



# PERSONAL COMPUTERS

## WHAT CAN YOU DO WITH A COMPUTER?



# THE COMPUTER: FOR YOUNG AND OLD

- ✘ Not Just For Nerds Or Young People
- ✘ Shop On-Line (Amazon, eBay, etc.)
- ✘ Send E-mails To Far-away Friends Or Nearby Relatives
- ✘ Look Up What Time The New PBS Miniseries Comes On This Evening
- ✘ Find Information On The History Of Amsterdam, Museum Collections, And Other Points Of Interest
- ✘ Buy A Plane Ticket, Reserve A Hotel Room, Or Book A Complete Vacation Package
- ✘ View, Edit, And Print Out Your Vacation Photos
- ✘ Play Bridge, Chess, Or Solitaire
- ✘ Incorporate Drawings Or Photos You've Created Into Your Own Cards And Posters



# WHO'S AFRAID OF THE COMPUTER?

- ✘ Computers Getting Easier And Easier To Use
- ✘ Twenty Years Ago, User Had To Type All Kinds Of Commands To Get Computer To Do Something
  - No Longer Necessary
- ✘ Today, Operate The Computer With Just Few Buttons
- ✘ Look Up Information, Send Messages, Play Games: All In Blink Of An Eye
- ✘ If You Get Stuck, Let Computer Give You Pointers
- ✘ Computers And People Getting Better At Understanding Each Other
- ✘ Computers Have Enormous Number Of Features
- ✘ Don't Have To Learn Everything To Understand How Computer Works
- ✘ Can Get Started On Computer Right Away
- ✘ Want Even More Help, Courses Available – Like This One!!



# A MODERN TYPEWRITER

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- ✘ Word Processor – Probably Most Widely Used Computer Application
- ✘ Use To Create, Edit And Format Text To Be Stored, Printed Or Sent As E-mail
- ✘ Display Text On Screen And Print Onto Paper
- ✘ Format Text And Pages
- ✘ Support Large Variety Of Fonts, Or Typefaces
- ✘ Change Size And Color Of Text
- ✘ Handier Than A Typewriter
  - + Text Typed With Keyboard Appears Directly On Screen
  - + Just Type In New Text – No Wasting Paper Or Using Correction Fluid
  - + Change To Different Font Or Formatting
  - + Letters, Reports, And Other Texts Stored On Computer
  - + Can Be Edited, Reused, Copied, Reformatted



# SURFING THE INTERNET

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- ✘ Almost Every Commercial, Radio Or TV, You Hear Go To [WWW.Something.com](http://WWW.Something.com)
- ✘ WWW Stands For World Wide Web
- ✘ Collection Of Information Viewed On Computer Screen
- ✘ Contain Text And Pictures, Sometimes Music, Films
- ✘ Many Pages Point, Or Link, To Other Pages, Forming An Ever-increasing, Literal Web Of Information
- ✘ Set Of Pages That Belong Together Is A Website, Or Site
- ✘ Surfing – Term For Viewing Web Pages On The Internet
- ✘ Start On One Page – Surf *Endlessly* By Clicking On “Links”
- ✘ Browser Used To Surf The Internet (Internet Explorer), Standard On All Computers
- ✘ If You Want To Surf The Internet, Need An Internet Connection



# THE ELECTRONIC MAILMAN

- ✘ Fast And Inexpensive
  - + Send Someone Letter Or A Postcard, Arrives Next Day At Earliest.
- ✘ E-mail Message, Arrives Within Minutes – Even If Sent To Other Country
  - + Costs Almost “Nothing” To Send E-mail
  - + Assumes You Have Computer And Internet Connection
- ✘ Very Convenient
  - + Suppose You’d Like To Contact Friend In Another Country
  - + If You Call, Have To Take Time Difference Into Account, Hope They’re Available
  - + Potential Poor Connection And Cost Of Making Long Distance Call
  - + Send An E-mail Whenever, Friend Can Read When Connected To Internet
  - + Friend Can Reply Immediately
  - + Check Your E-mail, Read Response
- ✘ Subscribe To An Internet Service Provider, Receive An E-mail Address
  - + Like [elkahirpclass1@hotmail.com](mailto:elkahirpclass1@hotmail.com) Or [YourName@mchsi.com](mailto:YourName@mchsi.com), etc.



