LESSON PLAN

Touchpad iPRIME Ver 1.1 Class-4

1. Computers—Storage and Memory Device

Teaching Objectives

Students will learn about

- Data and information
- Memory
- Measuring the computer's memory

Teaching Plan Number of periods: 2

While teaching this chapter, tell the students that like human beings, computers also have memory to store all data and instructions for performing various tasks.

Tell the students about the two types of computer memory – primary memory and secondary memory.

Share with the students that the primary memory of the computer is fixed on the motherboard of the computer.

Explain in detail about the types of Primary Memory covering:

Random Access Memory (RAM) – the volatile memory

Read Only Memory (ROM) – the non-volatile memory

Share with the students the meaning and difference between the two types of RAM – Dynamic RAM and Static RAM.

Give a brief introduction about secondary memory or secondary storage devices covering in detail: Magnetic Disk (Hard Disk – Internal and External)

Optical Disk (CD, DVD, Blue-ray Disk – ROM, R and RW)

Flash Drive (Pen Drive, Memory Card) (See Suggested Activity also)

Introduce byte as the basic unit of measuring computer memory and nibble as half a byte.

Share with the students the meaning and relationship between higher units of measurement of computer memory – KB, MB, GB, TB, PB, EB, ZB and YB.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

Q. What is computer memory?

- Q. What is primary memory?
- Q. Name the different types of primary memory.
- Q. Expand RAM / ROM.
- Q. What are the different types of RAM?
- Q. What is the difference between primary and secondary memory?
- Q. Name the categories in which secondary storage devices are divided into.
- Q. What are the different types of CDs and DVDs?
- Q. Expand CD / DVD.
- Q. What is a pen drive / memory card?
- Q. Define a byte.
- Q. Name any three higher units of measurement of computer memory.

After explaining the chapter, let the students do the course book exercises given on Pages 12 and 13 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 14 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Hands-On and Fun in Lab given on Page 14 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to research and collect information about some secondary storage devices like floppy disks, which have now become obsolete.

2. GUI Operating System—Desktop Management

Teaching Objectives

Students will learn about

Components of Windows 7 desktop
Desktop background

☞ Icons 🖙 Taskbar

Teaching Plan Number of periods: 3

While teaching this chapter, tell the students that operating system is one of the most important software as without this software we cannot use our computer at all.

Give a brief introduction of Microsoft Windows.

Tell the students the about the useful features of Windows 7.

Demonstrate to the students the steps to start Windows 7.

Make the students aware about the concept of desktop.

Familiarize the students with some important icons on the desktop like Computer, Recycle Bin and Network



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Demonstrate to the students the steps to sort icons on the desktop. Show to the students that how some or all of the icons on the desktop can be hidden.

Introduce the students to the taskbar and its components covering Start button, Opened program icons and Notification Area.

Explain the use of the following to the students:

- Start Button
- Clock
- Quick Launch Bar
- Show Desktop Button
- Changing Volume of the Speaker
- Changing Position of the Taskbar

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the importance of an operating system?
- Q. Give examples of some popular operating systems.
- Q. Which company developed Windows operating system?
- Q. What are the important features of Windows 7?
- Q. What is desktop?
- O. Define icons.
- O. What is taskbar?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 23 and 24 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 25 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 25 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to draw the various shapes of a mouse pointer and the action being performed at that time on an A3 sheet of paper.

3. Editing in MS Word 2010

Teaching Objectives

Students will learn about

Features of MS Word 2010

Creating a new document

Saving a document

Selecting text

Inserting text

Cutting/copying text

Spell check

Thesaurus

Teaching Plan Number of periods: 3

While teaching this chapter, tell the students that editing is the process of making changes in the existing text.

Share with the students that to edit text, first it needs to be selected.

Tell the students about selecting text with the help of mouse and with the help of keyboard.

Demonstrate to the students the different ways in which text can be deleted according to the requirement of the user.

Show to the students that text can simply be inserted by moving the cursor to the point where text is to be entered and start typing.

Demonstrate to the students the steps involved in:

Saving a document

Opening a saved document

Printing a document

Closing MS Word

Introduce Undo as a feature used to cancel the command and Redo as a feature to reverse the action of Undo.

Familiarize the students with the icons and the shortcut keys to Undo and Redo actions.

