



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?

Give the student group leaders an opportunity to report back after 10 minutes of discussion. They might come up with a few interesting points.

Advantages

- Huge increase in access to information. Not necessary to visit a library.
- Improved access to education, e-learning, You Tube video's, etc.
- Entertainment – watching video's, playing online games, using social media (Facebook, Instagram, etc)
- Improved communication via email, Skype and social media.
- Increased job opportunities, job search, online businesses, online marketing, opportunities for handicapped persons, etc.
- Online shopping is easy, choose from a wide range of suppliers and pay online by using EFT (electronic funds transfer).
- Free downloads (freeware)

Disadvantages

- Health problems like backache and eye strain as a result of too many hours spent in front of the computer, may develop.
- Productivity lower because employees spend too much time reading private emails, surfing the Internet or using social media like Facebook.
- Fraud, scams, phishing, cyber-crime and violation of privacy are problems encountered.
- Unemployment – if you are not computer literate, you may struggle to find a job. A computer operated by one person, can perform the tasks of several other people.
- As more people make use of computers, the demand for electricity increases.
- Computer hardware becomes unusable after a while – this may cause an environmental problem, as electronic equipment must be disposed in a certain way.



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 them to the person next to you.



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

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



Activity 4

Multiple-choice questions

Choose the correct answer from the list given with each question or statement. Write only the question number and answer, e.g. 1.D.

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

Assist the students with the following practical activities:



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.



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.

Activity 7

Research

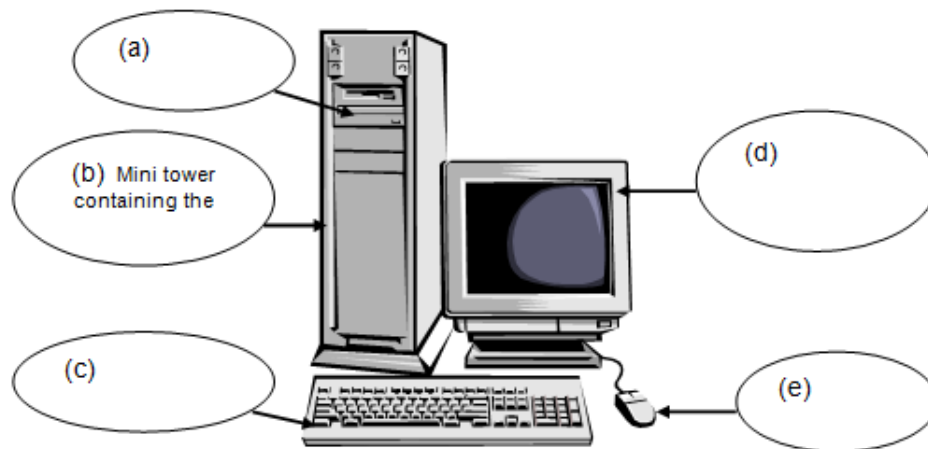
1. Find out which devices are used in your classroom.
2. Go to a big shopping centre or computer shop to see the different devices, such as a touchscreen and all-in-one printer, or use a brochure from a computer equipment supplier and make a study of the products.



Activity 8

Questions

1. Name the different parts of the computer.



- (a) CD-ROM drive
- (b) Mini tower containing the hard drive
- (c) Keyboard
- (d) Screen/monitor
- (e) Mouse

2. Describe the following terms in your own words to the person next to you:

2.1 Bit

Binary digit - the smallest unit in the binary system that can be 1 or 0. All computers use the binary system to store information in the memory.

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 1000 kilobytes.

2.4 Binary system

The numbering system used in computers - to the ground figure of 2 - it is called "base two notation".

2.5 Desktop

When Windows has finished starting up, the first screen that you see with a set of icons.

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.



Activity 8 (*continued*)

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 or flash drive.

2.10 External hard drive

An external storage device, connected to the PC through a USB port, with a capacity larger than a flash disk.



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.
j) Information
2. The permanent memory of the computer.
a) ROM
3. An external storage device used to store huge amounts of data, such as a back-up of the hard drive.
t) External hard drive
4. An input device used by architects and artists to enter graphics (and drawings) into the computer.
k) Light pen
5. The smallest unit in the binary system.
i) Bit
6. A device used to connect a computer to a telephone line.
b) Modem
7. A group of eight bits.
s) Byte
8. This printer is unable to print graphics.
l) Daisy wheel printer
9. Devices that can be connected to the computer, such as printers.
h) Peripherals
10. The part of the CPU where arithmetic calculations can be done.
r) ALU
11. The *heart* or *brain* of the computer.
c) CPU



Activity 9 (continued)

12. The set of programs controlling the computer.
m) Operating system
13. The physical components of the computer.
g) Hardware
14. A device that is used to get a hard copy of a document.
f) Printer
15. These relatively small storage devices are used to save programs and files.
p) Flash drives
16. Programs used by the computer.
q) Software
17. An input device used for pointing at options on the screen.
n) Mouse
18. The memory component, which is volatile.
o) RAM
19. The most commonly used input device.
d) Keyboard
20. A phrase describing a program, which enables people with limited computer knowledge to follow working procedures.
e) User friendly

Assist the students with the following practical activities:



Activity 10

Find out which software programs you are using.