# MANAGING YOUR FINANCES

- ✘ No Matter What Bank You Use, You Can Bank Online
- ✘ Every Bank Offers Managing Bank Affairs On-line
  - + View Current Accounts Balances, Pay Bills
  - + Transfer Money Between Accounts Or Someone Else's Account
  - + Don't Have To Send Paper Checks By Mail Anymore: Issue Them Online
- ✘ 24 Hours A Day!
- ✘ Need Internet Connection And A Contract With Bank For Online Banking
- ✘ Most Banks Provide Online Banking Services Free Of Charge
- ✘ Apply And Bank Will Provide User ID And Password (Keep Private!)
- ✘ Use ID And Password To Identify When Connecting To Bank's Website
  - + Lets Bank Verify You Are Who You Say You Are
  - + Secure, Encrypted Connection
  - + Keeps Information Safe
- ✘ Many Banks Offer Additional Services, Such As Electronic Investing, Online Mortgage, Insurance Applications, Etc



# WORKING WITH PHOTOS

- ✘ Different Ways To Manage Photos On Computer
- ✘ Digital Camera – Transfer Photos From Camera To Computer
- ✘ No Digital Camera, Want To Show Old Photos On Computer – Use Scanner
  - + Make Digital Version Of Photos
  - + Photos Converted Into Files Viewable On Computer
- ✘ Show Photos To Others - Display On Computer Screen, Or TV Set
- ✘ Print Favorite Vacation Shots As Regular Photos, Or Posters!
- ✘ Computer Programs For Editing Photos – Some Features Included in XP, Vista, & Windows 7
  - + Filter Out Red Eyes, Increase Color Contrast
  - + Remove Unwanted Elements
  - + Restore Old Photos
- ✘ Internet Is Handy Tool For Photos
  - + Place Photo Collection On The Internet
  - + Order Prints Of Your Digital Photos – Usually Cheaper Than Printing



# SEARCHING FOR YOUR ANCESTORS

- ✘ Anyone Wanting To Research Family Had To Use Archives To Track Down Material
- ✘ With Computer And Internet, Do Much Of This Work At Home On PC
- ✘ Search For Information On The Internet By Typing In Names, Places, Or Other Leads
- ✘ Not Alone In Researching Your Family Tree – Countless Web Pages To Help
- ✘ Experienced Researchers Offer Search Tips Online
- ✘ Exchange Research With Relatives Over E-mail
- ✘ Many Archives And Files Containing Names You Can Consult On The Internet
- ✘ Data Has To Be Organized, Need To Know What's Missing And Where To Look
- ✘ Several Computer Programs That Can Help Organize Data



# YOUR OWN PRINTING PRESS

- ✘ Creative? – Express Yourself Using Computer
- ✘ Make Unique Greeting Card – Design With Your Own Text And Personal Photo
- ✘ Fifty Invitations For Big Party? – Don't Have To Cut, Paste, Write Fifty Times
- ✘ Using Computer, Make One Good Design, Print As Many As You Like
- ✘ No Longer Need To Address Envelopes By Hand
  - + Create And Maintain A Digital Address Book – Just A Few Clicks, Address All Your Mailings
- ✘ Send Photos Of Party To Guests Over E-mail, Or As Electronic Cards
- ✘ Create Poster From Photos, Make High-quality Print With Razor-sharp Colors
- ✘ Many Programs Available – Some “Free”



# PLAYING AND LEARNING

- ✘ Computers Already Contain Games, Some On-line
- ✘ Play Right Away
- ✘ Solitaire, Spades, Hearts, FreeCell, Or Minesweeper
- ✘ May Find It Hard To Stop – "Just One More Game"
- ✘ Playing Games On PC Is Fun, Educational
- ✘ Just Starting – Get Acquainted Using Computer By Playing
  - + Learn How To Use Mouse And Keyboard
- ✘ Plenty Of Games To Keep You Glued To Computer



