

NATIONAL CERTIFICATE VOCATIONAL FUNDAMENTAL

MEMORANDUM Of ACTIVITIES

COMPUTER SKILLS LEVEL 2 THEORY

Activity 1

Group discussion

Spend 10 minutes discussing the following in a group:

1. The computer has definitely changed our lives drastically. What are the advantages involved when using computers?
2. Are there any disadvantages of using a computer?

Ask a group leader to report back. Write keywords of advantages and disadvantages in two columns on a white board as they report back.

Advantages

- Computers are fast.
- Computers are accurate. The GIGO (garbage in, garbage out) rule applies. In other words, if the operator doesn't enter the data correctly, the given information or answers will be incorrect. The computer never makes mistakes! The program or operator is usually at fault.
- One computer operator can do the work of ten other people.

Disadvantages

- Unemployment is the result of the last above-mentioned advantage. Only one out of ten people will get an opportunity as a computer operator.
- Privacy is something of the past. Personal information can be sold to advertising agencies – the reason for so much junk mail in your post box.
- Computer fraud can be a problem.

Activity 2

Peer Assessment

Identify and point out the following components in your computer system:

- Input devices
- Processing unit
- Storage device(s)
- Output devices.

Show it to the person next to you.

Assist the students when they point out the different components of the computer.

Activity 3

Choose a word from COLUMN B that matches a description in COLUMN A. Write only the letter next to the question number.

COLUMN A

1. A small external storage device.
2. To switch on the computer.
3. Unit used to measure clock speed.
4. Processed data.
5. Software that controls the running of a computer.

COLUMN B

- A. Hertz
- B. Information
- C. Flash disk or memory stick
- D. Operating system
- E. Boot

1. C
2. E
3. A
4. B
5. D

Activity 4

Multiple choice questions

Choose the correct answer from the list given with each question or statement. Encircle the correct answer.

1. The four main components of a computer are:
A Power cord, mouse, screen, keyboard
B Input devices, Central processing unit, storage devices, output devices
C Network card, USB port, diskette drive, hard drive
D Battery, Monitor, keyboard, mouse
2. The two most commonly used Input devices are:
A Screen, diskette drive
B Modem, hard drive
C Keyboard, mouse
D Printer, Screen
3. Embedded computers are found in various items. Which of the following are examples of embedded computers?
A Microwave oven
B Video machines
C ATMs
D All the examples above
4. These computers are commonly used by smaller businesses and for personal use.
A Mainframe
B Supercomputers
C Minicomputers
D Personal computers (PC's)
5. The two most commonly used Output devices are:
A Screen, diskette drive
B Modem, hard drive
C Keyboard, mouse
D Printer, Screen

1. B
2. C
3. D
4. D
5. D

Activity 5

Practical

1. Make sure that the foldable legs or supports of the keyboard are both opened.
2. Turn the keyboard over and carefully shake any dry dirt and dust out.
3. If you have an optical mouse, turn it over and make sure you know where to replace the batteries. Close the opening carefully.

Note: If you do not have an optical mouse, open the mouse at the bottom. Take out the little ball and clean the rollers. Take care not to drop and lose the little ball! Put the ball back and close the opening carefully.

Assist the students with this activity.

Activity 6

Practical

Find out how the controls on your screen work and check the settings such as brightness and contrast. Ask your teacher/lecturer to assist you.

Assist the students with this activity.

Activity 7

Research

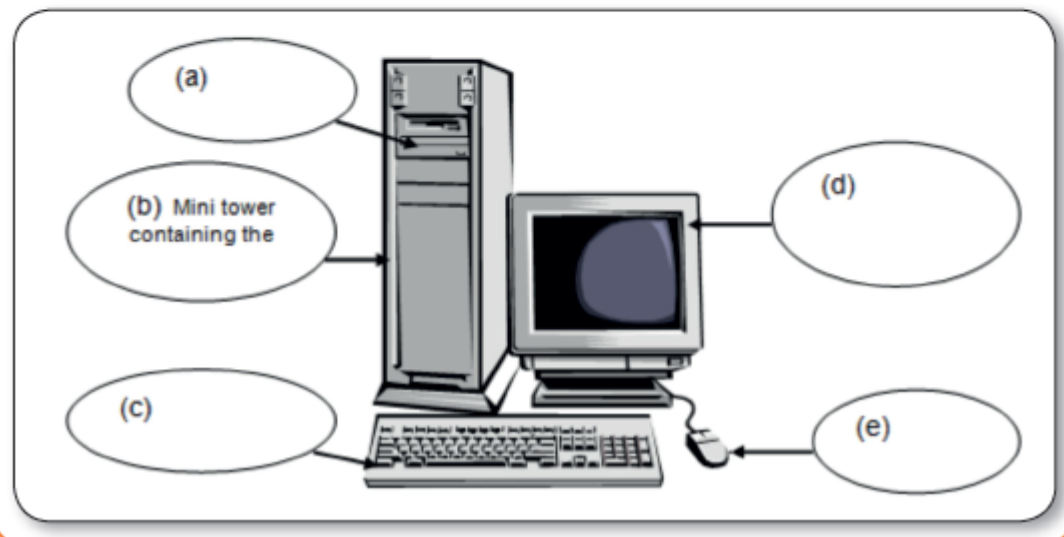
1. Find out which devices are used in your classroom.
2. Go to a big shopping centre or computer shop to see the different devices such as a touch screen and All-in-one Printer or use a brochure from a computer equipment supplier and make a study of the products.

