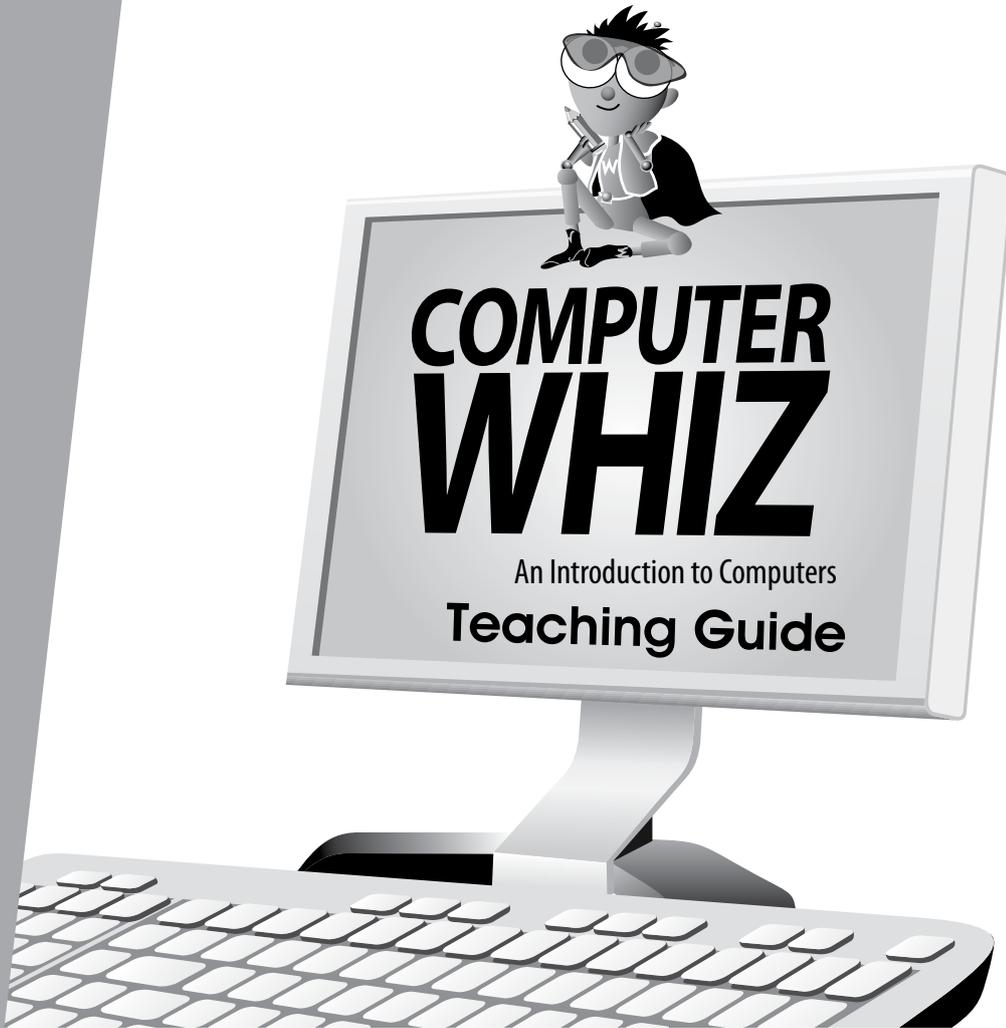


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Third Edition



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Introduction

Computers have become an integral part of our everyday lives. We use computers everywhere. Hence, a clear understanding of basic computer concepts and applications is vital.

The **Computer Whiz (Third Edition)** series provides students with detailed basic knowledge of computers at the primary level. The computer is presented to children through Whiz, the mascot, to create interest and visual appeal. Varied activities reinforce their understanding of the different concepts. The new features, fresh layout, and stimulating exercises added to this edition will help develop computer skills and enhance student learning.

Whiz's Files is a list of chapters in the book with teaching objectives and learning outcomes.

Word Whiz consists of activities involving the use of new words introduced in each chapter.

Whiz's Commands includes tips on conduct, etiquette, and safety while using the computer and the Internet.

Whiz Bytes provides interesting facts about computers to students.

Explore with Whiz consists of interesting and challenging exercises/activities that review the concepts that have been learnt in the chapter.

Whiz's Tasks comprise of worksheets provided in the Teaching Guides for classroom practice.

Whiz through Lab encourages the children to do practical work and helps develop their skills on the computer.

Whiz through Projects promotes intellectual and social skills and encourages teamwork.

Whiz's Notes at the end of each chapter offers a summary of the important points.

Whiz's Word File at the end of each book is a glossary. It is a list of computer terms with clear definitions.

Introduction to the Teaching Guides

The Teaching Guides provide helpful tips, lesson plans, and worksheets with engaging activities that support learning. They act as a framework to help you develop your own lesson plans and teaching strategies.

Each chapter has a list of objectives and learning outcomes. You must try to realize these objectives at the end of each lesson. Sample lesson plans have been provided on the basis of which you can develop your own plans.

A good lesson plan consists of a starter activity for 3-5 minutes which introduces the concepts being taught followed by a 20-minute activity that encourages students to interact with each other. Please engage the quieter children too. This may be

followed by feedback of the discussion in larger groups on which you can spend about 10 minutes. Reinforcement of the entire lesson, summarizing, and time for assigning homework should be at the end of each period for about 2-3 minutes. Students should be taken to the computer lab as required. The more practical experience on the computer, the more proficient the students become at using computers.

Guidelines

While students are working at the computer, discuss the importance of maintaining good posture. Students will probably spend a lot of time at the PC, barely moving, and with their eyes fixed on the screen. Extended use of the computer can have serious consequences on a child's health; a child can develop weak eyesight and severe back problems. It is very important to make students aware that they should not use computers for hours on end. It is important for you as well as your students to be aware of what they should do and things they should avoid doing while using the computer.