# YOUR OWN MOVIE

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- ✘ In Past, Lots Of Literal Cutting And Pasting Necessary To Edit A Film
  - + Very Precise, Make A Mistake, Throw Away That Part Of Film
- ✘ Now Very Easy To Edit Just The Way You Want
- ✘ To Edit Films, Need A Well-equipped Computer
  - + Film/Videos Require Sizeable Storage And Memory
  - + Large And Fast Hard Disk, Lots Of Internal Memory, Good Graphics Card
  - + Video-editing Program
- ✘ Can Connect Either Digital Camera Or Video Camera To Computer
- ✘ Store On A CD-ROM Or A DVD



# ELECTRONIC CHATTING

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- ✘ Nothing More Than Exchanging Short Messages – Like Cell Phone “Texting”
- ✘ Use Keyboard Instead Of Voice
- ✘ Different Ways To Chat Over Internet
  - + “Chat Rooms” On Internet Where People Can Join In To Discuss Particular Topics
  - + Message Programs To Chat With One Or Many People
- ✘ Exchange Information Or Just Shoot The Breeze
- ✘ Learn More About Hobby Or Meet New People
- ✘ Disadvantage Of Open Chat Rooms, People Who Have No Business Can Also Enter
  - + Some Chat Rooms Constantly Monitored To Make Sure Stays Enjoyable
- ✘ Many Prefer To Chat One-on-One
- ✘ Need An Internet Connection In Order To Chat



# BUYING A COMPUTER

- ✘ Brand New Or Secondhand? If More Than Five Years Old, May Not Be Good Idea
  - + Computers Constantly Getting Faster, Easier To Use
  - + Newer Programs Require More Capable Computer
  - + Advantage Of A New Computer – No Quirks Yet And Will Serve You Well For Next Several Years
  - + Model With Average Price And Average Performance For Today's Standards, Probably A Good Buy
  - + Special Wishes, Like Extra-large Monitor, Laptop, Or Large Hard Disk And Extra Memory To Edit Films, Be Prepared To Spend More
  
- ✘ Service And Warranty
  - + Always Seek Advice From People Who Have A Lot Of Experience With Computers Before You Buy
  - + If New, Choose Supplier With Good Service And Favorable Warranty Terms
  - + Computer Should Serve You Well For Several Years
  - + Need Expert Support If Something Unforeseen Goes Wrong



# PARTS OF A COMPUTER

- ✘ Processor – Heart Of The Computer – Speed Measured In Megahertz (MHz) Or Gigahertz (GHz)
- ✘ Memory (RAM) – Minimum 1 to 2 Gig (New Computer), 512 Meg (Used Computer)
- ✘ Hard Drive - Stores All Programs And Files (Also Called Hard Disk)
  - + 250 GB (Gigabytes) Average Size On New Computers
  - + For Video Or Photo Editing, Need Larger Hard Drive, Or Preferably Extra One
- ✘ Graphics And Sound Card – Some Built Into Computer
  - + Graphics Connects Monitor, Sound Connects Speakers And Microphone
- ✘ Ports –USB, Firewire, Ethernet
  - + USB To Connect Printer, External Drives, Mouse, Keyboard, Web Camera, etc
  - + Firewire To Connect Digital Video Camera
  - + Ethernet To Connect To Network, Cable Or DSL Internet Connection.
- ✘ CD, DVD Or BD Drive – DVD Standard With New Computers – BD Extra Cost
  - + Use For Playing And/or Writing (Burning) CDs Or DVDs
- ✘ Price – Compare Prices In Several Stores – Consider Used Or Custom Built
  - + Prices On Slightly Older Models Lower As Newer Computers Enter Market
  - + Pay Attention To Software Included And Service And Warranty Agreements



# MONITOR

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- ✘ Two Categories: CRT And LCD
- ✘ CRT Monitor
  - + Similar To TV
  - + Former Standard With Older Computers
  - + Different Sizes, Measured Diagonally In Inches
  - + 14, 15, 17, 19 Inches And Up
  - + Pleasant Viewing Starts Around 17 Inches
- ✘ LCD Monitor
  - + Flat-screen, Less Heavy, Different Technology
  - + Significantly Better Image Quality
  - + Standard For Most New Computers
  - + Available In Wide-Screen



