Chapter 19

Internet Setup and General Use Terms
NOTE: In this chapter universal key commands are used unless JAWS key commands are specified.

Key Terms

Internet: Imagine being able to go to a place where you can find out about things you are interested in, network with friends, take classes, check your bank account, pay your bills, shop, listen to the radio or net based television, read books, play games, make hotel and flight reservations, learn a new language, view a city or country you wish to visit, use the phone, look up a business, look up a person, look up a phone number or address, get driving directions from a starting point to an ending point, look up medical information, look for an apartment to rent or a house to buy, and many other things. The internet is such a place. When you are on the internet you are connected to all of the world's millions of computers that are a part of the internet. There are millions of web pages on the internet, and there will be times when you want to know something or find something, but do not know the "web address" to go to that web site. There are web sites called "search engines" that will help you look for specific content web sites. One such search engine is www.google.com. The version of Google that makes access easier if you are using a screenreader is http://labs.google.com/accessible/.

Internet Service Provider: Is the company you pay to allow you to connect your computer to the internet. There are local companies, and larger national companies. Several, but not all of the larger internet service providers are Comcast and AT&T.

Port: There are a number of different kinds of ports on your computer, on the modem, and on the router. There are Ethernet ports, phone jack ports, and connectors for coaxial cables. There are even USB ports on some modems. You connect cables to these ports in order to connect you modem to the line (coaxial or phone) from you internet service provider. You connect Ethernet cables to connect your modem to your computer or router. You connect Ethernet cables to connect your modem to a router, and from the router to one or more computers. You even use an Ethernet cable to connect your modem to a wireless router.

Drivers: Drivers are small files that allow your computer to recognize your modem and router. These usually come on a CD, and can be found on the internet.

Modem: Is the device that is connected to a line from your internet service provider, and to your computer, that allows you to go onto the internet. You might have a DSL modem from your phone company, or a Broadband modem from an internet service provider such as Comcast. An older type of modem allows you to connect directly by phone line. This type of modem is not as common as in the past because many web pages are so graphical that the speed of opening the web page(s) takes a long time. The type of modem that connects through companies such as Comcast are called "cable modems." A cable modem will have a coaxial cable connector. This feels like a screw with a small hole on the top end. The coaxial cable screws onto this connector, and the other end connects to the coaxial connector on the wall. **See "Coaxial Cable" definition and description below.** There will also be an Ethernet connector so that you can connect an Ethernet cable from the modem to the back of your computer, or to a router. There will be a power connector for the power supply for the modem.

Router: Is a device that you can connect to your modem, and then connect your computer to it (router), to go onto the internet. Routers are generally used when you want to have "wireless" capability, or when you have more than one computer. There will be one Ethernet port to connect an Ethernet cable to your modem. There will be three or more Ethernet ports to connect Ethernet cables from the router to one or more computers. There will be a power supply connector or the power cord that comes with your router. There will be a CD that has installation software for your router.

Coaxial Cable: The cable that runs from your wall outlet to the back of your modem, if you are using a company such as Comcast. This is a round cable with a pin sticking out of each end. This pin fits into a screw type connector on the wall and on the modem. There is a hole in the top middle of this screw. Push the pin into the hold until it will not go any further, and then turn the area (nut) at the end of the cable to the right to tighten the cable.

Bandwidth: Think of bandwidth as a road where you have cars traveling. The wider the road, the more cars, and speed you can have. The oldest setup for connecting to the internet is through your phone line (not DSL). This is like a two lane road with cars going each direction. DSL, which does connect to the phone jack and uses a phone line, is like a four land road, with two lanes for cars going one direction, and two lanes for cars going the other direction. This is faster than the phone line. Think of cable modem as a super highway, with six or more lanes (the more bandwidth you pay for, the more lanes you have). Unlike the phone line, cable modem does share the highway with other computer users in your area. If you are only using the internet to check email

and read the newspaper, you do not need a lot of bandwidth. If you are download8ing movies or playing online games, you do need higher bandwidth. You need to look at how you are going to use your computer on the internet, and then decide which level of connection you want—remember the faster the speed, the more expensive it is.

Phone Cable: The phone cable that runs from your wall outlet to the back of your modem, if you are using a phone company to access the internet.

Ethernet: This is a port on your computer, on your modem, and on a router that feels like a very large phone jack. An Ethernet cable is the cable that connects your computer directly to the modem or router. A wireless router connects to the modem but does not have to connect to the wireless computer (it can if you need it to).