Assist the students with this activity.

Activity 8

Questions

1. Name the different parts of the computer.
2. Describe the following terms in your own words to the person next to you:
 - 2.1 BIT
 - 2.2 BYTE
 - 2.3 Megabyte
 - 2.4 Binary system
 - 2.5 Desktop
 - 2.6 Icon
 - 2.7 Capacity
 - 2.8 ASCII codes
 - 2.9 Flash disk
 - 2.10 External hard drive



1.

- (a) CD-ROM
- (b) Mini tower containing the motherboard and hard drive
- (c) Keyboard
- (d) Screen / Monitor / Visual display Unit
- (e) Mouse

- | | | |
|-----|---------------|--|
| 2.1 | Bit | Binary digit – the smallest unit in the binary system that can be 1 or 0. |
| 2.2 | BYTE | A group of eight bits. It takes one byte of memory to store a single character. |
| 2.3 | Megabyte | A unit of memory capacity. A single Mb is 1024 kilobytes. |
| 2.4 | Binary system | The numbering system used in computers – to the ground figure of 2. |
| 2.5 | Desktop | The first screen that you see with a set of icons when Windows has finished starting up. |

2.6	Icon	A symbol or graphic representation of a file or a function used to click on. It is easily recognisable e.g. a small picture of a printer is the print icon. If you click on it, your document will be printed.
2.7	Capacity	The amount of information that can be held in a storage device.
2.8	ASCII codes	American Standard Code for Information Interchange – a set of codes to represent characters in binary form.
2.9	Flash disk	A small, external storage device, connected to the PC through a USB port – also called a Memory Stick.
2.10	External hard drive	An external storage device plugs into a computer, usually at the USB or FireWire connection. It has a big capacity and this makes it excellent for backing up large amounts of work.

Activity 9

Questions

Choose the correct word that fits the description or definition below. Write your answer next to each question number.

- | | |
|------------------|------------------------|
| a) ROM | k) Light pen |
| b) Modem | l) Daisy wheel printer |
| c) CPU | m) Operating system |
| d) Keyboard | n) Mouse |
| e) User friendly | o) RAM |
| f) Printer | p) Flash Drives |
| g) Hardware | q) Software |
| h) Peripherals | r) ALU |
| i) Bit | s) Byte |
| j) Information | t) External Hard Drive |

1. Processed data.
2. The permanent memory of the computer.
3. An external storage device used to store huge amounts of data such as a backup of the hard drive.
4. An input device used by architects and artists to enter graphics (and drawings) into the computer.

Activity 9 (continued)

5. The smallest unit in the binary system.
6. A device used to connect a computer to a telephone line.
7. A group of eight bits.
8. This printer is unable to print graphics.
9. Devices that can be connected to the computer such as printers.
10. The part of the CPU where arithmetic calculations can be done.
11. The *heart* or *brain* of the computer.
12. The set of programs controlling the computer.
13. The physical components of the computer.
14. A device that is used to a hard copy of a document.
15. These relatively small storage devices are used to save programs and files.
16. Programs used by the computer.
17. An input device used for pointing at options on the screen.
18. The memory component, which is volatile.
19. The most commonly used input device.
20. A phrase describing a program, which enables people with limited computer knowledge to follow working procedures.

1. j) Information
2. a) ROM
3. t) External Hard Drive
4. k) Light pen
5. i) Bit
6. b) Modem
7. s) Byte
8. l) Daisy wheel printer
9. h) Peripherals
10. r) ALU
11. c) CPU
12. m) Operating system
13. g) Hardware
14. f) Printer
15. p) Flash Drives
16. q) Software
17. n) Mouse
18. o) RAM
19. d) Keyboard
20. e) User friendly

Activity 10

Find out which software programs you are using.

