GRAMSOL

LET'S DO INFORMATION & COMMUNICATION TECHNOLOGY

GRADE

4

NEW CURRICULUM

Approved by Ministry of Primary and Secondary Education

ZIMBABWE

Ratidzo Nhamo Maturuse

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MY STUDY GUIDE
MY EXAM PRACTICE

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- Good use of images and other visuals.
- **User friendly** and **Engaging design** to facilitate learner centered approach.
- **Full coverage** of syllabus including objectives, methodology and activities.

LET'S DO

INFORMATION AND COMMUNICATION TECHNOLOGY

Grade 4

Ratidzo N Mataruse

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Let`s Do
Information and Communication Technology Grade 4

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CONTENTS

Book Features iv

TOPIC 1 ICT TOOLS....1

1.1 Computer peripherals....2

1.2 Using computer peripherals....13

TOPIC 2 CREATING AND PUBLISHING....17

2.1 Presentations....18

2.2 Databases....41

TOPIC 3 COMPUTER SOFTWARE....48

3.1 Desktop publishing....49

3.2 File management....56

3.3 Multimedia....63

END OF TERM ONE ASSESSMENT....72

TOPIC 4 SAFETY AND SECURITY....77

4.1 Computer viruses....78

TOPIC 5 THE WORLD WIDE WEB AND COLLABORATION ONLINE....84

5.1 Web page....85

5.2 Information presentation....92

END OF TERM TWO ASSESSMENT....103

TOPIC 6 ICT Enterprise....108

6.1 Computer operator....109

6.2 Copyist....113

TOPIC 7 PROGRAMMING....120

7.1 Sequence of instructions....121

7.2 Programming....125

END OF TERM THREE ASSESSMENT....136

Index....140

Book Features

1.1 COMPUTER PERIPHERALS

Objectives
By the end of this unit, learners should able to
identify input, output and storage devices.

KEYWORDS
input
output
computer system
technology
peripheral device

Introduction

Like a human body formed with different body parts, a computer system is made up of different parts. These are the internal and external parts. In this unit, we will learn different input, output and storage devices. We will also learn how to connect different input, output and storage devices.

What is a computer peripheral device?

A peripheral device is a device that is attached to and controlled by a computer.

Computer peripherals

ACTIVITY 1.1

Name the above peripheral devices.

A computer peripheral device is connected to a

2

Each unit starts with key words that focus on the subject material to be covered.

Vibrant photos with informative captions.

Carefully designed activities support your learning and check your progress on each topic.

Fascinating fact

Different parts of a human being make the body so are different computer peripherals (devices) combined to form a computer system.

ACTIVITY 1.4

1. Fill the crossword with the help of pictures and words given below.

Book Features

Interactive exercises to test knowledge on every unit covered.

EXERCISE 7.2

True or False

1. Robots do not need to be programmed before they can do anything.
2. Programming language must specialise in a particular aspect of programming.
3. Scratch programming contain resources for creating a question/answer system.
4. Scratch programming cannot create quizzes and puzzles.

Fill in the blank spaces

5. Programming is _____ that tell the computer what to do.
6. Programming instructions are used to _____ or make _____ and easier to solve.
7. Give five reasons why scratch programming is easier to use than other programming languages.
8. The type of data stored in scratch variables is _____.
9. A simple way to think about variables is a _____ with _____ in it.

Keywords used in-text are defined in the glossary.

GLOSSARY

Program a series of instructions to control the operation of a computer or other machine.

Programming the process of writing computer instructions.

Drone it is a camera that can move without human control beyond the line of sight.

Variable a data item that may take more than one value during the runtime of a program.

Code program instructions.

Coding writing program instructions.

Sprite a computer graphic which may be moved on-screen.

Stage is the background of the project, but can have scripts, backdrops (costumes), and sounds, similar to a sprite.

Oval having a rounded and slightly elongated shape like that of an egg.

Numeric relating to or expressed as a number or numbers.

