Notes 3 – Computer Software

⊞ **Software**

➢ Specific _____ _____ which enable a computer to perform specific tasks. Software functions off of human and computer input, or the 0's and 1's of the binary code.

➢ Software cannot be seen or touched and so _____ _____.

⊞ **System Software**

➢ Computer software _____ _____ _____ the computer _____ and to provide _____ maintain a platform for running _____ _____.

➢ System software includes:

  o The computer BIOS and device firmware

  o The operating system

  o Utility software

➢ System software is essential for a computer to function, and usually comes built-in or pre-installed when you purchase a computer – You _____ want to accidently _____ system software.

⊞ **Terminology**

➢ Firmware

  o Provides the _____ _____ for the device. Most computer peripherals are themselves special-purpose computers and have firmware _____ internally.

  o These software instructions are usually never updated or changed.

➢ The Basic Input/Output System (BIOS)

  o The _____ _____ run by a PC when powered on.

  o The fundamental purposes of the BIOS are to _____ and _____ the system hardware _____, and to _____ an _____ system from a mass memory device.

  o The BIOS also provides a consistent way for application programs and operating systems to interact with hardware, the keyboard, display, and other input/output devices.

➢ Utility Software

  o _____ to analyze, configure, optimize and maintain the computer.

➢ Device Drivers

  o A device driver simplifies programming by acting as a translator between a hardware device and the applications or operating systems that use it.

⊞ **Boot Process**

➢ The boot process is initiated by the BIOS, and is the _____ _____ _____ that occur between the time a computer is powered on, to the time an operating system is loaded and takes control.

  o Events and Purposes of the Boot Program

    ▪ Loads from ROM memory

Notes 3 – Computer Software

- Performs a diagnostic test to ensure everything is working properly.
- _____ connected peripheral _____.
- Checks configuration and customization.
- _____ operation _____.

▤ **Operating System Software**

➢ _____ _____ for all activities that take place within a computer; primary purpose is to help the computer system monitor itself in order to function efficiently.

➢ Interacts with application software, device drivers, and hardware to manage a computer's resources.

➢ Ensures that input and output proceed in an orderly manner.

➢ Examples

- o Microsoft Windows, Mac OS, Linux, and Unix

▤ **Command Line Interface**

➢ _____ based operating system. To interact with this system you type commands to perform specific tasks.

▤ **GUI (Graphical User Interface)**

➢ A type of user interface that features on-screen _____, such as menus and icons, manipulated by a mouse.

➢ Abbreviation is pronounced "gooey".

▤ **Operating System Terminology**

➢ Drive

- o A _____ on a network that is _____ _____ for the collection of data.

➢ Folder

- o The _____ or subdivision, of a drive that can contain files or other folders.

➢ Program

- o Set of detailed, step-by-step instructions that tell a computer how to solve a problem or carry out a _____.

➢ File

- o A _____ collection of _____ that exists on a storage medium. (a document file)

▤ **GUI Terminology**

➢ Menus

- o a _____ of commands presented to a computer user. A menu is used in contrast to a command-line interface, where instructions to the computer are given in the form of commands

➢ Icons

- o a _____ _____. A picture that means something, and if double clicked or accessed it will do something like open a file or start an application.

Name _____   Period _____

Notes 3 – Computer Software

⊞ **Multitasking**

➢ Running _____ _____ _____ program at a time.

➢ Making sure that the _____ and data from one area of memory _____
_____ with memory allocated for other programs.

⊞ **Application Software**

➢ Also known as applications or _____.

➢ Computer _____/_____ designed to help the user to perform productive or
specialized tasks.

⊞ **Software Types**

➢ Application software suites
➢ Astrology software
➢ Business software
➢ Communication software
➢ Computer programming tools
➢ Computer-aided
   manufacturing software
➢ Data management software
➢ Desktop publishing software
➢ Desktop widgets
➢ Digital typography
➢ Editing software
➢ Educational software

➢ Entertainment software
➢ Free application software
➢ Genealogy software
➢ Government software
➢ Graphics software
➢ Industrial software
➢ Knowledge representation
   software
➢ Language software
➢ Legal software
➢ Library and information
   science software
➢ Multimedia software

➢ Music software
➢ Personal information
   managers
➢ Religious software
➢ Science software
➢ Simulation software
➢ Software for children
➢ Spreadsheet software
➢ Stagecraft software
➢ Transport software
➢ Video games
➢ Video software
➢ Word processors

➢ File Extensions – ***Circle the ones you know***

. doc	.oog	.gif	.html	.xlsx
.docx	.bmp	.jpeg	.htm	.ppt
.pdf	.png	.mpeg	.zip	.pptx
.key	.txt	.swf	.xls	.ged

⊞ **Platform**

▣ _____ _____ and _____ of the computer system.

▣ Two popular platforms

  ▪ Windows

  ▪ Mac