Dos and Don'ts

Do...

- have your chair at the right height so that your eyes are level with the computer screen
- have your computer screen directly in front of you
- make sure your chair has a good backrest
- keep your shoulders and back relaxed
- make sure that your wrists rest on the desk
- let your feet be flat on the floor
- take regular breaks
- adjust the position of the computer so that there is no glare on the screen
- make sure you have a protection screen on top of the monitor screen.

Don't...

- fix your eyes on the screen continuously
- lift your shoulders while you type or move the mouse
- twist your body to reach out for computer hardware
- use your PC in poor lighting.

Teaching objectives

The objectives of this chapter are to:

- introduce the term 'personal computer'
- highlight the uses and importance of computers
- explain computer data and memory
- make students aware of where data is saved.

Learning outcomes

By the end of this chapter, the students should be able to:

- identify a personal computer
- explain the meaning of the word 'data'
- summarize the importance of memory.

Suggested number of periods: 2

Period 1

Sample lesson plan for a 40-minute period

Starter activity (4 minutes)

Write the word **COMPUTER** on the board.

Ask students to call out words that come to their mind when they think of a **COMPUTER**.

Write these on the board next to the word **COMPUTER**. If you use a chart, it can also be mounted onto a soft board in class for future reference.

Pick out the words **personal**, **data**, and **memory** and write these on the board around the word **COMPUTER**. If these words have not been called out by any of the students, lead them with clues/prompts to these words.

Explain that these are the words they will be concentrating on in this class.

Group work (20 minutes)

Divide the class into groups of 3-4. Give each group an A4-size sheet with the following bold/underlined headings on it: **Personal Computer**, **Uses of Computers**, **Data**, **Memory**. Explain to the students that they have to work in groups and, within 15 minutes, fill in the boxes on the given paper. Explain the heading on each box and give examples. Two students should do the writing while all students should contribute to the answers that are written down. Answers can be written down in a list or in complete sentences, as the group deems appropriate.

After every 5 minutes, tell the students the time that remains to complete the work.

Personal Computer

- a computer that is used at home and in some offices
- is used by only one person at a time

- may not be very big
- is not meant to handle large amounts of data

Uses of Computers

- to find information promptly
- to communicate with family and friends that live in other cities/countries
- make work easier and quicker
- to help human beings work faster

Data

- all the information contained in a computer
- also includes information that a user types/feeds into the computer
- may be numbers, pictures, words, drawings/sketches, etc.

Memory

- the capability of a computer to remember the information fed into it
- part of a computer that stores data, e.g. CPU (central processing unit)
- CDs, DVDs, USB drives, etc.

Feedback/discussion (10-15 minutes)

Once complete, select one student from the first group to read out what his/her group has written in the first box. The second group's speaker should only add something that the first group has not included but they have.

A similar grid should be drawn on the board which the teacher will fill in with answers that the students call out.

Hold a discussion if any contributions are missing or students are uncertain about something.

Assigning homework (2 minutes)

Exercises on pages 2 and 3 of the textbook can be assigned for homework.

Period 2

Sample lesson plan for a 40-minute period

Starter activity (5 minutes)

The activity from the previous period will lead to the next lesson. Recap the meaning of data. Ask students to find pictures of computers being used in different environments and paste them in the blank area on page 4.

Explanation (15 minutes)

Emphasize the necessity of using a computer in a well-lit area. Darkness strains your eyes. Harsh fluorescent lighting can lead to a lot of overhead glare and harsh shadows. Ensure that magnets are kept away from the computer as they are likely to affect your computer's permanent memory, making your computer nonfunctional.

Exercise (20 minutes)

Allow students to complete the exercises on pages 6 to 8 in the classroom.

For the Word Whiz activity, explain that remembrance is the process of remembering something. If you remember something, it is in your memory. Just like a computer that remembers things and has a memory.

When we say that a computer can store data permanently, it means that it can remember the data forever. Permanent implies something that lasts or continues for a very long time.

Answers

Exercise (page 2)

Words that can be made from the letters in the word COMPUTER are: compute, recoup, comet, court, route, metro, core, poem, mute, cute, core, up, or, pet, toe, top, our, out.

Exercise (page 3)

search for information

do homework

perform calculations

check spelling and grammar

draw images

Exercise (page 6)

three, three, yes, no, no

Explore with Whiz (pages 7-8)

Where are computers being used in these pictures? What are they being used for?

Top-left:

at home, to play games

Top-right:

at a bank, to withdraw money from a ATM

Bottom:

at an airport, to screen luggage

Answer the following questions.

1. personal
2. data
3. data
4. a personal computer
5. in its memory

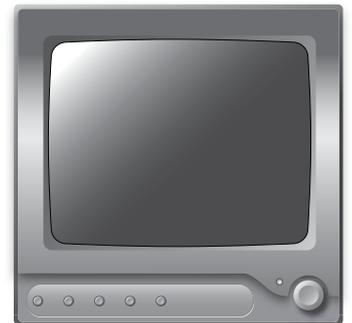
Whiz through Lab (page 8)

For the teacher: Encourage students to type as much as possible to become comfortable with their fingers on the keyboard. Developing fluency at this stage is important before typing techniques can be taught in subsequent chapters.

Answers to Additional Activity: 1C, 2C, 3C

Whiz's Tasks

Look at the pictures of the parts of the computer below. One of the pictures does not belong in the group. Can you spot it? Circle the picture.



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Additional Activity

Tick (✓) the correct statement.

- (1) (a) The computer remembers everything.
- (b) The computer does not remember anything.
- (c) The computer remembers everything entered into it.
- (2) (a) We cannot store data on the computer.
- (b) We can store data permanently.
- (c) We can store data in the computer's memory.
- (3) (a) The keys on a keyboard are data.
- (b) The story we write on the computer is not data.
- (c) Words, numbers, and pictures we feed into the computer are called data.