Fill in the blank spaces

6. File management is _____ and _____ files in a computer.
7. Memory cards are used in _____ and _____.
8. Memory card is used as an extension of _____ internal storage.
9. To save files on CD or DVD you insert _____ into disc burner.

SUMMARY

- File management is the process of organising documents on a computer for easy access.
- A drive is a computer storage device that holds information.
- File management on a computer is like filing documents in a file cabinet. A file cabinet is used to store paper files in cardboard folders. This is how files are stored on a computer.

Summaries at the end of each topic provide an opportunity to reflect on what has been learnt.

ICT LINK

Visit the website below and watch the video on how to save Apps to SD card on Android.

https://www.youtube.com/watch?v=K9AViruc9Eg

Visit the website below and learn how to move files, pictures and Apps to an SD Card on Android.

https://www.lifewire.com/move-files-pictures-apps-to-sd-card-android-4147213

Visit the website below and learn how to write files to a CD or DVD.

https://help.gnome.org/users/gnome-help/stable/files-disc-write.html.en

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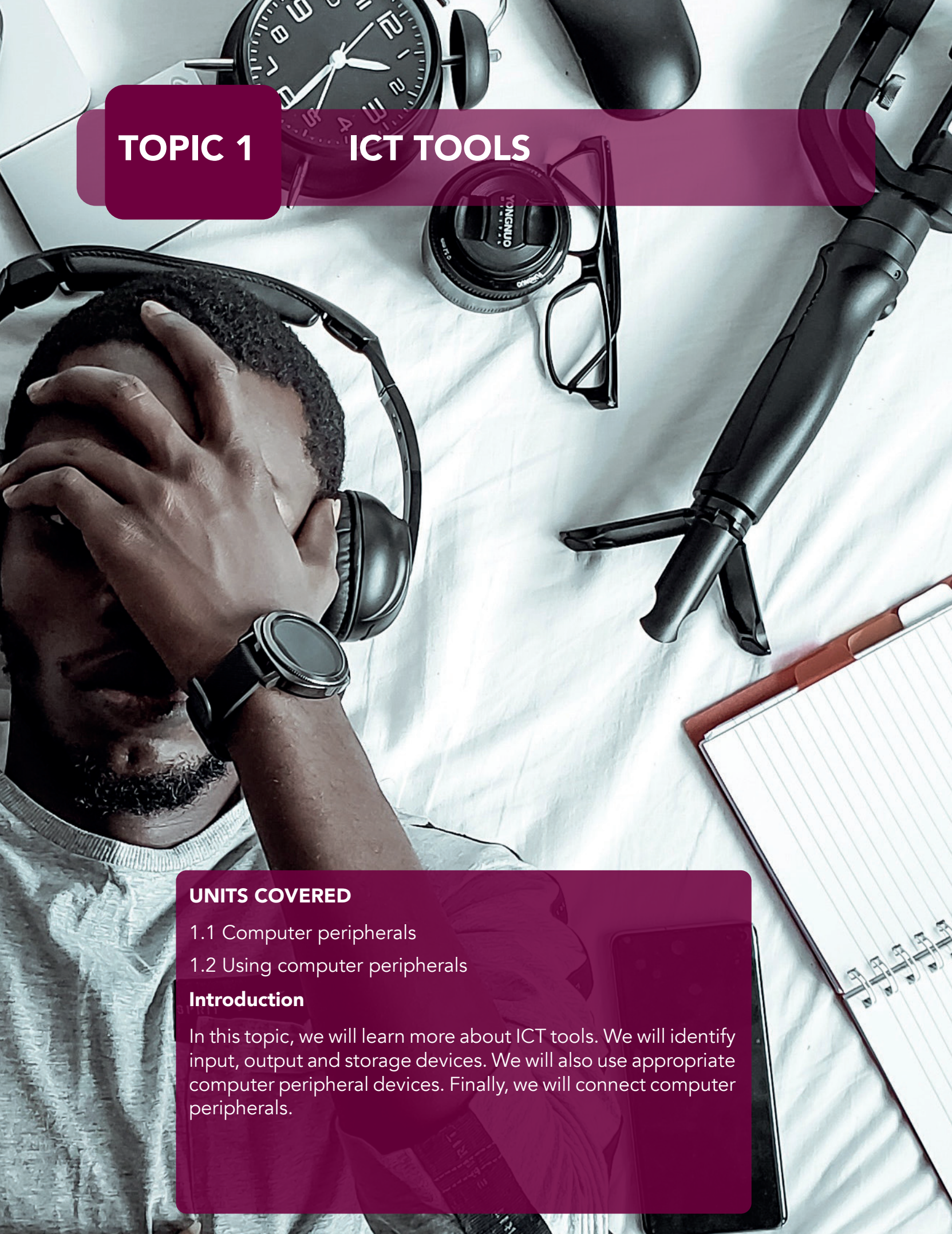