Introduce Cutting as moving the text from one place to another and Copying as duplicating text at another place also.

Demonstrate the steps to Cut-Paste and Copy-Paste text in a Word document.

Introduce the students to Spelling and Grammar Check feature of MS Word.

Show to the students the representation of spelling and grammar mistakes with different colored wavy lines.

Demonstrate to the students the method of using Spelling and Grammar Check feature of MS Word. (See Suggested Activity also)

Demonstrate to the students the method of using Thesaurus feature of MS Word.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is editing?
- Q. How is letter / word / text / paragraph selected using a keyboard?
- Q. Which key is used to delete a letter?
- Q. What is the use of Undo command?
- O. When is Redo command used?



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- Q. What is the difference between cutting and copying text?
- Q. What is the use of Spelling and Grammar check feature?
- Q. Which button is pressed to skip errors and continue working during Spelling and Grammar check?
- Q. What are the shortcut keys to open / save / print a document?

After explaining the chapter, let the students do the course book exercises given on Pages 33 and 34 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 35 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 35 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to write a paragraph on My Favourite Festival in MS Word 2010, check for spelling and grammar mistakes and paste a printout in the computer notebook / practical file.

4. Formatting in MS Word 2010

Teaching Objectives

Students will learn about

Changing Font and Font Size

Highlighting text

Applying text effects

Changing case

Line spacing and paragraph spacing

Difference between editing and formatting

Changing Font Color

Bold, italic and underline

Aligning the text

Adding bullets and numbering

Printing a document

Shortcut keys

Teaching Plan

Number of periods: 4

While teaching this chapter, tell the students that formatting the text means changing the appearance and arrangement of the text.

Share with the students the default font and font size in a MS Word 2010 document.

Demonstrate to the students the method of changing font and font size.

Tell the students the steps involved in changing color of the selected text in the document.

Introduce highlighting feature of Word as marking important text and placing a colored rectangle over it.

Show to the students the steps involved in highlighting text.

Share with the students about the Bold, Italic and Underline features and the method of applying these features to the text.

Tell the students that Word has some in-built text styles which can be applied to the selected text.

Demonstrate to the students the method of:

- Applying text effects
- Changing text alignment
- Applying borders
- Applying artistic borders
- Applying shading

Introduce Change Case feature as changing text to upper, lower and other common capitalizations.

Show the students how to change case of the selected text.

Introduce bullets as small symbol used to mark items in a list.

Show to the students the method of adding bullets or numbers to the items in a list.

Ensure that the scope of Let's revisit given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. Define formatting a text.
- Q. What is the default font / font size of text in a MS Word 2010 document?
- Q. What do you mean by highlighting text?
- O. What is the difference between bold and italic format of the text?
- Q. What are text effects?
- Q. Define text alignment.
- Q. What are the different types of text alignment options?
- Q. Why is shading added to text?
- Q. What does Change Case option do?
- O. What are bullets?
- O. When are bullets or numbers added to text?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 46, 47 and 48 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 48 and 49 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 49 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to collect write a paragraph on My Favourite Sport in MS Word 2010 applying various formatting features to make the paragraph attractive.



5. The Internet - Web Browser

Teaching Objectives

Students will learn about

Uses of Internet
Requirements to connect to Internet

Internet terms
Internet explorer

Search engines

Teaching Plan Number of periods: 2

While teaching this chapter, tell the students that computers connected to a network can share data and files efficiently without any delay.

Make the students recall that the internet is a global network of millions of computers and computer networks.

Introduce Uniform Resource Locator (URL) as a unique address or website address used for locating websites.

Explain the various uses of internet covering:

E-mail – an online communication system

Information – through search engines like Google, Yahoo, etc.

Online shopping

Online chatting

Downloading data

Uploading data

Social Networking – Facebook, Instagram, Twitter, YouTube, WhatsApp, etc.

Share with the students the various requirements for an internet connection covering computer system, telephone/cable line, modem, web browser and Internet Service Provider (ISP).

Explain the meaning of some common internet terms like URL, Hyperlink, Offline, Online, Surfing, Website and Web page.