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 10 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.



Activity 12


Practical

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



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 icon on the desktop to launch the word processing program. Close the program.



Activity 14

Practical

1. Click the Start button and make a study of the screen.
2. Scroll down on the left pane to browse all the programs. Move the mouse pointer to *Windows Accessories* and click the arrow to display the sub-menu.
3. Scroll down to T and select Tips.  
4. The Tips window will appear where you can choose an option or type a topic or question. Read the tips under **What's new?**
5. Click the Close button  to exit the Tips window.



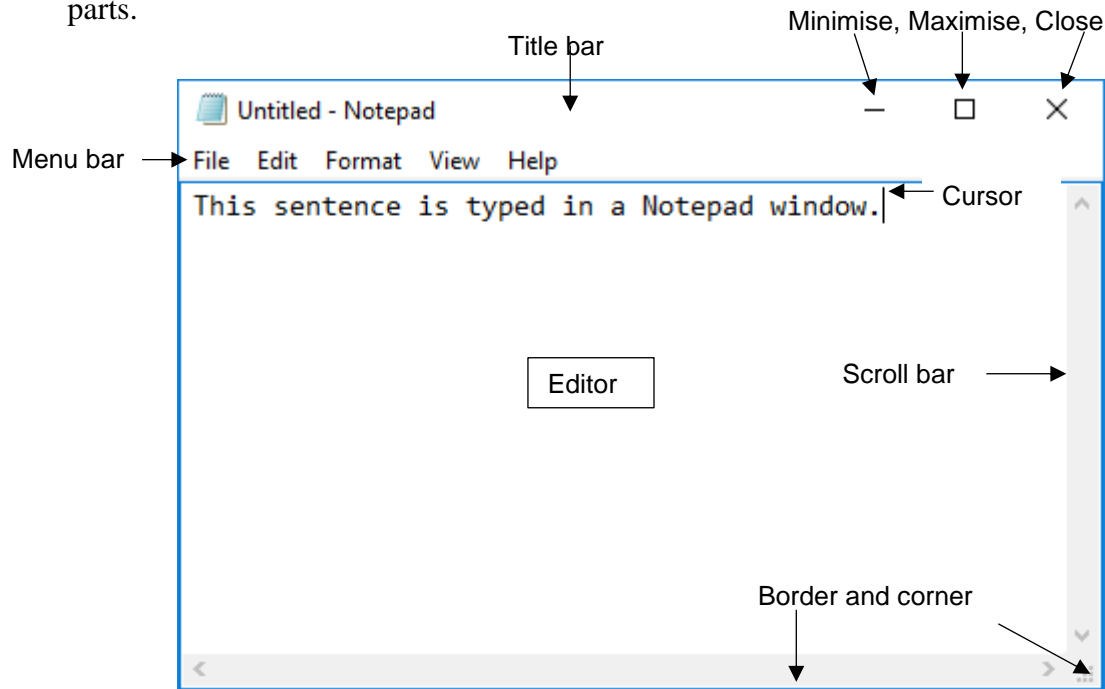
Activity 15

Practical

1. Click Start | Windows 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.

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

Maximise: 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.

Editor: This is the working area where text is to be typed.

Cursor: The screen marker, usually a flashing vertical line, which 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 maximise the window. Double-click the Title bar again to restore down. Close the Notepad program.



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 Back-up


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

Assist the students with the following practical activities:



Activity 17

Practical

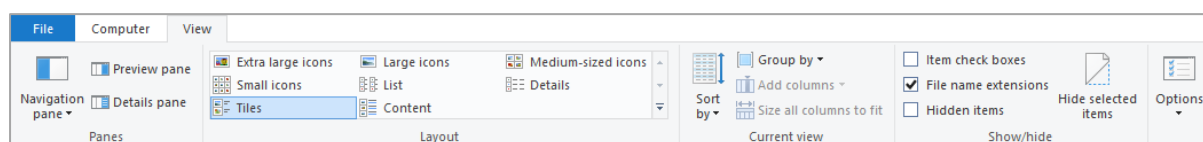
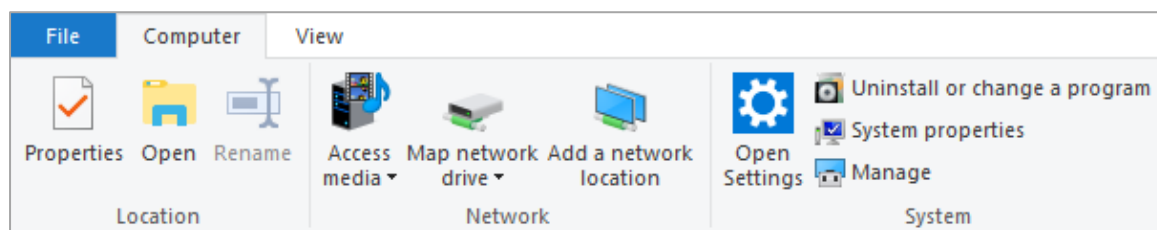
1. Open both the Word and Excel programs.
Click Start | scroll down to select the appropriate program.
OR
Double-click the icons on the desktop or click the required taskbar button.
OR
Click Start and determine whether these programs are listed under *Most used* or in the right panel (shortcut button). 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. Click the Task View button  on the taskbar to reveal all 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. Click at the Excel button on the taskbar twice to toggle between the maximised and minimised status.
7. Close both the Word and Excel programs.