TOPIC 1 ICT TOOLS

UNITS COVERED

1.1 Computer peripherals

1.2 Using computer peripherals

Introduction

In this topic, we will learn more about ICT tools. We will identify input, output and storage devices. We will also use appropriate computer peripheral devices. Finally, we will connect computer peripherals.

1.1 COMPUTER PERIPHERALS

Objectives
By the end of this unit, learners should able to
identify input, output and storage devices.

KEYWORDS
input
output
computer system
technology
peripheral device

Introduction

Like a human body formed with different body parts, a computer system is made up of different parts. These are the internal and external parts. In this unit, we will learn different input, output and storage devices. We will also learn how to connect different input, output and storage devices.

What is a computer peripheral device?

A peripheral device is a device that is attached to and controlled by a computer.

Computer peripherals

ACTIVITY 1.1

Name the above peripheral devices.

A computer peripheral device is connected to a

computer but is not part of the major computer system. We connect the device to the computer to improve the way the computer system works. For example, once the printer is connected to a computer, we can print out documents.

Input devices

An input device is a device that is used to put data into the computer.

Examples of input devices

Input device	Description
Mouse 	A mouse is an input device that uses point and clicks technology to communicate with a computer. Modern mice have two buttons, the left and the right buttons, with a scroll wheel between the two.
Keyboard 	The keyboard is used to enter letters, numbers, and other symbols into the computer. Using a keyboard to enter a lot of information is called typing.
Touchpad 	A touchpad is found on a laptop. It is a flat area next to the keyboard. We touch the touchpad with a finger, and the computer can tell where the finger and the direction it is moving.
Webcam 	This is an input device like a video camera that is connected to a computer. A webcam enables people to see each other when communicating over the internet or for recording videos.

Digital camera 	Digital cameras are used to take pictures. The camera records what each individual has captured.
Scanner 	A scanner is a device used to move a printed image, drawing or text into a computer system.

ACTIVITY 1.1

1. Match the given input devices with the correct names.

Input device	Name
	
	
	
	
	
	

Output devices

An output device is a device that displays the results from the computer. Output devices provide data in different forms, including audio, visual, and hard copy media.

Examples of output devices

Output device	Description
Printer 	A printer is used to generate hard copies of data typed and stored on a computer on paper.
Monitor 	The monitor enables the user to communicate with a computer. It displays text, images or photographs sent by the computer in a visual format.
Speakers 	Computer speakers are hardware devices that produce sound.
Projector 	A projector is an output device that can take images generated by a computer and reproduce them by extending them onto a screen. A projector can be used in a room full of people to see well from a single computer.

ACTIVITY 1.3

1. Match the given output devices with the correct names and uses.

Output device	Name and use
	

Storage devices

A storage device is computer hardware used for storing data and instructions when the processor is turned off.

