:'hu:/ *n* A leading web portal, with a mix of news, entertainment and online shopping, as well as search engine, internet directory, email and IM services.

**YouTube** /'ju:t ju:b/ *n* A popular website which lets users upload, view, and share video clips.

## Z

**.zip** /zɪp/ *n* An extension that identifies compressed files. To decompress them you need a shareware program like WinZip.

**zoom** /zu:m/ *n* A tool used to magnify areas of an image when you are doing close, detailed work.



# Irregular verbs

These are the most important irregular verbs. They can be divided into the following groups (A–E):

## A All three forms the same

Base	Past simple	Past participle	Translation
bet	bet	bet	.....
cost	cost	cost	.....
cut	cut	cut	.....
hit	hit	hit	.....
hurt	hurt	hurt	.....
set	set	set	.....
let	let	let	.....
put	put	put	.....
shut	shut	shut	.....
spread	spread	spread	.....
read	read /red/	read /red/	.....

## B Base = Past simple

Base	Past simple	Past participle	Translation
beat	beat	beaten	.....

## C Past simple = Past participle

Base	Past simple	Past participle	Translation
bend	bent	bent	.....
bleed	bled	bled	.....
bring	brought	brought	.....
build	built	built	.....
buy	bought	bought	.....
catch	caught	caught	.....
deal	dealt	dealt	.....
feed	fed	fed	.....
feel	felt	felt	.....
fight	fought	fought	.....
find	found	found	.....
get	got	got	.....
hang	hung	hung	.....
have	had	had	.....

## C Past simple = Past participle cont.

Base	Past simple	Past participle	Translation
hear	heard	heard	.....
hold	held	held	.....
keep	kept	kept	.....
lay	laid	laid	.....
lead	led	led	.....
learn	learnt	learnt	.....
leave	left	left	.....
lend	lent	lent	.....
light	lit	lit	.....
lose	lost	lost	.....
make	made	made	.....
mean	meant	meant	.....
meet	met	met	.....
pay	paid	paid	.....
say	said	said	.....
sell	sold	sold	.....
send	sent	sent	.....
shine	shone	shone	.....
shoot	shot	shot	.....
sit	sat	sat	.....
sleep	slept	slept	.....
spend	spent	spent	.....
stand	stood	stood	.....
stick	stuck	stuck	.....
strike	struck	struck	.....
sweep	swept	swept	.....
teach	taught	taught	.....
tell	told	told	.....
think	thought	thought	.....
understand	understood	understood	.....
win	won	won	.....



## D Base = Past participle

Base	Past simple	Past participle	Translation
become	became	become	.....
come	came	come	.....
run	ran	run	.....

## E All three forms different

Base	Past simple	Past participle	Translation
arise	arose	arisen	.....
awake	awoke	awoken	.....
be	was/were	been	.....
begin	began	begun	.....
bite	bit	bitten	.....
blow	blew	blown	.....
break	broke	broken	.....
choose	chose	chosen	.....
do	did	done	.....
draw	drew	drawn	.....
drink	drank	drunk	.....
drive	drove	driven	.....
eat	ate	eaten	.....
fall	fell	fallen	.....
fly	flew	flown	.....
forbid	forbade	forbidden	.....
forget	forgot	forgotten	.....
forgive	forgave	forgiven	.....
freeze	froze	frozen	.....

## E All three forms different cont.

Base	Past simple	Past participle	Translation
give	gave	given	.....
go	went	gone	.....
grow	grew	grown	.....
hide	hid	hidden	.....
know	knew	known	.....
lie	lay	lain	.....
overwrite	overwrote	overwritten	.....
ride	rode	ridden	.....
ring	rang	rung	.....
rise	rose	risen	.....
see	saw	seen	.....
shake	shook	shaken	.....
show	showed	shown	.....
shrink	shrank	shrunk	.....
sing	sang	sung	.....
sink	sank	sunk	.....
speak	spoke	spoken	.....
steal	stole	stolen	.....
swear	swore	sworn	.....
swim	swam	swum	.....
take	took	taken	.....
tear	tore	torn	.....
throw	threw	thrown	.....
wake	woke	woken	.....
wear	wore	worn	.....
withdraw	withdrew	withdrawn	.....
write	wrote	written	.....



