Basic Computing

MANKATO COMPUTER TECHNOLOGY

TOWER

A form of computer that has been around for quite a while is a tower. A tower is one style of desktop computer that, because of its size, people keep on or near a table or desk.

Compact Desktop

⬚Compact desktops, which have the volume of a shoebox, and can sit be kept on your desktop. Check into a compact desktop, such as Intel's NCU, if you like your computer small but non portable.

All In One

Another form of desktop computer is called an all-in-one. With this type of computer, all the brains of the computer are stored in a casing behind the monitor, so the entire computer sits on your desk or table.

Laptop

A laptop is portable, weighing anywhere from 2 to 8 pounds. The monitor, keyboard, and mouse (in the form of a flat touchpad) are built into the laptop.

Tablet

▶a thin, flat <u>mobile computer</u> with a <u>touchscreen display</u>, which is usually in color, processing <u>circuitry</u>, and a rechargeable <u>battery</u> in a single device. Tablets often come equipped with sensors, including <u>digital cameras</u>, a <u>microphone</u>, and an <u>accelerometer</u>, so that images on screens are always displayed upright. The touchscreen display uses the recognition of finger or stylus <u>gestures</u> to replace the <u>mouse</u>, <u>trackpad</u> and <u>keyboard</u> used in <u>laptops</u>.

Features

Memory	Processor	Battery Life
Keyboard	Screen	Cd/DVD Drive
Type of Hard Drive	Wireless Capability	Included Software
Manufacturer Support	Graphics and Sound Cards	Webcam

Using a Mouse

When you move the mouse it moves a pointer or 'cursor' on the screen.

The cursor will change shape depending on what you are doing.

An arrow lets you select things and move them around.

A hand lets you open a link on the internet.

An hourglass (if using Windows Vista this will appear as a revolving circle) is asking you to wait while the computer does a task.

Using a mouse

You can use your mouse to do a variety of tasks – select things, open things and move things.

To select things, move your cursor over the item, click once with the left button and let go.

To open things click twice on the left button – think 'knock, knock' on a door.

To move things, you need to 'drag and drop'. Hold down the left button as you 'drag' the mouse along. Let go of the button once you have positioned the item where you want it.

Using a Keyboard

When you open a document or click in a box to type, you will see a flashing vertical line. This is the cursor. It tells you where you are going to start typing on the page or screen.

Press the letter keys for letters. You will notice they are laid out in a non-alphabetical order. This is called a QWERTY layout.

Press the number keys for numbers and press the symbol keys for symbols.

Pressing the Shift key lets you type capital letters and the symbols at the top of the keys.

The Shift keys are on the left and right of the keyboard, with the arrow pointing upwards.

For capital letters, press down the shift key and hold and then type the letter.

For symbols at the top of a number key, press down the shift key and then type the symbol.

You can use the Shift key to type any symbol at the top of a key.

When you let go of the Shift key you will begin to type lower case letters and numbers again.

The Caps Lock key lets you write in capital letters. To turn it on, press it once and then type. To turn it off, press it again.

Using a keyboard

Putting in spaces, moving your cursor and deleting text

The space bar puts a space between words. You press it once to put in a space.

The Tab key puts a bigger space between words. You press it once to put in a space.

The Enter key moves your cursor down a line.

The arrow keys let you move your cursor in all directions on the page or screen – up, down, left and right.

To delete your typing you need to put your cursor to the right of a word. Press the Backspace button to delete your word. The cursor will move to the left and delete as it goes.

Desktop and Icons

A desktop is what you see when the computer is turned on.

When you open programs or files they will appear on your desktop

From your desktop you can use shortcuts to find files and programs on your computer

An icon represents a file a folder or a program

Icons look different for each type of file or program

The start button lets you open programs and files on your computer

The taskbar shows which programs and folder or documents you have open

Desktop and icons

A folder stores files such as documents and pictures

When you open a folder or file by clicking it twice it's contents will appear in a window

You can use the scroll bars to move around the window

The title bar displays the name of the folder document or program

The menu bar has commands where you choose what to do with your folder document or program

The tool bar has shortcuts to the commands in the menu bar

Desktop and icons

You can have more then one window open at a time

The active window has a highlighted tile bar and is in front of the other windows

The open window are displayed as buttons on the taskbar. The active button will be a different color

To move between windows click on a window or on the button on the taskbar

To hide a window, click on the minimize button in the top right hand corner.