Examples of storage devices

Storage device	Description
Flash disk 	A flash disk is a small storage device used to store and transport files from one computer to another.
Optical disk 	It is a storage medium from which data is stored. The most common optical disks are compact disk (CD) and digital versatile disk (DVD). CDs can hold large files but is limited to about 1 GB. This makes CDs ideal for holding data like music files. DVDs can hold 5-10 GB of data.
External hard drive 	External hard drives are storage devices that usually connect to a computer with a cable. They hold large amounts of data, and they can be easily used with different types of computers.

Memory card 	A memory card is a type of storage device that is used for storing data files. Memory cards are commonly used in small, portable devices, such as cameras and cellphones.

ACTIVITY 1.4

1. Match the given storage devices with the correct names.

Storage device	Name
	
	
	
	

Fascinating fact

Different parts of a human being make the body so are different computer peripherals (devices) combined to form a computer system.

ACTIVITY 1.4

1. Fill the crossword with the help of pictures and words given below.

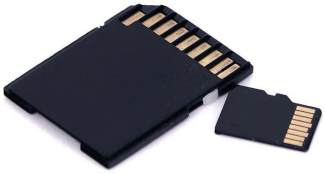
						s	
d						e	
	K		Y		o		r	
a						k	
y						r	
			M		u		e
o							
	p		i		t		r
e							
		n				r	

ACTIVITY 1.5

1. Match the given devices with their correct categories, for example. (input, output and storage devices).

Device	Category
	
	
	
	
	
	

Connect computer peripherals

Peripheral devices are connected to the computer via Universal Serial Bus (USB) port.

We set up the keyboard right in front of where we sit when we use the computer, between us and where the monitor goes. The computer keyboard and mouse are plugged into the USB ports. We set the monitor on top of our desk, to make room for the keyboard. We set up the printer where it is within arm's reach of the computer. To get the printer and the computer to connect, we need a cable. When we are using a wireless printer, we keep it close enough to the computer to ensure that it is in the signal range.

SUMMARY

- Computer peripherals are devices that send or receive information from a computer.
- They include input hardware, output hardware and storage devices.

REVISION EXERCISE 1.1

True or False

1. A monitor is a storage device.
2. A keyboard is an input device.
3. A scanner is a storage device.
4. An optical disk is an input device.
5. An external hard drive is a storage device.

Fill in the blank space

1. An input device is a device used to _____ data into the computer.
2. A touch pad is a mouse used on a _____.
3. A webcam is used to enable people to see each other when communication over the _____.
4. The use of speakers is to produce _____.
5. Two common examples of optical disks are _____ and _____.

1.2 FAULTS IN ICT TOOLS

KEYWORDS
keyboard
mouse
cursor

Objectives
By the end of this unit, learners should able to:
- state importance of computer peripheral devices.
- use appropriate computer peripheral devices .

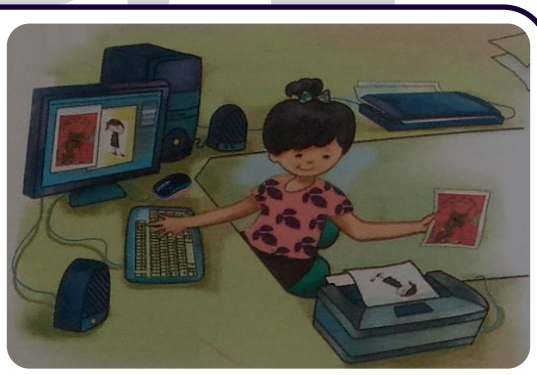
Introduction

Computer peripherals which are not working are useless. Computer peripherals are added to the computer so that they can be operated by the user to do the users' tasks. In this unit, we will use appropriate computer peripheral devices.

Importance of computer peripheral devices

ACTIVITY 1.1

1. Identify the computer peripheral devices that are being used.



Peripheral devices are devices that are needed to communicate with computers. Without peripheral devices, computers are just like boxes that contain a bunch of wires with a list of instructions but cannot deliver results to the user.