# MOUSE AND KEYBOARD – PRIMARY INPUT

- ✘ Mouse – Important Part Of Computer
  - + Usually Has Two Or More Buttons, Sometimes A Wheel To Scroll Through Pages On Screen
  - + Used To Select And Enter Commands
  - + Start And Close Programs, Perform Various Program Operations
- ✘ Keyboard – Looks Like Typewriter
  - + Additional Keys With Special Functions Not On Typewriter
  - + Some With Separate Buttons To Start Particular Programs Directly
    - ✘ Word, Internet Explorer, Outlook Express, etc.
    - ✘ Some To Adjust Sound
    - ✘ Some To Move Through Web Pages On Internet
- ✘ Connections – Wired & Wireless (Uses Batteries)



# CD-ROMS AND DVDS AND BLU-RAY

- ✘ CD-ROM – 700 Meg – Viewed As Successor To Floppy Disk
  - + Similar To Music CD
  - + Floppy Capacity Too Small – CD Capacity 500 Times Greater Than Floppy
  - + Most Computers Have CD-ROM Player, Some With CD-ROM Burner, Can Read And Write CD-ROMs
  
- ✘ DVD – 4.7 Gig – Like CD-ROM, Holds 7 Times More Information Than CD
  - + DVD Reader And Burner Like CD-ROM
  - + DVD Burner Current Standard Equipment In Most New Computers
  - + Burner Useful To Put Great Deal Of Information Onto One Disc, Such As A Homemade Film
  - + DVD Burner Can Play DVDs, Can Read And Play CD-ROMs
  
- ✘ Blu-Ray – New Technology – Costly, Price Will Come Down
  - + Holds 5 To 10 Times More Information Than DVD



# PRINTER

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- ✘ Indispensable To Print Letters, Reports, Homemade Invitations, Photos, More
- ✘ Inkjet And Laser Printers
- ✘ Laser Printers Usually Found In Businesses
  - + Quality Exceptional, But Expensive
- ✘ Home Users, Inkjet Printers More Suitable
  - + Less Expensive, “Good” Color Prints Of Photos
- ✘ Quality Expressed In Dots Per Inch (DPI)
- ✘ Connections – Wired Or Wireless, Some Network-able
- ✘ Cost Is In The Ink (Or Toner), Not The Printer
- ✘ Not Necessary To Print All The Time



# SCANNER & ALL-IN-ONE DEVICE

- ✘ Scanner
  - + Imports Paper Photos/Texts Into Computer
  - + Process Similar To Copy Machine
  - + Converts Into File That Computer Can Read
  - + Not Used As Often As Printer
  - + Scanner With Reasonable Quality Not Expensive Can Be Useful
- ✘ All-in-One Device
  - + Separate Printer And Scanner May Clutter/Crowd Desk/Office
  - + Consider Printer, Scanner, Copier Combo (Some With FAX)
- ✘ Connections – Wired Or Wireless, Some Network-able



# DIGITAL PHOTOGRAPHY - 1

## ✘ Advantages

- + Immediately See Result Of Photo Just Taken
  - ✘ If Bad, Delete, Make New One, Repeat Until Satisfied
- + Save Photos To Computer Hard Drive
- + Print, Send Over E-mail, Place On Internet
- + Photos Stored On Memory Card In Camera
  - ✘ Erase After Photos Saved Onto Computer
- + Plug Digital Camera Into Computer
  - ✘ Separate Devices Transfer Memory Card Contents To Computer



# DIGITAL PHOTOGRAPHY - 2

- ✘ Which Camera Should You Buy?
  - + Choice Of Digital Camera Very Personal
  - + Should Feel Good In Your Hand
  - + Should Know How To Get Most Out Of It
  - + Many Available From Well-known Manufacturers
  - + Image Quality For Digital Cameras In Megapixels (Resolution Or Sharpness Of Photos)
    - ✘ Available From 1 To 12 Megapixels - Even More
  - + Choose Image Quality For Your Needs And Cost



# DIGITAL PHOTOGRAPHY – 3

- ✘ Do You Really Need A Digital Camera?
  - + Don't Need Digital Camera To Edit Photos On Computer
  - + Put Regular Photos On CD Or DVD When Developed
  - + Scan Printed Photos With A Scanner And Import Photos To Computer
  - + BUT – Film Is Expensive, No Immediate View
  - + No Do-Overs



# WINDOWS: WHAT IS IT?

## ✘ Gives Commands

- + Computer Nothing More Than Box With Electronics
- + Only Does What You Tell It To Do, Such As Start Program Or Connect To Internet
- + Need Operating System (OS) Like Windows To Tell Computer What To Do, To Give It Commands
- + With Windows OS, Tell Computer What To Do Using The Screen By Pointing With Mouse At Program You Want To Start, For Example.
- + Windows Already Installed On Most Computers, You Can Put Computer Right To Work.