To bring back the window, click on its button on the taskbar.

To make a window larger and fill the screen, click on the maximize button.

To close a window click on the close button. You have now covered 'Desktop and icons'.

Using the internet

The information on the internet is contained in websites and on webpages.

To connect to the internet you need an Internet Service Provider or ISP.

Your mobile phone company, home phone, cable television provider or even your local supermarket chain can offer you an internet connection. A broadband internet connection allows you to access the internet.

The address bar has the address of the website you are on. Every website has an address, which is also called a URL.

For example, the URL for the BBC website is: www.bbc.co.uk

The www stands for World Wide Web. Most websites have this at the beginning.

The BBC is the name of the website.

The .uk shows the BBC website is in the United Kingdom.

Using a web browser

You view websites and webpages in a web browser. A web browser is simply a way of being able to view webpages.

All web browsers have similar features.

You can normally open your web browser from a shortcut on your desktop.

Two of the most popular browsers are Internet Explorer and Mozilla Firefox.
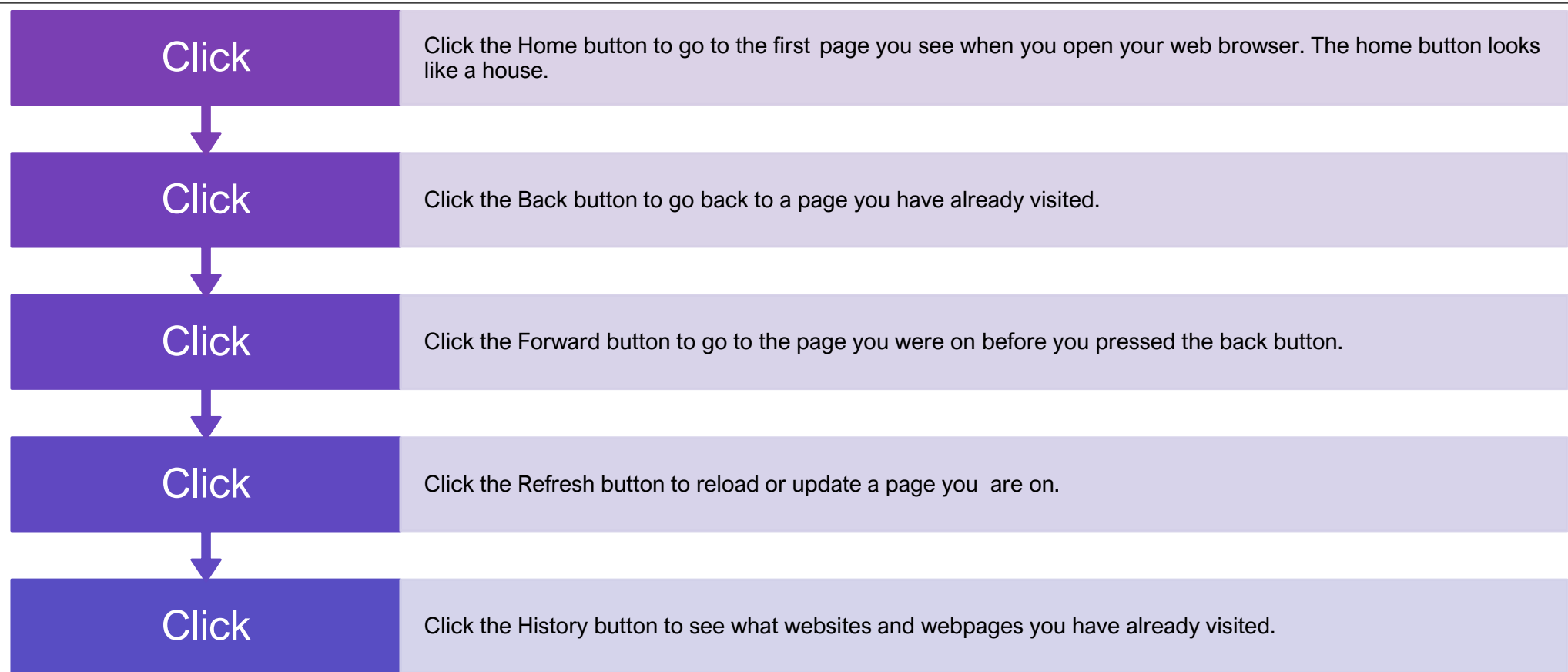
At the top of the browser you will find an address bar. To go to a website you need to put its address into the address bar.