Fascinating fact

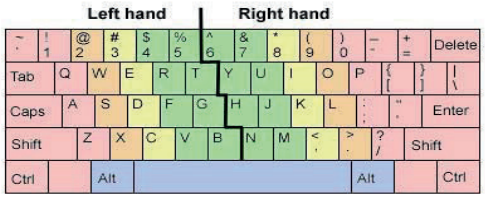
The more we can operate computer peripherals, the better we appreciate their importance to easy our lives.

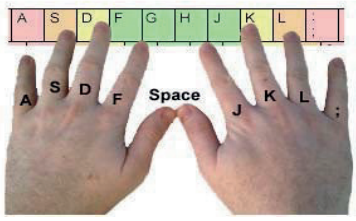
Using computer peripherals

Keyboard

A keyboard is the main means to enter information into the computer. Whenever we need to type something on a computer, we use a blinking vertical line called the cursor or insertion point. It shows where the text that we type will begin. Before typing, we place our hands in the proper position, with our fingers on the home row keys. When we are typing, we look at our fingers to ensure that each finger is pressing the correct key. Our left-hand fingers should be positioned over A, S, D, and F keys and our right hand should be positioned over the J, K, L, and special keys.

Keyboard finger position





Mouse

A computer mouse is a pointing device and input device used by hand. To help with portability, mobile devices like a laptop use a touchpad instead of a mouse.

Here are some of the more basic mouse operations:

- **Point:** When we are told to point with the mouse, we move the mouse on the desktop, which moves the mouse pointer on the screen to point at something.
- **Click:** A click is a press of the mouse button — press and release of the main button on the left.
- **Right-click:** This action is the same as a click, although the right mouse button is used.
- **Double-click:** This one works just like the single click, although we click twice in the same spot rapidly.
- **Drag:** The drag operation is done to pick up something on the screen and move it. To do that, we point the mouse at the thing we want to drag, press and hold the mouse's button (which "picks up" the object), and then move the mouse to another location. When we move the mouse (and keep the button down), the object moves. To release or drop the object, release the mouse button.
- **Right-drag:** This action is the same as a drag, but the mouse's right button is used.

ACTIVITY 1.7

Connect your computer and use your mouse and keyboard to type a one-paragraphed letter to a friend.

EXERCISE 1.2

True or False

1. Without computer peripherals, computers are useless.
2. When typing using a keyboard, the positions of fingers is not essential.
3. The movement of the mouse indicates the movement of a mouse pointer.
4. The right-click is the same as left-clicking.
5. Typing using a keyboard can be done using one hand.

Fill in the blank spaces

1. The _____ shows where the text that we type begins.
2. Name some of the basic mouse operations are:
3. A mouse has _____ buttons to be clicked on.
4. A mouse used on a laptop is called _____.
5. Double clicking is clicking _____ rapidly.

SUMMARY

- It would be impossible to communicate with your computer without computer peripherals.
- Devices such as keyboards, mouses, printers and scanners allow us to use computer resources fully.

REVISION EXERCISE

True or False

1. A peripheral device is attached to a computer and controlled by a computer.
2. Digital cameras are used to print text.
3. DVDs can store a more significant amount of data than CDs.
4. A mouse is placed to the right or left of the keyboard when connecting it to the computer.
5. There is no need for the printer to communicate with the computer to be located far away from the computer.
6. Objects can be moved from one place to another using clicking.

Fill in the blank spaces

7. An output device _____ the results from the computer.
8. Output devices provide data in form of _____, _____ and _____ media.
9. A _____ is a device which is used in a room full of people so that they can see well.
10. A storage device is used to store _____ and _____ on the computer.
11. CD can store files up to _____GB whereas DVD can store up to _____ GB.
12. Peripheral devices are used by the user to perform user's _____.
13. A click is a _____ of the mouse button.
14. Right click is clicking on the _____ mouse button.
15. A mouse has a _____ and _____ buttons to be clicked on.

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