Wireless: Is a signal that allows a wireless enabled computer to connect through a wireless router, to the internet. The wireless router is connected to your modem with the Ethernet cable. If you use wireless you need to be aware of safety issues. You do not want to leave your wireless connection in an open state—if you do, other people can look directly into your computer. There are ways to lock other computers out of your wireless. One common method is known as "Setting the WEP Key." See the instructions that comes with your wireless router. On your computer, especially laptops that are wireless there are "Public" and "Private" settings. If you are in a coffee shop, hotel, or airport, set this to "Public" for greater security. These settings can be found in the Windows Control Panel, under "Network Settings." Computers, cell phones and Personal Digital Assistants (PDAs) can connect wirelessly to the internet, if you have that feature active from your phone company or internet service provider. In the case of cell phones and PDAs you want to research the pricing for "data plans."

Data Plan: Offered by many cell phone companies and some internet service providers. There are different levels of plans with a monthly charge for each. The more data you intend to utilize on the internet on your cell phone or PDA, the larger the data plan, and the more expensive it is. In most cases it is cheaper to purchase the "Tethering" plan. This means that you connect your cell phone to your computer with a cable, and access the internet using your cell phone as a modem. In this way you can cheaply pay for "unlimited" internet use on a data plan. Tethering generally runs at DSL speeds and lets you connect to the internet wherever your cell phone receives a signal.

Network: When you connect to the internet you are networked to computers around the world. You might be using a wireless connection, or you might be connecting through a phone line or Ethernet cable. It does not matter how you connect, the fact that you are on the internet means that you have networked with millions of computers. You can also have a small business network where you are connected to computers in

your school or company. These networks might also be connected to the internet. There are open networks where many people can connect, and closed networks where only the people in a school or company can connect. It is rare that you will have a computer that is not connected to the internet or another computer. When you hear the term "network," or "networking," in relation to computers, it simply means your computer is connected in some way to other computer. Along with being on a network, there are many advantages, and many dangers.

Firewall: This is a program built into Windows that keeps certain types of files from being placed on your computer. If you use a commercial level product such as McAfee, it has its own firewall program, and will turn off your Windows firewall.

Virus: Is a file or program that does bad things to your computer. Some viruses affect the way your programs work. Some slow your computer down. There are some that spy on what key strokes you press, and others that can damage your computer hardware (i.e. hard drive, memory, CPU).

Virus Checker: A virus checker keeps track of the files on your computer and deletes any that it considers a threat to your computer. You can set the virus checker to automatically delete or quarantine files, or you can select the files you want to delete or quarantine. Some well known virus checkers are McAfee, Norton, AVG, and One Care. Some of these are free programs that come from your internet service provider. Some are free programs that can be downloaded from the internet. Others are commercial level that you can buy at the store, or purchase online and download.

Web Browser: A web browser is the program you use to go onto the internet. The most common web browser is the Microsoft Internet Explorer. There are other web browsers that you can use. One is called Firefox, and is made by Mozilla. Another web browser is called Webbie. Webbie comes from the United Kingdom and is designed for accessibility.

Web Address: The address of the web site you are on. For example, if you are going to the accessible Google search engine, the web address is http://labs.google.com/accessible/.

IP Address: Each computer connected to the internet has an IP address. Each web address has an IP number, although you will not see that number, in most cases. You will not generally see this, but it is necessary. What you will hear or see is the web address. Think of the IP address as a number that is like an address that your computer has. Your internet service provider assigns the IP address that your computer

uses. If you are using a router, your IP address for the router is something like 192.168.0.1.

Address Bar: One place where you can type a web address and tap the Enter Key to go to that web site. If you are on the internet and need to quickly get to the address bar tap the F6 key one time.

Web Site: The web page or collection of web pages at a web address.

Web Page: The page or screen on the internet that you read and work with.

Home Page: The web site your computer goes to each time you start the internet. You can change this home page to a different web site.

Favorites: If there is a web site you want to return to often, you can save it as a "Favorite" (in Firefox it is called "Bookmark"). To save as a "Favorite" in Internet Explorer, press and hold down the Alt Key and tap the letter "a" one time. Tap the Enter Key two times and the site is saved as a "Favorite." To open a "Favorite" web site, press and hold down the Alt Key and tap the letter "a." Release these keys. Down arrow to the web site you want and tap the Enter Key one time.

Refresh the Screen: There will be times when your web page screen will "freeze" or not correctly work. One method for fixing this is to tap the F5 Key one time to refresh (also called redraw) the web page on the screen. What this actually does is reload (restart) the web page you are on.