Teaching objectives

The objectives of this chapter are to:

- introduce hardware and the different parts of the computer
- discuss the functions of the different keys on the keyboard
- briefly describe the functions of the mouse and the scanner
- help the student distinguish between a pointer and a cursor
- explain the uses of the monitor, the printer, and the CPU.

Learning outcomes

By the end of this chapter, the students should be able to:

- explain the terms 'hardware' and 'processing'
- describe the functions of a keyboard, mouse, scanner, monitor, printer, and CPU
- differentiate between the functions of some keys.

Suggested number of periods: 3**Period 1****Sample lesson plan for a 40-minute period****Starter activity (10 minutes)**

Take students to a computer lab and ask them to write down all the parts of a computer they can see or identify. Collect their responses and jot them down on the board.

Expected responses: monitor/screen, keyboard, mouse, system unit, microphone, scanner, webcam, printer, speakers, headsets, etc.

If a computer lab is not available, an enlarged picture of the computer and its peripherals can be used in the classroom. Inquire if anyone knows the collective name for all the identified parts. Circle all the jotted down names and write 'Computer Hardware' above.

Colouring activity (10 minutes)

Students may be asked to do the activity on page 11.

Remind them that they must not touch any exposed wires or sockets as there is fear that they might get electric shocks.

The monitor (10 minutes)

Students should be familiar with what a monitor is and its function. Ask them questions leading to what a monitor is and what it does. Explain that the monitor is a visual display unit used to project information for the user to see and work on. Whatever appears on the monitor screen is called soft copy—an unprinted digital document file that may be viewed on the monitor screen (but cannot be held in the hand). It can be transported from one computer to another through email or

through USB drives and other disk drives. As a recall exercise, have them do the exercise on page 12.

Remind students to give their eyes a break. It is important to look away from the screen at regular intervals and focus on a distant object. Students should do so every 20 or 30 minutes for at least 20 seconds. This allows the eye muscles to relax. Remind students to blink consciously and regularly. This allows eyes to be lubricated.

Foreign particles are removed which soothes the eyes. In fact, in some organizations, an alarm goes off every half an hour when the employee is to stand up and walk around, giving both the body and eyes a break.

The CPU (10 minutes)

Point to the system unit and ask the students which important part of a computer is contained in it. They should state the CPU. Ask them what CPU stands for: central processing unit.

In pairs, students should brainstorm the functions performed by a CPU. If they do not already know, teach them to brainstorm in the manner shown below. Record students' responses on the board. Activities on page 13 of the textbook can then be assigned to be done individually.

Functions of a CPU:

- to perform calculations
- to process information
- to store data
- to prepare data
- to carry out instructions
- to run programs
- to transmit data from one computer to another

Period 2

Sample lesson plan for a 40-minute period

The keyboard (pages 14-15) (15 minutes)

Students should be permitted to sit at computers in the lab that have a blank Word document open. Alternatively, if you are in the classroom, an enlarged picture of a keyboard on which the following keys (Enter, Backspace, Shift, Caps Lock, and Esc) have been highlighted in different colours may be put up on the soft board. Students should recall the functions of some of these keys from what they have learnt in the previous year. Discuss these functions before you proceed.

The Enter key is the keyboard's main communicator with the computer. It tells the computer to execute a command, start a program, and move to a new line in a document

The Backspace key moves the cursor backwards and erases data from the page one letter or number at a time.

When used with other keys, the Shift key helps to type capital letters or symbols.

When the Caps Lock key is switched on, we can type capital letters.

The Esc key is used to stop or cancel what the computer is doing.

Discuss the space bar too at this point.

Practical work (20 minutes)

In the computer lab, ask students to type the following sentence making use of only the relevant alphabet keys and the space bar.

My name is _____. I am 7 years old.

'M' and 'I' will be capitalized as they are the first alphabets of the words beginning each sentence. The computer's memory tells it to capitalize the first alphabets of the words beginning each sentence as this instruction has already been fed into and saved in the computer.

Next, instruct the students to bring the cursor before 'I' and click the left button on the mouse. When the 'I' shaped cursor is clicked, it turns into a blinking line. Students should notice what happens and write it down in their notebooks.

While typing their names, some may not have written their names (like all proper nouns) with a capital letter. Since this mistake has to be corrected, ask the students to click the cursor so that it appears after the letter that has to be capitalized. Now they should use the Backspace key to erase the letter, and then press the Shift key along with the alphabet they want to capitalize.

They should observe what happens and write it down in their notebooks, e.g. when the Backspace key is pressed, one letter at a time is removed; pressing an alphabet key along with the Shift key capitalizes the letter.

Students should then be asked to lock the Caps Lock key. Bring their attention to the light that lights up above the number pad when the Caps Lock key is pressed to indicate it is locked. Ask the students to write down the initials of their full names (the first alphabet of their first name followed by the first alphabet of their father's name and finally the first alphabet of their surname. They should observe all that happens and write it down in their notebooks).

Exercise (page 16) (5 minutes)

The students should then work on the activity on page 16 of the textbook.

Period 3

Sample lesson plan for a 40-minute period

The mouse (pages 17-18) (15 minutes)

Ask the students to work on the following task in groups of 4.

In five minutes, list as many functions of the mouse as you can think of on a sheet of paper. After you have done the above task, open to page 17 of the textbook and do the join the dots activity. Be prepared to explain which button performs which of the functions you have listed.

Expected responses: moves pointer to the desired place/file/folder/button/icon user wants to access; on a click or double-click, opens the desired file/folder/program; on a document, the clicking of a mouse enables the user to start writing/editing/moving around; the scroll wheel on the mouse allows greater flexibility in maneuvering up/down a page.

Once students have completed both tasks, collect feedback and write down the responses on the board for all to copy or add to the list they have already prepared.

Activities on pages 18 and 19 may be assigned as homework.