# WINDOWS VERSIONS

- ✘ Windows 95, 98, Me, 2000, XP, Vista, Or Windows 7?
  - + Every Few Years, New Version Of Windows Comes Out
  - + Each New Version Makes Computer A Little Bit “Smarter” And Sometimes A Little Easier To Use
  - + Windows 95 Came Out 1995, Big Improvement Over Previous Versions (1.0, 2.0, 3.0)
  - + Windows 98, Windows ME, Windows 2000, And XP Each A Little Better In Turn
  - + Windows XP Is Currently The Most Reliable And Stable Operating System
    - ✘ Service Pack 3 Supported By Microsoft Until June 2014
  - + Windows 7 Is The Newest Version.
    - ✘ Much More Extensive – Significant Changes To User Interface
    - ✘ Very Stable, Solves Many Issues In Vista
  - + All Newer PCs Can Use Windows XP, Vista, Or Windows 7
  - + If You Have Older Computer, May Have To Make Do With An Earlier Version Of Windows Unless Upgrade To Memory And Disk (About \$100)



# INTERNET CONNECTION

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- ✘ The Internet Service Provider – ISP
  - + Internet Connections Made Over Telephone Lines Or Cable
  - + Computers Communicate With One Another Over Telephone Or Cable Network
  - + Connect To Other Computers Through ISP
  - + ISP Provides Access To Internet Via Large Numbers Of Computers All Connected To Internet.
  - + When You Connect To One Of The ISP's Computers, You Connect To The Internet.



# INTERNET CONNECTION TYPES

- ✘ Dial-Up (Not Recommended – Extremely Slow)
  - + Two Kinds Of Subscriptions: Free And Premium.
  - + Premium Subscription, Customer Gets Improved Access And More Disk Space For Own Website.
  - + Free Internet Access Providers Make Money By Advertisements
- ✘ Cable Or DSL – RECOMMENDED!!
  - + Use Of Internet Regularly – Cable Or DSL Subscription Worthwhile
  - + Faster Connection
    - ✘ Cable (Over Cable TV Line) Or DSL (Over Telephone Line)
  - + Always Connected To The Internet, No New Connection Every Time
  - + Costs A Little More Than Subscription Over Telephone Line



# KEEPING DANGER AT BAY

- ✘ Viruses Pose A Threat
- ✘ Unwanted E-mail, Or Spam – Very Frustrating
- ✘ Protect Yourself Against These Dangers.
- ✘ What Is A Virus?
  - + Computers Can Contract A Virus.
  - + Don't Just Suddenly Develop: Written By Programmers.
  - + Virus Is A File That Ends Up On Your Computer And Can Spread To Other Computers, Usually Via E-mail Or Malicious Website
  - + Sometimes Virus Inflicts Damage: May Delete Files, Cause Computer To Lock Up.
  - + Take Steps To Ensure Your Computer Doesn't Get A Virus.



# VIRUS PROTECTION

## ✘ Protection

- + Use Of Internet Often, Sending Lots Of E-mails, Good Chance Computer Will Catch A Virus.
- + Virus Scanners Protect Computer From Viruses
- + Inspect All Files On Computer And Delete Any Viruses Found
- + Regularly Update Virus Lists – Protected Against The Newest Viruses
- + Use Virus Scanner And Keep Up To Date
- + Never Open E-mail Attachments From Strangers



# SPAM

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- ✘ In News A Lot Lately
- ✘ Unwanted Advertisements Sent To Large Numbers Of People In E-mail Messages
- ✘ Doesn't Do Damage
- ✘ Frustrating , Unwanted E-mail On Daily Basis
- ✘ Protect Yourself Against Spam – Special Programs For Repelling Spam
- ✘ Some ISPs Use Programs To Keep Viruses And Spam At Bay