Text: The words on a web page that are not links or other items. Text is written in words, sentences and paragraphs. Insert F5 reformats documents to make them more accessible with speech. For example, if you open a page with a columned document, you can press and hold down the Insert Key and tap the F5 Key one time to make that document more readable with a screenreader. If you are using the JAWS screenreader you can read all of the text on a page by pressing and holding down the insert key and tapping the down arrow key one time. When you release these keys the JAWS screenreader will begin reading, and read to the bottom of the page. If you are using the JAWS screenreader and what to move forward paragraph by paragraph, tap the letter "p." If you want to move backward paragraph by paragraph, press and hold down the Shift Key and tap the letter "p." Some common universal key commands for moving through a web page are as follows. **Control Home:** Takes you to the fop of a document, spreadsheet, or web page. Press and hold down the Control Key and tap the Home Key (top middle on the 6 Pac). **Home:** Tap the "Home" Key on the 6 Pac (top middle) to go to the beginning of a line. **End:** Tap the "End" key on the 6 Pac (bottom middle) to go to the end of a line. **Control Down Arrow:** Press and hold down

the Control Key and tap the down arrow key one time to move to the next (forward) paragraph. **Control Up Arrow:** Press and hold down the Control Key and tap the up arrow key one time to move up (backwards) one paragraph. **Control End:** Takes you to the end of a document, spreadsheet, or web page. Press and hold down the Control Key and tap the End Key (bottom middle on the 6 Pac). Tap the right arrow key to move forward letter by letter, or the left arrow key to move backward letter by letter. Press and hold down the Control Key and tap the right arrow key again and again to move forward word by word, or Control left arrow to move backward word by word. If you are using the JAWS screenreader you can press and hold down the Insert Key and tap the number 5 on the numeric keypad to hear the word, or hold down the Insert Key and tap the 5 twice quickly to hear the word spelled. If you have a word spelled, remember to press Insert 5 one more time to go out of spell mode. You can have a letter spoken phonetically by tapping the 5 on the numeric keypad twice quickly.

Frames: Frames are areas on a web page that can have text, links, small forms, or any other type of item you would find on a web page. If you are using the JAWS screenreader you can press and hold down the Insert Key and tap the F9 Key to list all of the frames on a web page. You can use Control Tab to move forward through the frames on a web page, and Control Shift Tab to move backwards through the frames on a web page.

Links: You may hear this referred to as a "hyperlink," are the items on a web page that you can tap the Enter Key on to go to another web page. Sometimes a link will take you to an entirely different web site, or it will open another page on the web site you are on. For example, if you are on the web site for your bank and tap Enter on the link that says "Check My Balance," you will be taken to your account balance sheet, which is actually another web page on your bank web site. If you use the Google search engine and tap Enter on a link, you will be taken to an entirely different web site. With any screenreader you can tap the Tab Key to move forward through the links on a web page, or press and hold down the Shift Key and tap the Tab Key to move backwards through the links on the web page. If you are using the JAWS screenreader you can press and hold down the I**nsert Key and tap the F7 Key to list the links on a web page.** After you do this use your down and up arrow keys to find the link you want, and then tap the Enter Key one time to activate or open that link. **If you are using the JAWS screenreader, tap the letter "u" to move through unvisited links (links you have not opened before), or Shift "u" to move backwards through the unvisited links. Tap the "v" key to move through visited links (links you have opened before), and Shift "v" to move backwards through visited links.**

Headings or Headers: These are like links, with the difference being there are fewer of them, and they act like the chapter names in a book. If you go to a header, there will be

links under that header. The links act as sections in a chapter of a book. So, you have the header (chapter name) and the links (sections of the chapter). There can be a few headers (sometimes no header), or many headers on a web page. **The Tab and Shift Tab key commands will treat the headers as links. If you are using the JAWS screenreader tap the letter "h" to move forward through the headers, and press and hold down the Shift Key and tap the letter "h" to move backwards through the headers on a web page.** After you tap the Enter Key on a header, press and hold down the Insert Key and tap the F7 Key one time to list the links under the header you have selected.

Lists: A list is simply a list of items on a page. It might be a basic list, a bulleted list, or any other type of list. **If you are using the JAWS screenreader, tap the letter "l" to move forward through the lists and Shift "l" to move backwards through the lists on a page.** When you hear or see a list you want to read, use your down or up arrow to read the items on the list. You can also tap the letter "i" to move forward through the items on a list, or Shift "i" to move backwards through the items on a list.