Remind students to always use a mouse on a mouse pad. It gives you a flat, smooth surface to work on. A mouse pad provides a consistent, easy-to-read surface for the image sensor of optical mouse devices. Some mouse pads come with a convenient cushion for the wrist, promoting better hand position and giving it a place to rest. With all the hours we spend in front of our screens, this could, at the very least, help in preventing fatigue. It protects your desk as the hard plastic can scratch or dent a wood surface very easily.

Scanner and printer (page 20) (15 minutes)

If you have a scanner, ask the students to give you a paper with work they want to save on the computer. Place it in the scanner, and scan it to get its image on the monitor. Let the students write down what they think a scanner can be used for. Explain that a scanner is used to get hard copy of text or images onto the monitor and ultimately into the memory of the computer for further use.

Students should be able to comfortably guess from its name what a printer is used for. Permit them to call out answers and write them down on the board. Then show the students two printed pages (one in black-and-white; the other in colour) and explain that all printers can print both types—what it depends on is the ink cartridge that is installed in the printer. If a black-and-white cartridge, which is less expensive than a coloured one, is installed in the printer, the printed page (hard copy) will be black-and-white or in shades of grey. A colour printout (hard copy) will require a coloured cartridge.

Use the term hard copy when referring to the printed pages. Ask the students to tell you what hard copy is. You may hint that it shares some characteristics with the hardware of a computer—it can be touched and held in the hand.

Assign the colouring activity and Word Whiz to be performed in class.

Explore with Whiz (pages 21 and 22) (10 minutes)

Assign the Explore with Whiz exercises to be completed in the classroom.

Answers

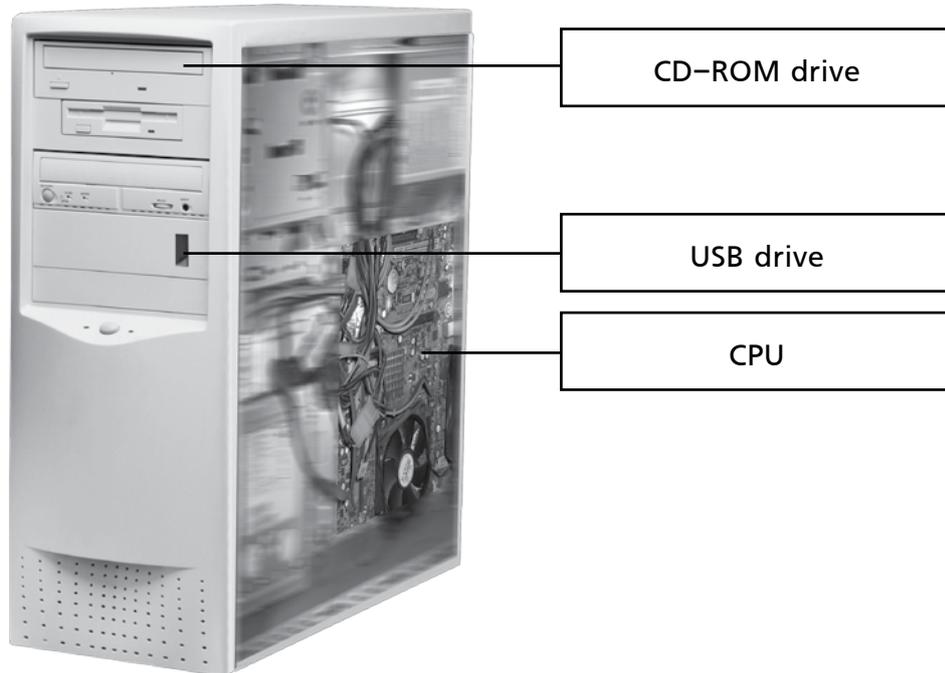
Colouring activity (page 11)

Computer hardware: system unit, monitor, printer, scanner, keyboard, mouse

Unscramble the letters and write the name of the computer hardware. (page 12)

monitor
system unit
mouse
keyboard

Label the CPU, CD-ROM drive, and USB drive on the system unit. (page 13)



Word Whiz (page 13)

prepare, process

Draw an arrow to show what functions these keys perform. (page 16)

The Shift key along with the %5 key together is used to type a symbol.

The Esc key helps to cancel an action.

The Caps Lock key is used to type a capital letter.

The Backspace key acts like an eraser.

Word Whiz (page 18)

point: direct

select: choose

place: put

Fill in the blanks with the correct verb. (page 19)

1. move
2. moves
3. enter
4. place, click
5. point, select

Word Whiz (page 21)

Hard copy: printed document or data; printed version of a soft copy; can be held or touched; cannot be edited (correction fluid might be used to edit mistakes); requires some time to be mailed to a recipient; requires paper, ink, and printer to be produced

Soft copy: unprinted document or data; cannot be held in the hand; can be edited easily on the computer; can be sent from one computer to another in no time; does not require paper, ink, or printer

Explore with Whiz (pages 21 and 22)

Which keys do the following?

1. Enter key
2. Caps Lock key
3. Shift key + Number key
4. Backspace key

Underline the correct answers.

1. mouse
2. pointer
3. scanner
4. soft copy
5. processing

Answers to Additional Activity

(I) Identify and underline the mistakes in the following sentences. Explain what has gone wrong in typing them.

- (a) GOING TO SCHOOL should be underlined. The Caps Lock key has been pressed accidentally while typing.
- (b) The word 'country' should be underlined. The Enter key has been pressed by mistake while typing the word 'country'.
- (c) The / (slash) should be underlined. The Shift key has not been pressed to type the question mark.

(II) Identify and write 'hard copy' or 'soft copy', as appropriate, alongside each of the following.

- (a) soft copy
- (b) hard copy
- (c) hard copy
- (d) soft copy
- (e) hard copy

(III) Circle the correct answer.