Assist the students with this activity.

Activity 11


Practical

1. Switch on the computer. This is called a cold boot.
2. A self-test program is executed to check the functioning of the different components of the computer. Follow the on-screen instructions if any.
3. Windows 7 or the operating system installed on the computer is loaded and the Desktop is displayed on the screen.
4. If you are using a network computer, a log in window (dialog box) will appear after a while which prompts you to insert a username and password. Click Ok or press Enter.

Assist the students with this activity.

Activity 12


Practical

1. Close all documents and programs. Click the Close button  in the top right corner of the window.
2. Click: Start | Shut Down or choose Log off on the drop-down menu. See diagram.
3. The computer will automatically terminate all processes and switch off or log off.

Assist the students with this activity.

Activity 13

Practical

1. Switch on the computer and log in properly.
2. Make sure you know how to change the date and time. Close the Date and Time Settings window. Click the Close button .
3. Double-click the Word 2010 icon on the desktop to launch the word processing program. Close the program.

Assist the students with this activity.

Activity 14

Practical

1. Click the Start Button and make a study of the screen.
2. Move the mouse pointer to one of the options on the left side with an arrow pointing to the right. Click the arrow to display a sub-menu.
3. Move the mouse pointer to the right and select Help and Support.
4. The Help window will appear where you can choose an option or type a topic or question.
5. Click the Close button to exit the Help window.

Assist the students with this activity.

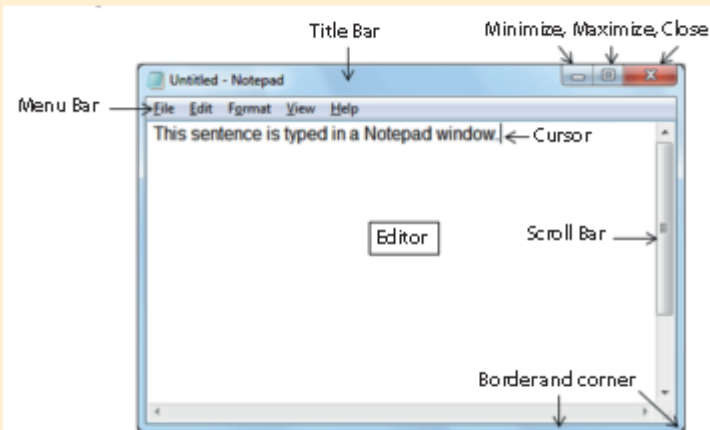
Activity 15

Practical

1. Click Start | All Programs | Accessories | Notepad.
Notepad is a basic text-editing program commonly used to view or edit text files.
A text file is a file type typically identified by the .txt file name extension.
2. Make a study of the different parts of a window.

Parts of a window

Although the contents of every window are different, most windows have the same basic parts.



Menu Bar: Contains a list of options that you can click to make a choice.

Title Bar: Displays the name of the document and the program.

Minimize: This button minimizes or hides the window and inserts a button on the taskbar to indicate that the program is still open.

Maximize: This button enlarges the window to fill the whole screen.

Close: This button is used to close the program.

Scroll bar: This allows the user to scroll the contents of the window to view information that is currently out of view.

Border: Drag the border or corner with the mouse pointer to change the size of the window.

Activity 15 (continued)

- Editor:** This is the working area where text is to be typed.
Cursor: The screen marker, usually a flashing vertical line that indicates where the next character will appear.

3. Point in a corner, keep the left mouse button in and drag the border outwards to enlarge the window.
4. Point in the Title Bar and double-click to maximize the window. Double-click the Title Bar again to restore down. Close the Notepad program.

Assist the students with this activity.

Activity 16

Choose a word from COLUMN B that matches a description in COLUMN A. Write only the letter next to the question number.

Column A

1. Restarting your computer.
2. The first screen that is visible after the computer has been fully booted.
3. The moving picture or pattern that appears on the screen after a while.
4. This is also called the wallpaper.
5. The area of the desktop that contains the Start button.