Buttons: Are items such as "OK," "Submit," "Save," or "Cancel," "Open," or "Close." There are many different names for buttons but they all fall into a few main categories. Buttons can be used to open and close, save or cancel, go to another web page, or submit. In the case of "Submit," this is a button that can be used to submit a form, such as an application or purchase you have made. Tap the spacebar on a button to activate it. You can tab through the links and buttons on a web page, or press and hold down the Shift Key and tap the tab to move backwards through the links and buttons on a web page. This takes a long time. If you are using the JAWS screenreader, simply **tap the letter "b" to move forward through the buttons on a web page, or press and hold down the Shift Key and tap the letter "b" to move backwards through the buttons on a web page.** If you are using ZoomText you can click the "Web" button on the ZoomText panel to list the items on a web page.

Edit Boxes: These are sometimes called other names such as "Form Fields," or "Form Controls." An Edit Box is a place that looks like a rectangular box, where you type specific information. For example, if you are filling out a personal information form, there will be an Edit Box for your "Last Name," one for your "First Name," one for your "Street Address," and many others. You can tap the Tab Key to move forward, from box to box, or press and hold down the Shift Key and tap the Tab Key to move backward from box to box. If you are filling out a form **do not press the Enter Key during the process!** Simply Tab and type your way through the form, and then tap the spacebar on the "Submit," or "OK" button at the end of the form. If you are using the JAWS screenreader you can Tab and Shift Tab to move forward or backwards through the edit boxes, or you can **tap either the letter "e" or the letter "f" to move forward.**

You can press and hold down the Sift Key and tap either the letter "e" or the letter "f" to move backwards through the edit boxes. The fastest way to hear what edit boxes are on a form, if you are using the JAWS screenreader, is to press and hold down the Shift Key and tap the F5 Key one time. Release these keys and you will have a list of edit boxes that you can up and down arrow through. If you tap the Enter Key on any of these items you will be placed in that edit box on the form, in "Forms Mode," ready to type. If you are tabbing through a form and hear or see an edit box you want to type in, tap the Enter Key one time to go into "Forms Mode," in order to be able to type. Tap the + (plus) Key one time to go out of "Forms Mode."

Combo Boxes: These are also referred to as a "Jump Menu."These look like edit boxes, but are different. These are the boxes that have the drop down lists, such as the list of the abbreviations for each of the fifty states. **Tap the letter "c" to move forward, and Shift "c" to move backwards through the combo boxes.** To activate the combo box, if you are using the JAWS screenreader, tap the Enter Key one time to go into forms mode, press and hold down the Alt Key and tap the down arrow key one time. The list will drop down (open) and you can down or up arrow to what you need. Insert up arrow will close the combo box. Another way to handle the combo box is to tap the first letter of the name or item you want on the list until you hear or see it. For example, if you want "IN" for Indiana, tap the letter "I" until you hear or see "IN." A third way to move through the list of the combo box is to sown arrow through it. If you are not sure if you are in forms mode, tap the + (plus) Key one time to be sure you are out of forms mode, and then tap the Enter Key one time, when you are on the combo box, to go into forms mode.

Check Boxes: These generally look list the small outline of a box. Check boxes are use to place checkmarks in showing that you have picked some item on a web page. **Tap the letter "x" to move forward, and Shift "x" to move backwards. Tap the spacebar to check or uncheck a check box.** The item might be on a form on the internet that lets you check boxes for interests you have. For example, there are internet based surveys that attempt to find out what kind of uses you have for a computer program, or some other item. There might be a box for "Beginning User," "Intermediate User," and "Advanced User." You check the box on the survey that applies to you.

Radio Buttons: These buttons come in groups such as "Yes" "No," or "Male" "Female." Tap the letter "r" to move forward, and Shift "r" to move backwards. When you move to a specific group of radio buttons, **use your arrow key to go to the one you want check, and then tab to the next item on the page.** The radio button you arrowed to is marked.

Slider Bar: A slider bar lets you do things like adjust the volume or speed of sound on the computer. It allows you to make the mouse pointer slower or faster. There are many uses for the slider bar. If you have a left to right slider bar, use the left or right arrow key to adjust it (i.e. volume or speed). If you have an up and down slider bar like the ones on the volume settings for your computer, use the up arrow to make the sound louder, or the down arrow to make the sound softer.