- (a) (iii)
- (b) (iii)
- (c) (iii)
- (d) (ii)
- (e) (ii)
- (f) (iii)

Whiz's Tasks

(A) Match the parts of the computer to their correct functions.



feeds data into the computer



shows us what we are doing on the computer



lets us copy images and text from books



points at icons on the screen

(B) Look at the keys below. Which key is not found on the keyboard? Colour it blue.



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(I) Identify and underline the mistakes in the following sentences. Explain what has gone wrong in typing them.

- (a) I enjoy GOING TO SCHOOL but I dislike doing homework.
 - (b) I love my co untry and I will serve it well.
 - (c) Will you come to my birthday party/
-
-

(II) Identify and write 'hard copy' or 'soft copy', as appropriate, alongside each of the following.

- (a) text that you read on the monitor screen _____
- (b) a copy on paper of the story you have typed

- (c) a printed copy of the bill of items you have purchased at a supermarket

- (d) a list of items you have purchased at a departmental store that appears on the screen of the cashier's computer _____
- (e) a letter you have received by post _____

(III) Circle the correct answer.

- (a) Any part of the computer that you can touch is

(i) hardware
(ii) software
(iii) computer hardware

- (b) To enter data into the computer, we need the use of a _____.
- (i) printer
 - (ii) scanner
 - (iii) keyboard
- (c) This key acts like an eraser.
- (i) Shift key
 - (ii) Enter key
 - (iii) Backspace key
- (d) The arrow that we see on the monitor is called a _____.
- (i) cursor
 - (ii) pointer
 - (iii) flashing line
- (e) The scanner _____.
- (i) shows us what we are doing on the computer
 - (ii) copies a picture from a book and transfers it to the computer
 - (iii) copies text
- (f) CPU stands for _____.
- (i) central programming unit
 - (ii) computer processing unit
 - (iii) central processing unit

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Teaching objectives

The objectives of this chapter are to:

- introduce the terms 'program' and 'software'
- make students aware of basic operating systems
- introduce Windows.

Learning outcomes

By the end of this chapter, the students should be able to:

- explain the meaning of software and program
- list the functions of an operating system
- perform basic operations on Windows.

Suggested number of periods: 1

Period 1

Sample lesson plan for a 40-minute period

Starter activity (5 minutes)

Ask students what might happen if they are simply given the ingredients for a recipe. Will they be able to make a cake if they know just what to put in it?

After students have responded, ask them what else is needed to make a cake? Write the word INSTRUCTIONS on the board once the students have given their responses. Ask students to call out words/phrases that come to mind when they read the word 'INSTRUCTIONS'. Write down the responses around the word on the board. Expected responses: steps/directions/commands telling them what to do.

Now ask students why instructions are needed. Expected responses: to do things in an orderly/organized way; so that not many mistakes are made and the result is what is desired; so that there is uniformity, etc. Explain that in order to avoid confusion and mistakes, a computer too needs a set of instructions to perform operations correctly.

Explanation (4 minutes)

Have a student volunteer read out page 24 of the textbook. Lay emphasis on the word software. Help students recall what they have learnt previously about hardware.

Pair work (6 minutes)

In pairs, students can then attempt the activity on page 25 followed by a quick feedback. Please note that answers are bound to vary in an activity like this.

Sample recipe for jam sandwich

1. Cut out the crusts from the bread.
2. Butter the bread slices evenly.
3. Spread jam on the buttered slices.

4. Put the slices together.
5. Cut into two triangles and serve.

Whole class activity (13 minutes)

Instruct students to read pages 26-27 of the textbook and to be prepared to answer questions. Write the following words on the board and ask students to write down a sentence or two about each according to what they have understood.

operating system
booting
Windows

Once done, ask students for their responses and jot those down around the respective words. Clarify and elaborate where needed. With the help of the students, draw a sample Start menu on the board. Ask them to create their own menus in their textbooks (as homework if classroom time is limited).

Practical demonstration (10 minutes)

If a computer is available, switch it on and show students what booting is. Show the Start menu and the different programs listed on it. Briefly describe the programs that enable the making of cards (Microsoft Publisher), the creation of a typed document (Microsoft Word), the use of the dictionary, the storage of addresses (Address Book), and the exploring of the World Wide Web (Internet Explorer). Point to some of the widely used and popular icons on the desktop and ask students to identify them and state their functions.

Following this, ask them to do the exercise on page 27.

Assigning homework (2 minutes)

Exercises on pages 28 and 29 of the textbook may be assigned as homework.

Whiz through Lab (page 29)

For the teacher: Students may create their own set of instructions. A sample is provided below for guidance.

How to make a greeting card

1. Divide an A4 page into half.
2. Draw a picture on the card.
3. Colour the picture.
4. Write a message inside the card.

Answers

Exercise (page 27)

Microsoft Paint
Microsoft Word
Microsoft Excel
Microsoft PowerPoint
Internet Explorer
Calculator

Explore with Whiz (pages 28 and 29)

Tick (✓) the correct statement.

1. The instruction that a computer receives is called a command.
2. A program is a set of instructions that tells the computer how to perform a task.
3. When we switch on the computer, the operating system loads first.

Write a set of instructions which will teach children how to start and shut down the computer.

1. To start the computer, first switch on the power supply.
2. Press the POWER button on the system unit.
3. Wait for the computer to boot up and display the desktop.
4. Click on the Start button to open a list of programs.
5. Select the program you want to open by clicking on its icon in the menu.
6. To switch off the computer, move the pointer to the Start button on the taskbar and click on it.
7. A menu with the Shut Down button in the bottom-right appears.
8. Click on it to shut down the computer.
9. Switch off the power supply.

Answer to Whiz's Tasks: C, D, B, A

Answers to Additional Activity

I. Which of these statements are false?

- (a) Computer programs are called software. Computer hardware includes parts of the computer that we can touch.
- (b) A set of instructions that tells you how to do something on the computer is called a program. Any set of instructions is not necessarily a program.
- (d) Windows is an operating system.