Activity 18

Practical

1. Activate the File Explorer and make a study of the screen. Familiarise yourself with the terminology and different parts of the window. Note: Each computer will look slightly different, but the layout will be more or less the same.
2. Close the File Explorer and open *This PC*.
3. Make a study of the screen. The File Explorer and This PC options will give similar results. Do you note the difference?
4. Click *Documents* once in the right pane. The following ribbons are available: Computer and View. See diagrams.



5. Double-click *Documents* in the right pane. Which ribbons are now available?
6. Close *This PC*.





Activity 19

Practical

1. Open the File Explorer and use any method to display the libraries. Click Libraries in the Navigation pane on the left. What do you see in the Library pane on the right? Switch off the display of the libraries.

Folders can be closed/collapsed (> ) or opened/expanded (▾ ).

2. Try out the following methods in the File Explorer:

Click This PC in the left pane. Click the  button in front of the Documents folder to expand it and display the content in the left panel. Click the  button in front of the Documents folder to close it.

OR

Click This PC in the left pane. Click the Documents folder in the left panel to display the content in the right panel.

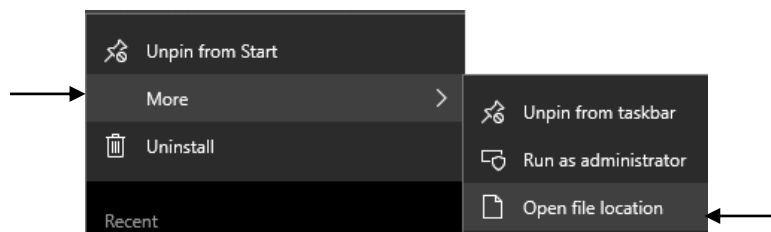
3. Close the File Explorer.




Activity 20

Practical

1. Click Start | scroll down to Word | right-click Word | select More > Open file location. *See diagram.*



Have a look at the path in the address bar:

 > This PC > Windows (C:) > ProgramData > Microsoft > Windows > Start Menu > Programs

2. Try out the different methods of viewing: Large icons, List, etc.
3. Double-click the Windows Accessories folder to open. Change the View mode to Details and sort the files chronologically according to the Date modified.
4. Select any non-adjacent files in this folder.
5. Select all the files and folders in this folder.
6. Sort the files in alphabetical order and close the File Explorer.



Activity 21

Practical

1. Activate the File 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 the File Explorer.

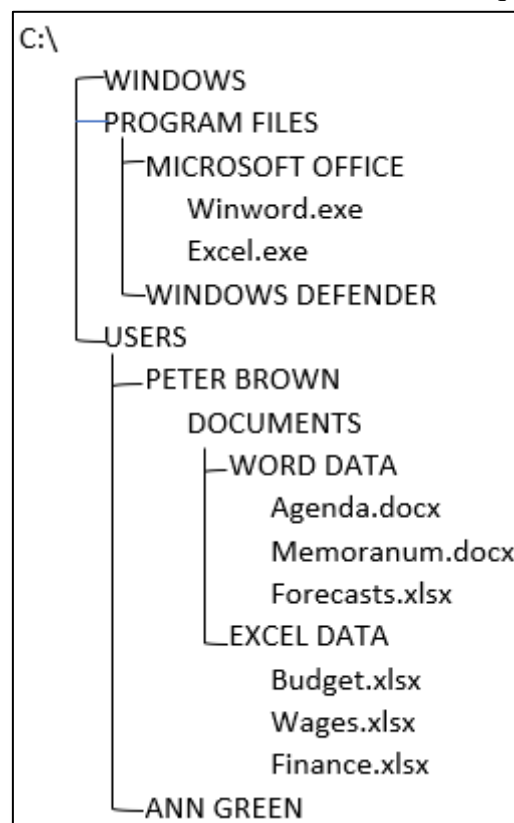


Activity 22

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 flash drive 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 subfolder of PROGRAM FILES is (PETER BROWN or MICROSOFT OFFICE).
5. The name of the executable file that will activate the WORD program is (Agenda.docx or Winword.exe).
6. The path of abovementioned file is (C:\USERS\DOCUMENTS\WORD DATA or C:\PROGRAM FILES\MICROSOFT OFFICE).
7. The file (Forecasts.xlsx or Agenda.docx) is not stored in the right folder.
8. The abovementioned 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 the (File Explorer or Internet Explorer) right-click Start and open the appropriate browser program.

Assist the students with this practical activity:



Activity 23

Practical

1. Activate the File Explorer and open the Documents folder.
2. Create a subfolder in 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 Tips function to learn more about ***The basics***.
4. Close the Tips window and shut down the computer.