Form: Insert F5 lists all of the form controls and contents on a page, if you are using the JAWS screenreader. Examples of forms might be an online job application, an application to buy something, or an online survey. Forms can have some or all of the following elements. Buttons, edit boxes, combo boxes, check boxes, and radio buttons. Remember, tapping the Enter Key one time puts you in forms mode in the JAWS screenreader, and the + (plus) Key takes you out of forms mode. If you are using the JAWS screenreader and want to fill out a form, you must be in forms mode. **Whenever you are filling out a form, with or without adaptive software such as JAWS or ZoomText, do not tap the Enter Key until you have finished the form. You want to tab, type, use the spacebar, or arrow keys, but not the Enter Key until you are on the button that submits the form.** If you do tap Enter in the middle of a form it will be instantly submitted. You can try the Alt left arrow key combination to move back, but this will not work in many cases.

Tables: A table is a group of cells that are connected in row and columns. A cell is one small area of the table that can have text, numbers, a link, an edit box, or other types of things. A column is a group of cells that are connected that go from the top cell down to a bottom cell. There might be a few cells, or many cells. A row of cells starts from the first cell and goes to the right. There might be a few cells going from left to right, or many cells. In each table there is a top left cell, or the beginning of the table, and an ending cell that is at the bottom right. There can be many cells in a table, or just a few. Imagine a piece of grid paper from your math class and that is how a table is laid out. **If you are using the JAWS screenreader, you can tap the letter "t" on a web page to jump to the first table. Tap the letter "t" again and you will be taken to the next table. Press and hold down the Shift Key and tap the letter "t" and you will move backwards one table. Following are JAWS screenreader commands for reading a table. Control Alt and numeric keypad 5 will read the cell you are in. Insert Shift up arrow will read the row you are on. Insert Shift Home will read from the start of the row. Insert Shift Page Up will read to the end of the row. Insert Shift and the numeric keypad 5 will read the current column. Insert Shift End will read from the top of the column. Insert Shift Page Down will read to the bottom of the column.**

Graphics: Is some type of picture, cartoon, or picture like text on a web page. If you are using the JAWS screenreader you can tap the letter "g" to move forward through the graphics on a web page, or Shift "g" to move backwards through the graphics on a web page. Insert "g" will list all of the graphics on a web page. **If you have a graphic that you need to label for the JAWS screenreader, move to that graphic, press Insert and the F2 Key, down arrow to "Custom label," tap Enter one time, type the label, and tap Enter one more time. This may require the help of a person with sight, and practice.**

Flash: Flash can be a graphical page, where the text and pictures are all graphical. If flash is written correctly you will be able to use the web page with a screenreader. There are also flash movies. These movies have "Play," "Stop," and other buttons. Some flash movies are not accessible, and others can be hard to use. There are some flash moves that have been set up with accessibility in mind, and they do work. You will have to experiment with many flash movies to make them play.

Dialogue Boxes: A dialogue box can have many different things. You can be sure there will at least be edit boxes and buttons. There might also be check boxes, combo boxes, and lists of items such as files. Dialogue boxes can be used for logging into a web site, saving a file, and many other things. **If you are using the JAWS screenreader press and hold down the Insert Key and tap the letter "b" to read the entire dialogue box from top to bottom. Press Insert "e" to read the default button on a dialogue box. Insert Tab will repeat the spoken information. If you have a combo box, insert down arrow will open it so that you can down arrow or up arrow through the list, and Insert up arrow will close the combo box. Escape will close the dialogue box.**

Login: Is usually a small form with an edit box for your username, and edit box for your password, and a button to submit what you have written. **If you are using the JAWS screenreader you must be in "forms mode" to use the login form.** Login forms can be different, depending on the web site. There are some logins where you type your username in the "Username" edit box, tap Enter, are taken to a second page where you type your password in the "Password" edit box, and then tap Enter. Most login forms have the username, the password, and the submit button all together.

Username: A "username" is a name you make up for an account. Sometimes this might be your email address. It can be a name you create for a specific account. It might be a word with a number attached.

Password: Is a group of letters, numbers, or both letters and numbers that you create to use with your "username" to access an account or web site. You might have actual

words and numbers, or a random series of letters and numbers. Make sure you remember (maybe write down) you password for an account. Most web sites have you fill out a reminder box just in case you lose or forget your password.

Go back a web page: Press and hold down the Alt Key and tap the left arrow key one time to go back one web page. If you have a number of web pages open, and are not on the last web page you opened, press and hold down the Alt Key and tap the right arrow key one time to go forward one web page.