Column B

- A Screen saver
- B Hot boot
- C Taskbar
- D Desktop
- E Background
- F Cold boot
- G Backup

1. B
2. D
3. A
4. E
5. C

Activity 17

Practical

1. Open both the Word and Excel programs.
Click Start | All programs | Microsoft Office | select the appropriate program.
OR
Double-click the icons on the desktop.
OR
Click Start and determine whether these programs are listed on the left side of the screen. If so, click the program name to open.
2. Take note of the taskbar buttons. Click the buttons to switch control between the different programs.
3. Keep the Windows logo key in and use the Tab key to cycle through the open windows.
4. Keep the Alt key in and use the Tab key to cycle through the open windows.
5. Display the Word program on the screen and try out the shortcuts: Windows logo key + M and Windows logo key + Shift + M.
6. Display the Excel program on the screen. Double-click the taskbar twice to toggle between the maximized and minimized status.
7. Close both the Word and Excel programs.





Assist the students with this activity.

Activity 18

Practical

1. Activate Windows Explorer and make a study of the screen while you read the following text on Libraries.

Activity 18 (continued)

2. Let the mouse pointer hover over Libraries in the Navigation pane on the left. Folders can be closed/collapsed () or opened/expanded (). Click the button  in front of a folder to expand it and display the content in the left panel. Click the  button in front of a folder close it.

OR

Double-click a folder name in the right panel to display the contents in the right panel.

OR

Click a folder name in the left panel to display the content in the right panel.

Activity 18 (continued)

Practical

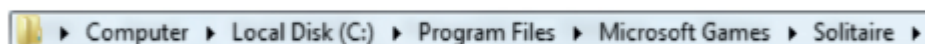
3. Double-click the Documents Library on the right side of the screen to list all the folders.
4. Close Windows Explorer.

Assist the students with this activity.

Activity 19

Practical

1. Activate Windows Explorer and open the C:\Program Files\Microsoft Games\Solitaire folder.



Have a look at the different methods of viewing: Large icons, List, etc.

2. Change the View mode to Details and sort the files according to the Date modified.
3. Select any non-adjacent files in this folder.
4. Select all the files and folders in this folder.
5. Sort the files in alphabetical order and close Windows Explorer.

Assist the students with this activity.

Activity 20

Practical

1. Activate Windows Explorer.
2. Insert a flash disk in the appropriate USB drive.
3. Activate or open any folder on C:\ and right click a file. Select **Send to:** Choose the Removable disk.
4. Activate or open the flash disk in the left panel as soon as the drive light goes off. Do you see the file?
5. Close Windows Explorer.

Assist the students with this activity.

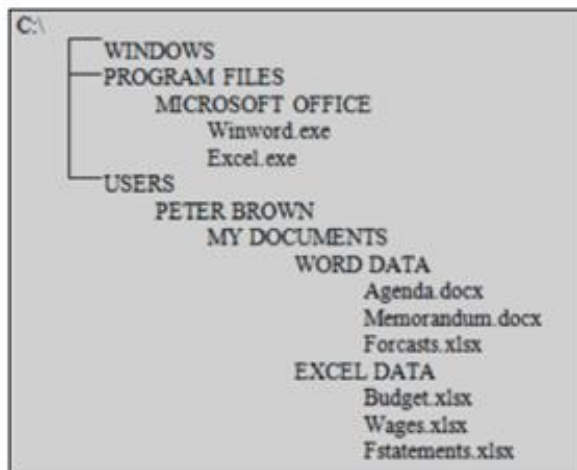
Activity 21

Practical

Choose one of the words or terms in brackets. Underline the correct answer.

1. A file is a collection of related (information or numbers), saved on a diskette or on the hard drive of the computer.
2. Windows uses (folders or text boxes) to organise related files into convenient groups.

Study the following hierarchical structure and answer the questions:



3. One of the folders created from the root is (WORD DATA or WINDOWS).
4. The sub-folder of PROGRAM FILES is (PETER BROWN or MICROSOFT OFFICE).

Activity 21 (continued)

5. The name of the executable file that will activate the WORD program is (Agenda.docx or Winword.exe).
6. The path of above-mentioned file is (C:\USERS\MY DOCUMENTS\WORD DATA or C:\PROGRAM FILES\MICROSOFT OFFICE).
7. The file (Forcasts.xlsx or Budget.xlsx) is not stored in the right folder.
8. The above-mentioned file should be stored in (WORD DATA or EXCEL DATA).
9. The two application programs on this system are (WORD and ACCESS or WORD and EXCEL).
10. To activate (Windows Explorer or Internet Explorer) click Start | All Programs | Accessories and open the appropriate browser program.

Activity 22

Practical

1. Activate Windows Explorer and open the Documents library.
2. Create a folder in My Documents. Use your initials and surname as folder name. E.g. S Cousins. This is the folder in which all your user files are going to be saved.
3. Use the Help and Support function to learn more about Windows Basics.
4. Close the Help and Support window and shut down the computer.

Assist the students with this activity.