To do this click with your cursor and type the address directly into the address bar.

If there is already an address in the address bar, click on it to highlight it and start to type.

The new address will start to appear.

A web browser also has a toolbar. You use the toolbar buttons to move around websites and update webpages.

Click	Click the Home button to go to the first page you see when you open your web browser. The home button looks like a house.
Click	Click the Back button to go back to a page you have already visited.
Click	Click the Forward button to go to the page you were on before you pressed the back button.
Click	Click the Refresh button to reload or update a page you are on.
Click	Click the History button to see what websites and webpages you have already visited.

To explore inside a website   you need   to click on links.

This is called 'browsing' or surfing the web.

A website is like a book which has a front cover   or home page, and lots of other pages, which are called webpages.

A link can take you to a webpage in the website.

A link can also take you to a different website.

A link can be text, a button or an image.

Links are highlighted so you can spot them.

Your cursor will change to a hand when it moves over a link.

Why Use a Search Engine

The internet has millions of websites and webpages.

You can search for almost anything –from recipes and local news, to history and gardening tips.

To search the internet effectively you need a search engine.

A search engine will scan through thousands of websites and webpages on the internet and collect and organize the information it thinks is most relevant to you.

Some of the most popular search engines are:

Google www.google.com

Yahoo www.yahoo.com

Bing www.bing.com

Opening and using a search engine

To use a search engine, for example Internet Explorer or Mozilla Firefox, you need to open your web browser

Type in the address of the search engine you want to use in the address bar

Click the arrow key on the address bar or press the enter key on the keyboard. This will take you to the search engine

The search engine has a search box or search field

To search you type key words into the search box and press the search button

Key words are words that describe what you are looking for in the most simple and direct way, for example "growing tomatoes"

The result from your search will appear as a list of websites and links. The most popular or relevant will be at the top of the list

To visit a site, click on a link

Making your search better

You can make your searching more effective by following a few handy tips:

Use keywords not full sentences or questions.   For example, instead of typing "I need tips for growing tomatoes" simply type "growing tomatoes"

If you can't find what you want, try to use different words or a different way of expressing it

Practice putting key words into the search box and pressing the search button

A list of search results will appear, with the most popular websites near the top of the list

To view a website, simply click on the link

Jargon Buster

Address Book Part of your email software where you store details of your 'friends and contacts' email addresses so you don't have to remember them!

Anti-virus Anti-virus software helps protect your computer from viruses.

Application Another word for computer program. For example, Word, which is used for creating documents is a word processing application. Archive The place on a website where you find old articles, stories etc.

Attachment A file which is 'attached' and sent with a standard text email message. Often photographs or Word documents are attached to emails.

Jargon

Backup A technical term for copying files onto disk or CD-ROM for safe keeping so that they are kept in more than one place.

Bcc Means Blind carbon copy. The Bcc box allows you to send an email to more than one person but their email addresses are hidden from other recipients.

Broadband A permanent high-speed internet connection. It receives digital information at about 100 times faster than a dial-up modem and is "always-on".

Browser A program you use to view web pages and 'browse' websites. Internet Explorer and Mozilla Firefox are two of the most popular browsers.

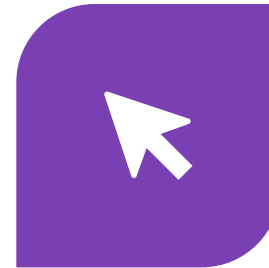Bugs Errors in a piece of software or web page that can make it break or work strangely.