Whiz's Tasks

Amir wrote down the steps required to shut down the computer. But they are in the wrong order. Help him put them in the correct order.

- (A) The computer shuts down.
- (B) Click on Shut down.
- (C) Click the Start button on the taskbar.
- (D) The Start menu with the Shut Down command in the bottom-right appears.

Additional Activity

Which of these statements are false?

- (a) Computer programs are called hardware.
- (b) A set of instructions to tell you how to make a cup of tea is called a program.
- (c) The operating system is the most important software for the computer.
- (d) Windows is not an operating system.
- (e) A menu allows us to choose what we want to do on the computer.

Teaching objectives

The objectives of this chapter are to

- introduce the word processing program to students
- teach editing.

Learning outcomes

By the end of this chapter, the students should be able to:

- define the terms 'text', 'document', and 'font'
- edit text using word processing tools.

Suggested number of periods: 2**Period 1****Sample lesson plan for a 40-minute period****Lab session (35 minutes)**

This lesson should be held in the computer lab.

Ask any student to volunteer reading out page 31. Explain the meaning of word processing carefully. You may explain that when words are written in a document, they need to be saved for future use. The document needs to be corrected if mistakes have been made. It may have to be adapted for the occasion or context, and so on. Explain that performing these functions is called 'word processing' and the word processing program enables us to perform these functions on the computer.

Point out the Quick Access Toolbar and the Ribbon on the Word window and explain their functions as described on page 32 of the textbook. Demonstrate how to open Microsoft Word by following the steps given on page 33. You can have one of the students read it during the demonstration.

Write some text on the document and call out aloud what you are doing. For example, you could say, 'I am now typing a note to my children instructing them to heat food for lunch as I will be home late,' as you type the following note:

Dear Sana and Shaan,

Since I have a meeting to attend after school, I will not be home before 4 o'clock.

You will have to heat your lunch that I have put in the refrigerator. Be careful when operating the microwave and remember to put the dirty dishes in the sink after you have finished eating. I will see you at 4 o'clock.

Lots of love,

Mummy

If you make any mistakes while typing the note—deliberate or otherwise—get the students to identify the mistakes and then guide them through the process of correcting those. Students should be clear about the difference between the

Backspace key and the Delete key. If the computer is shut down without saving the note, the note will be deleted automatically. So in order to use, print, or send the note, it must be saved. Demonstrate the steps for saving the document and closing it by following the steps given on pages 35 and 36 of the textbook.

Assigning homework (5 minutes)

Assign exercises on pages 32, 33, and 34 as homework.

Period 2

Sample lesson plan for a 40-minute period

Lab session (35 minutes)

Type the word 'font' on the computer screen and ask students to explain what it means. Type out their responses on the computer. Explain what font means and the different ways of formatting text by reading out from page 37 of the textbook. Once the meaning is clear, demonstrate the use of the Bold, Italics, and Underline features in the Font group on the Ribbon.

Explain how font size can be varied and show some of the different font styles, e.g. Times New Roman, Comic Sans MS, etc. Explain to the students that some font types such as Comic Sans MS cannot be used in formal correspondence. Students can be assigned the corresponding short exercises on pages 37 and 38. Finally, explain the use of the Backspace and Delete keys with reference to editing a document.

Assigning homework (5 minutes)

Assign the exercises on pages 39 and 40 of the textbook as homework. Instruct students to make the poster on coloured A4-size paper. Those who have the facility may make the poster on their computers too and bring a printout to the classroom. Others can make handmade posters.

Answers

State whether these statements are true or false. (page 32)

1. False.
2. False.
3. True.
4. True.
5. True.

Word Whiz (page 33)

commands, tasks

Exercise (page 37)

computer

Words in italics: printer, hard, copy

Nouns to be underlined: letters, word, processor, documents, fonts, document

In the lines below, which key will you use to correct mistakes? (page 39)

um|se: Backspace
scre|ven: Delete
yous|r: Backspace
comp|nuter: Delete

Explore with Whiz (pages 40)

Answer the following questions.

- 1 (a) To save a document:
 - i. Click on the File tab.
 - ii. A menu opens.
 - iii. Click on Save or Save As.
 - iv. Type the name for the document.
 - v. Click Save.
- (b) To open Microsoft Word:
 - i. Click on the Start button.
 - ii. Go to All Programs.
 - iii. Click on Microsoft Office.
 - iv. Click on Microsoft Word 2010.
- 2 (a) erases text one step backwards
(b) erases text one step ahead
- 3 (a) The Ribbon contains commands used to perform tasks in the word processing program.
(b) The Quick Access Toolbar contains some of the most commonly used commands.

Answers to Additional Activity

- (I) (a) italics
(b) bold
(c) italics and underline
(d) bold and underline
- (II) (a) Delete key or Backspace key
(b) Backspace key
(c) Delete key
(d) Backspace key
- (III) (a) ii
(b) i
(c) iii
(d) iii
(e) ii

Additional Activity

(I) Identify if the font(s) of the following phrases are in bold, italics, or underlined.

- (a) *a bouquet of flowers* _____
- (b) **a bed of roses** _____
- (c) a school of fish _____
- (d) **a herd of elephants** _____

(II) Assume that you are typing a document on the computer and notice the following errors. Which key would you use to correct these mistakes?

- (a) shinining _____
- (b) comming _____
- (c) compiuter _____
- (d) libraraiy _____

(III) Circle the correct answer.

- (a) The poem I write on a computer is called a _____.
- (i) software
- (ii) document
- (iii) word processor
- (b) A program is also called _____.
- (i) software
- (ii) document
- (iii) menu

- (c) The words that we enter into the computer are called _____.
- (i) numbers
 - (ii) letters
 - (iii) text
- (d) A set of characters displayed in a special size or shape is called _____.
- (i) letters
 - (ii) text
 - (iii) font
- (e) Correcting mistakes is called _____.
- (i) erasing
 - (ii) editing
 - (iii) deleting

Teaching objectives

The objectives of this chapter are to:

- introduce students to the correct way of using a QWERTY keyboard
- help students to use the letter keys quickly and easily
- teach students to type with speed and precision through practice.