# Acronyms and abbreviations

**ADSL** Asymmetric Digital Subscriber Line

**AI** Artificial Intelligence

**AIM** AOL Instant Messenger

**ALU** Arithmetic Logic Unit

**AMD** Advanced Micro Devices

**ASCII** American Standard Code for Information Interchange

**AT&T** American Telephone & Telegraph company

**ATA** Analogue Telephone Adaptor

**ATM** Automated Teller Machine

**AVI** Audio Video Interface

**BASIC** Beginner's All-purpose Symbolic Instruction Code

**BBS** Bulletin Board System

**Bcc:** Blind carbon (or courtesy) copy

**BIOS** Basic Input/Output System

**bit** binary digit

**bps** bits per second

**CAD** Computer-Aided Design

**Cc:** Carbon (or courtesy) copy

**CCD** Charge-Coupled Devices

**CD** Compact Disc

**cd/m<sup>2</sup>** Candela per square metre

**CD-R** Compact Disc-Recordable

**CD-ROM** Compact Disc-Read Only Memory

**CD-RW** Compact Disc-Rewritable

**CERN** Conseil Européen pour la Recherche Nucléaire

**COBOL** COmmon Business-Oriented Language

**CPU** Central Processing Unit

**CRT** Cathode Ray Tube

**CSS** Cascading Style Sheets

**CTP** Computer To Plate

**CU** Control Unit

**DAB** Digital Audio Broadcasting

**DAW** Digital Audio Workstation

**DBMS** Database Management System

**DDR** Double Data Rate (RAM)

**DIMM** Dual In-line Memory Module

**DLP** Digital-Light processing

**DMB** Digital Multimedia Broadcasting

**DNS** Domain Name System

**dpi** dots per inch

**DTP** Desktop Publishing

**DTTV** Digital Terrestrial television

**DVB-H** Digital Video Broadcast-Handheld

**DVD-/±RW** Digital Versatile Disc-Rewritable

**DVD** Digital Versatile Disc or Digital Video Disc

**DVD-R** Digital Versatile Disc-Recordable

**DVD-ROM** Digital Versatile Disc-Read Only Memory

**DVI** Digital Video Interface

**EEPROM** Electrically Erasable Programmable ROM

**EPS** Encapsulated PostScript

**FAQ** Frequently Asked Questions

**FORTRAN** FORMula TRANslation

**FTP** File Transfer Protocol

**GB** Gigabyte (1,024 megabytes)

**GHz** Gigahertz

**GIF** Graphic Interchange Format

**GIS** Geographic Information System

**GNU** Gnu's Not UNIX

**GPS** Global Positioning System

**GSM** Global System for Mobile communication

**GUI** Graphical User Interface

**HDD** Hard Disk Drive

**HD-DVD** High Definition-Digital Versatile Disk

**HDTV** High-definition Television

**HP** Hewlett-Packard

**HTML** Hypertext Markup Language

**HTTP** Hypertext Transfer Protocol

**Hz** Hertz

**I/O** Input/Output

**IBM** International Business Machines

**ICQ** I Seek You

**ICT** Information and Communications Technologies

**IM** Instant Messaging

**IP** Internet Protocol

**IR** Instruction Register

**IrDA** Infrared Data Association

**ISP** Internet Service Provider

**IT** Information technology

**JPG** (or JPEG) Joint Photographic Experts Group

**k** 1 kilo, used to denote a thousand; 2 1,024 bytes

**KB** kilobyte (1,024 bytes)

**LAN** Local Area Network

**Laser** Light Amplification by Stimulated Emission of Radiation

**LCD** Liquid-Crystal Display

**LISP** LISt Processing

**.mov** QuickTime movie

**Mac** Macintosh computer

**MAN** Metropolitan Area Network

**MB** Megabyte (1,024 kilobytes)

**MHz** Megahertz

**MIDI** Musical Instrument Digital Interface

**MIPS** Million Instructions Per Second

**MMS** Multimedia messages

**Modem** MOdulator/DEModulator

**MP3** MPEG-1 Layer-3 Audio

**MPEG** Moving Pictures Experts Group

**ms** millisecond

**NIC** Network Interface Card

**NUI** Network User Identifier

**OCR** Optical Character Recognition

**OLE** Microsoft's Object Linking and Embedding standard

**OLED** Organic Light-Emitting Diodes (display)

**OOP** Object Oriented Programming

**OS** Operating System

**.pdf** portable document format

**PAN** Personal Area Network

**PC** 1 Personal Computer; 2 Program Counter

**PCL** Printer Control Language

**PDA** Personal Digital Assistant

**PDL** Page Description Language

**PGP** Pretty Good Privacy

**PIN** Personal Identification Number

**pixel** picture element

**png** portable network graphic

**ppm** pages per minute

**PPP** Point to Point Protocol

**.ra** RealAudio file

**RAM** Random Access Memory

**RGB** Red, Green, Blue

**RFID** Radio-Frequency identification

**RIM** Research In Motion

**RIP** Raster Image Processor

**RISC** Reduced Instruction Set Computer

**ROM** Read Only Memory

**rpm** revolutions per minute

**RSI** repetitive strain injury

**RSS** Really Simple Syndication  
Rich Site Summary

**SDRAM** Synchronous Dyn.  
Random Access Memory

**SIM (card)** Subscriber Ident  
Module

**SMS** Short Message Service

**SMTP** Simple Mail Transfer I

**SQL** Structured Query Lang

**SSL** Secure Sockets Layer

**SVG** Super XGA (Extended  
Graphics Array)

**TAN** Transaction Authorizat  
Number

**TB** Terabyte (1,024 gigabyte)

**TCP/IP** Transmission Contro  
Protocol / Internet Protocol

**TFT** Thin Film Transistor (dis

**TIFF** Tagged Image File Forr

**UMTS** Universal Mobile  
Telecommunications System

**URL** Uniform Resource Loca

**USB** Universal Serial Bus

**VAT** Value Added Tax

**VCR** Videocassette Recorder

**VDU** Visual Display Unit

**VGA** Video Graphics Adapte

**VoiceXML** Voice Extensible  
Language

**VoIP** Voice over Internet Pr

**VRML** Virtual Reality Modelli  
Markup) Language

**.wav** Windows wave audio

**W3** See **Web** in Glossary

**WAI** Web Accessibility Initiat

**WAN** Wide Area Network

**WAP** 1 wireless access point  
2 Wireless Application Protoc

**Wi-Fi** Wireless Fidelity

**WiMAX** Worldwide Interope  
for Microwave Access

**WIMP** Window, Icon, Menu (mouse) and Pointer

**WP** Word Processing

**WWW** World Wide Web

**WYSIWYG** What You See Is V  
You Get

**XGA** Extended Graphics Arra

**XML** Extensible Markup Lang

**WXGA** Wide XGA (Extended  
Graphics Array)