Jargon

CC TYPING AN EMAIL ADDRESS OR STRING OF EMAIL ADDRESSES IN THE 'CC' BOX WILL SEND YOUR MAIL TO THOSE ADDITIONAL ADDRESSES AS WELL AS THE MAIN RECIPIENT.
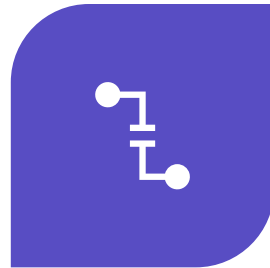
CRASH WHEN YOUR COMPUTER TEMPORARILY STOPS WORKING. IT MAY PAUSE OR 'FREEZE' UP, OR TELL YOU TO RESTART OR QUIT.

CURSOR THE FLASHING VERTICAL LINE ON THE SCREEN THAT SHOWS YOU WHERE YOU ARE AND WHERE THE NEXT CHARACTER YOU TYPE WILL APPEAR.

CUT AND PASTE SELECTING TEXT, IMAGES OR FILES AND DELETING THEM FROM ONE PLACE WHILE PUTTING THEM IN ANOTHER .

Jargon

Digital Cameras A camera that takes photographs and stores them on disks or smart cards rather than on film. The photos can then be downloaded onto a computer where the images can be printed, put on a web page or emailed.

Driver Software which runs hardware attached to your computer like a modem, printer or scanner. New hardware normally comes with a CD containing the necessary drivers to install on your computer.

Download Getting a file onto your computer from another computer on the internet.

Drag and drop Clicking on an icon or selection, holding the mouse button down and moving the mouse to 'drag' the selection to a new location. When the mouse button is released the item is 'dropped'.

Jargon

email Electronic mail. Messages (sometimes with attachments) sent over the internet from one email address to another.

error message A 'complaint' by the computer that something has gone wrong, maybe including an 'error code'.

FAQ Frequently Asked Questions. A list of standard answers to questions which newcomers to a topic or website may have.

File Data stored on a disk. There are two types: 'program files' (with instructions that make up software applications, e.g. Word) and 'data files' (files created by you and me, e.g. a letter or photo).
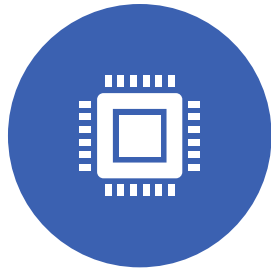
Firewall A program which sits between your computer and the internet and watches for hacking, viruses or unapproved data transfer.

Flash A plug-in application you download which allows your browser to show animations.
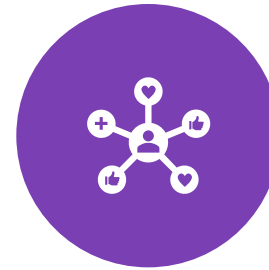
Jargon

HACKING UNAUTHORIZED ACCESS TO A COMPUTER, ITS FILES AND PROGRAMS BY A 'HACKER', A COMPUTER EXPERT WHO CAN BREAK THROUGH ITS SECURITY.

HARD DRIVE/HARD DISK THE PLACE INSIDE YOUR COMPUTER WHERE YOU SAVE DOCUMENTS, PICTURES, APPLICATIONS, ETC.

HOMEPAGE THE 'FRONT PAGE' OF A WEBSITE, WHERE YOU'RE TOLD WHAT'S ON THE SITE, HOW TO GET AROUND IT AND HOW TO SEARCH FOR THINGS THAT'LL INTEREST YOU.

HYPERTEXT TEXT WHICH IS ARRANGED IN A NON-LINEAR FASHION AND WHICH YOU CONTINUE READING BY CLICKING ON LINKS.

Jargon

icon A small picture which, when you click on it launches an application, program or acts like a link on the World Wide Web.

inbox The folder in your email program / webmail where you get your incoming emails.

internet Millions of computers around the world connected together by telephone lines, cables or satellites.

internet explorer One of the most popular web browsers, designed by Microsoft.

ISP Internet Service Provider. An ISP is the company that provides internet connections.

Jargon

Junk email Direct marketing sent by email rather than by the post.

Laptop A small, portable computer which can be battery operated as well as run from the mains.

Link Words or pictures you can click on which take you from somewhere (an internet page, an email message etc.) to somewhere else (another page, a picture etc.).