Learning outcomes

By the end of the lesson, the students should be able to:

- remember the placement of the letter keys on a QWERTY keyboard,
- apply typing techniques to type quickly and accurately.

Suggested number of periods: 1 (a second period may be allocated for practice)

Period 1**Sample lesson plan for a 40-minute period****Lab session (30 minutes)**

Take students to the computer lab. Remind them that they may not bring any food or drink into the computer lab.

Explain to the students that they must practice typing in the correct way to develop speed and accuracy. Students end up spending hours at the computer. This can be injurious to their health, so they must be careful about maintaining good posture. The table should be at the correct height and the students must be seated in a comfortable chair. The keyboard should be below or at the same level with the elbows. Students should seat themselves in front of the computer so that they are positioned in the centre of the keyboard right in front of the G and H keys of the keyboard. Students should sit up straight so their line of sight is just above the top of the monitor. This prevents stress on the neck muscles.

Call out the names of the fingers. Demonstrate the correct finger placement on the keyboard by following the instructions given in the chapter. The four fingers of their left hand are to be placed on the ASDF keys and the four fingers of their right hand are to be placed on the JKL; keys. Ask students to exercise their finger muscles by typing ASDFJKL; several times on the computer. You can call out any arrangement of the letters to test students' alertness.

Instruct students to stretch the index finger of the left hand to press the G key and the index finger of the right hand to press the H key. They should use the thumb to tap the space bar to create spacing between letters and words.

Have students take turns at the computer and practise. Make sure everyone gets a fair chance.

Instruct students to extend the left index finger to press the R and T keys and the right index finger to press the U and Y keys. Extend the left middle finger to press the E key and the right middle finger to press the I key. Extend the left ring finger to press the W key and the right ring finger to press the O key. Extend the left little finger to press the Q key and the right little finger to press the P key. Ask students to be patient whilst waiting for their turn at the computer.

Assigning homework (10 minutes)

Assign the Word Whiz and Explore with Whiz exercises as homework.

Answers

Word Whiz (page 43)

Maintain: Explain to the students that we maintain something when we keep it in good condition. We must develop good posture and maintain it by correcting any problems.

Strain: Explain that we strain something when we put too much pressure on it, such as by pulling or pushing too much. Explain that pulling or stretching a muscle too hard can cause it to strain.

Explore with Whiz (page 49)

Which finger do we use to type the following?

- G and H: index fingers
- U and Y: right index finger
- R and T: left index finger
- E: left middle finger
- O: right ring finger
- Q and P: little fingers
- space bar: thumb

List the words that we can type using the fingers of the left hand only.

Red, fed, wed, cad, sad, wad, fad, get, set, wet, was, saw

Teaching objectives

The objectives of this chapter are to:

- introduce the Paint software
- explain what an icon is
- teach students about the uses of the different tools.

Learning outcomes

By the end of this chapter, the students should be able to:

- use different tools in the Paint program
- explain the term 'icon' by pointing out various icons on the computer.

Suggested number of periods: 2

Period 1

Sample lesson plan for a 40-minute period

Starter activity (5 minutes)

Ask students if they know what the Microsoft Paint program is used for. As students have worked on Paint the previous year, they should be able to recall and state that it is used to draw and colour/paint pictures on the computer. Next, ask students if they can recall what an icon is.

Additional information

Icon or *ikon* is a Greek word which means an image or a likeness. An icon is a graphical image, a small picture, or object that represents a file, program, web page, or command. Icons help the user to carry out commands and open programs or documents quickly simply by clicking or double-clicking on the icons.

Show students the icons on the desktop of a computer and inquire if they know which file or program they represent.

Practical demonstration (30 minutes)

Take students to the computer lab. On a computer screen, demonstrate the steps to open the Microsoft Paint application from page 52 of the textbook. Identify the Ribbon and the drawing area in the Paint window.

Explain the concept of tabs and groups on the Ribbon. Point to the Tools group on the Home tab and click on the icons described on page 53 of the textbook one by one. Demonstrate the use of the following: Pencil, Eraser, Fill with Color, Color picker, Text, Magnifier, and Brushes tools. Let students tell you what functions they think these tools perform before you show it to them.

Point out the difference between the American and British spelling of colour. Explain to them that all Ribbons and menus will use the American spelling 'color'. But in countries that follow British spelling, we add a u and spell it colour.

Give the students sufficient time to sit at the computer and practise using the above tools. Make sure every student gets a chance. Explain to them that they must respect each other's work. If they have positive comments, they might tell their partners at the computers; but otherwise they must refrain from criticism. Also once they have done their work, they can only print with the teacher's permission.

Assigning homework (5 minutes)

Assign the exercises on pages 52, 54, and 55 as homework.

Period 2

Sample lesson plan for a 40-minute period

Lab session (30 minutes)

After revising the tools discussed in the previous period, demonstrate how different shapes such as triangles, circles, and squares can be created from the tools in the Shapes group on the Home tab. Draw various shapes by clicking on the relevant icon and dragging the mouse over the drawing area. Next, draw a car or other object by using different shapes, e.g. rectangle for the car body, circles for the wheels, etc.

Explain the use of the tools in the Image group for editing a drawing. Demonstrate the use of the Select and Crop tools by first drawing a picture using the different shapes. Then show how to select a certain portion of that picture using the Select tool and cutting it out using the Crop tool.

Once students have completed their drawings, ask them how they can save their drawings to view them later. Guide them through the saving process practically as well as by reading the steps on page 58 of the textbook.

Explore with Whiz (page 60) (10 minutes)

After the students have had a hands-on session at 'Paint', they should attempt the exercise on page 60 of the textbook which can also be used as an assessment quiz. Exercises and activities on pages 56 and 59 can be assigned as homework.

Answers

Number the pictures in the correct order. (page 52)

4, 3, 2, 1

What tools will you use to do the following? (page 54)

- Rectangle tool
- Eraser tool
- Fill with color tool
- Text tool
- Rectangle and Triangle tools

Exercise (page 55)

Answers will vary.

Word Whiz (page 59)

select: choose. We can select or choose a present.

crop: cut. We can crop or cut away a part of a picture.

command: instruct. The teacher commands or instructs you to complete your work.
varying: differing. There are varying sizes or differing sizes, that is different sizes.

Explore with Whiz (page 60)

Name the following tools.

Select, Crop, Eraser, Magnifier, Fill with color, Pencil, Color picker, Text, Brushes

What are these called?

Ribbon

icon

drawing area

Whiz through Lab (page 61)

For the teacher: Instruct the students to make a certificate for 'Best Student' using all the tools that they have learnt in this chapter. Ask them to keep a protection screen on the monitor to protect their eyes from glare.

Answers to Additional Activity

- (I) (a) (iii)
- (b) (ii)
- (c) (ii)
- (d) (ii)
- (e) (ii)
- (f) (iii)

Whiz's Tasks

What do the following tools do?













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Additional Activity

(I) What do the following tools do?

- (a) Select _____.
 - (i) draws a picture
 - (ii) colours a picture
 - (iii) selects a part of a picture
- (b) Text _____.
 - (i) makes text bigger
 - (ii) adds text on the page
 - (iii) makes text bigger and smaller
- (c) Eraser _____.
 - (i) deletes a straight line
 - (ii) erases mistakes
 - (iii) deletes a circle
- (d) Size _____.
 - (i) edits the picture
 - (ii) draws and paints with a thicker line
 - (iii) magnifies your picture
- (e) Ellipse _____.
 - (i) draws a circle only
 - (ii) draws an oval and a circle
 - (iii) draws freehand
- (f) Magnifier _____.
 - (i) makes the text bigger
 - (ii) makes the text smaller
 - (iii) makes the text both bigger and smaller

Teaching objectives

The objectives of this chapter are to:

- make students familiar with networks
- discuss the importance of the Internet.

Learning outcomes

By the end of this chapter, the students should be able to:

- explain the meaning and role of networks
- summarize the uses of the Internet.

Suggested number of periods: 1**Period 1****Sample lesson plan for a 40-minute period****Starter activity (5 minutes)**

Ask students to recall the importance and uses of computers that they listed when they were studying the first chapter of this book. After students have called out some uses, select and write the following uses on the board:

- to find information quickly
- to make communication with family and friends living in other cities or countries easier, quicker, and inexpensive
- to watch movies and listen to songs
- to read books, etc.

Reading and explanation (25 minutes)

Prompt students to think about what enables so much to be done on the computer. Lead them to the answer: the Internet. Write the word INTERNET on the board and ask students to brainstorm its meaning in pairs. Give them 5 minutes to do so and then ask for their responses, writing them down on the board and explaining the connections.

Expected responses include connected computers, cables, network, transfer of information/data, Internet, sending and receiving email, World Wide Web, connection, online, finding information, etc.

Ask students if they know how to search for information on the Internet (expected responses: through Google, Yahoo, etc.). If students do not know what these are collectively called, explain that these are called search engines and are used to search for information. Ask a volunteer to read out pages 63 and 64 of the textbook and demonstrate how a search engine works. Show them how to connect to a search engine on the computer.

Explain to the students that they have to be very careful on the Internet. These are some of the things you could caution them about:

People are not always what they appear online. The Internet makes it easy for people to pretend to be someone they are not. If people add you to their contact list and you don't know them, you must block them so they can't see you online.

Always be careful in online chat rooms. Tell an adult or someone you trust when you feel something is suspicious or not quite right. Never agree to meet someone you have only met online unless an adult or your guardian is present.

Do not give out personal information. Remember that anyone can access information that you put up on your profile. Once you place it on the Internet it can be seen and used by others. Use your privacy settings to protect yourself.

People may use websites to bully and harass others. They may attempt to use matter from your profile in malicious ways, post nasty comments, and harass you in different ways. Show these things to an adult you trust.

Assign the information gathering task for homework if school resources do not permit the activity; otherwise, it would be ideal to have students work on the task in the school's computer lab under your supervision. The exercise on pages 65 and 66 may be assigned to assess whether students have followed the session or not.

Assigning homework (5 minutes)

Assign the exercises on pages 67 and 68 as homework.

Answers

Write brief answers to the following questions. (page 67)

What is a network?

When two or more computers are linked together, they form a network.

What is the Internet?

The Internet is a network of computers linked together to share information.

What do you use the Internet for?

The Internet is used to gather information, send messages, and buy things online.

Explore with Whiz (page 68)

Fill in the blanks with the correct verb.

communicate, connect, form, gather, send, share

State whether these statements are true or false.

True.

False.

True.

True.

True.

Answers to Whiz's Tasks

- I. A. i B. ii
C. iii D. iii
E. i

Whiz's Tasks

I. Tick (✓) the correct answer.

- A. Computers share information through a _____.
- (i) satellite
 - (ii) mouse
 - (iii) library
- B. We access the Internet with the help of the _____ program.
- (i) Computer
 - (ii) Internet Explorer
 - (iii) All Programs
- C. We find information on various topics through a _____.
- (i) search program
 - (ii) search car
 - (iii) search engine
- D. The Internet enables us to buy things _____.
- (i) for free
 - (ii) online
 - (iii) offline
- E. As soon as we see something disturbing on the Internet, we should _____.
- (i) tell our teacher or parents
 - (ii) keep quiet about it
 - (iii) never use the Internet again