Logging in Using a username and password to prove your identity so that you can enter your computer or internet account.

Jargon

Macintosh/Mac A family of computers developed by Apple.

Mailbox The folder which contains a person's individual items such as an inbox, outbox, sent items, notes and calendar.

Memory The storage and thinking parts of your computer. More storage memory on your hard disk (ROM) means you can save more files and more thinking memory (RAM) means your computer can perform more complex tasks quicker.

Monitor The display screen on your computer.

Jargon

Offline Describes when your computer is not connected to the internet.

Online Describes when your computer is connected to the internet.

Password A series of letters, numbers and characters that you enter to get into your computer, internet connection, email or websites that you are registered with.

Refresh/Reload The button that you use to download a web page again. In Internet Explorer it's called "Refresh" and in Mozilla Firefox "Reload". You should press this button if for some reason a web page appears not to have loaded correctly.

Jargon

register Some websites ask you to give your name, email address and other personal information in order to view pages. This is called registering.

search engine A search engine is usually a website which allows you to search the internet for information. The search engine lists results that relate to your key words.

Software Any programs such as word processors, email applications or internet browsers.

SPAM Junk email sent to many people at once, usually involving advertising or offering services. SPAM is very deeply frowned upon by most internet users, and where it involves advertising or a false return address it is particularly disliked.

Jargon

URL Stands for uniform resource Locator, the technical term for the address of a website or document on the web (e.g. www.bbc.co.uk).
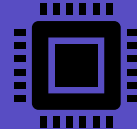
username A series of letters and numbers you type into your computer, email account or other computer network service to tell it who you are.

Virus Pieces of code that are designed to reproduce and damage data or system performance. There are thousands of viruses and the numbers keep growing.

Web browser Software which allows you to surf the internet.

Key or Keystroke Combination	Effect
Ctrl+X	Cuts the selected text or object
Ctrl+C	Copies the selected text or object
Ctrl+V	Pastes copied or cut text or object
Ctrl+Z	Undoes the previous action
Alt+Tab	Switches between currently open app
Windows Key	Displays the Start menu
Win+S	Opens Cortana
Win+C	Opens Cortana in Listening mode
Win+I	Displays the Settings window
Win+L	Displays the Lock screen
Win+X	Display the Desktop menu
Win+A	Displays the Action Center
Win+E	Displays File Explorer
Win+Tab	Displays Task View

10 OR SO WINDOWS KEYSTROKE SHORTCUTS

Use these Windows keystroke shortcuts to handle common activities, such as cutting and pasting text, quickly and easily, or to open key windows.

Computer Tips

Set up a password: By assigning a password to your Windows user account, you may prevent people from accessing your files and personal data.

Protect your laptop from damage: If you have a laptop invest in a good case for your laptop to protect it from damage when travelling. Also, get a screen protector, which is a thin sheet of plastic that you place across your screen to prevent scratches.

Consider using a picture password: If your computer or laptop is in a spot where other people surround you, consider using a picture password, which is almost impossible for people to get past. Also be aware that using a pin rather than a password is probably the least secure way to go because it's so short and made up entirely of numbers.

Computer Maintenance: You need to perform some basic maintenance on your computer to keep it running in top shape. Here's some advice to keep your computer secure and performing optimally:

Windows Firewall: Turn on the Windows Firewall feature to stop people and programs from downloading malicious code and viruses to your computer from the Internet.

Antivirus software: You can use antivirus software such as Windows Defender, which comes with all Windows 10 computers, or a third-party antivirus program such as MacAfee, to scan your computer and remove viruses.

Use System Restore: You can create a System Restore Point to save current settings and revert to those settings if your computer begins having problems. This can happen after installing a new program or driver for hardware.

Optimize your hard drive: Optimizing your hard drive cleans out any damaged or obsolete files to improve your computer's performance.

Battery life: If you have a laptop or tablet, you should be aware that all batteries wear out and your computer's is no different. If your battery doesn't hold a charge as long as it used to, consider buying a replacement battery from the manufacturer.

Perform a Disk Cleanup: Use the Disk Cleanup feature to free up some disk space on your hard drive. This helps your computer perform better.