Ensure that the scope of let's revisit r given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is a computer network?
- Q. What is internet?
- Q. What are the uses of internet?
- Q. What are the requirements for an internet connection?
- Q. What do you understand by Downloading / Uploading data?
- Q. Define URL / Hyperlink / Offline / Online / Surfing / Website / Web Page.

After explaining the chapter, let the students do the course book exercises given on Pages 57 and 58 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 58 and 59 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 59 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to prepare a report on some more uses of internet and present the observations to the class.

6. Introduction to MS PowerPoint 2010

Teaching Objectives

Students will learn about

Starting MS PowerPoint 2010

Creating a new presentation

Entering data on the slide

Deleting a placeholder

Viewing slide show

Exiting PowerPoint

Components of PowerPoint screen

Slide layout

Adding new slide to a presentation

Number of periods: 5

Deleting a slide

Saving a presentation

Teaching Plan

While teaching this chapter, tell the students that Microsoft PowerPoint 2010 is a part of Microsoft Office 2016 package or suite. Share with the students that it is used to create presentations. Demonstrate to the students the steps to start MS PowerPoint 2010. Familiarize the students with various components of PowerPoint screen covering Title Bar, Ribbon, Quick Access Toolbar, File Tab, Slide, Placeholder, Slides / Outline Pane and Status Bar. Introduce slide as a single page of a presentation.

Demonstrate the steps to:

- Create a new presentation
- Enter data on a slide in title and subtitle placeholders
- Add new slide to a presentation
- Deleting a placeholder
- Deleting a slide Introduce slide show as full screen view of the presentation.
- Show to the students the method of viewing a slide show.
- Tell the students how to:
 - Save a presentation
 - Exit MS PowerPoint 2010

Ensure that the scope of let's revisit given at the end of the chapter has been covered.



Extension

Ask the students some oral questions based on this chapter.

- O. What is MS PowerPoint 2010?
- O. Define Title Bar / Status Bar.
- Q. What do you mean by Ribbon / Placeholder?
- Q. What is a slide in a presentation?
- Q. Which key is pressed to delete a selected placeholder?
- Q. What are the various ways in which a slide show can be started?
- Q. What are the steps to exit MS PowerPoint 2010?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 68, 69 and 70 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 71 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 71 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a presentation on 'The Cartoon Character I Like The Most'.

7. Stepwise Thinking

Teaching Objectives

Students will learn about

- Reasoning and Problem Solving
- Stepwise Thinking
- Case Study
- Programming

Teaching Plan

Number of periods: 4

Before starting the chapter, ask the students to solve the question in Let's Plug In given on Page 73 of the main course book.

Tell the students about the following in detail using appropriate examples:

- Reasoning
- Problem Solving

Explain the Stepwise Thinking to the students with the steps involved in the process using suitable examples.

Share some Case Study with the students to explain the above taught factors in problem solving approach.

Tell the students about Programming and give a brief introduction about it.

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is reasoning?
- Q. What is problem solving?
- Q. What is stepwise thinking?
- Q. What is case study?
- Q. What is programming?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 76, 77, 78 and 79 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 79 and 80 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 80 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to write a case study to create a greeting card.

8. Features of File Management

Teaching Objectives

Students will learn about

- File/folder
- Organizing file/folder
- Creating a new file/folder
- Selecting a file/folder
- Copying and moving a file/folder
- Renaming a file/folder
- Deleting a file/folder
- Restoring a deleted file/folder
- Not tempering with other file/folder



Teaching Plan Number of periods: 4

While teaching this chapter, tell the students that all the data saved on a hard disk consists of files and folders.

Introduce file as an item that contains a collection of related information, a folder as a collection of files and a sub folder as a folder within a folder.

Introduce to the students the Windows Explorer as a file manager that manages files and folders.

Demonstrate to the students the steps to open Windows Explorer.

Familiarize the students with the various components of Windows Explorer covering Toolbar, Navigation pane, File List pane, Status bar, Address bar, Search, Back and Forward.

Tell the students that Windows 7 has some default folders to organize similar files.

Demonstrate to the students the steps to:

- Open a file and a folder
- Select a file and a folder (including selecting a single file, selecting multiple files, selecting all files and deselecting a file)
- Copying a file and a folder (using Copy-Paste features)
- Moving a file and a folder (using Cut-Paste features)
- Creating a new file and a folder
- Renaming a file and a folder
- Deleting a file and a folder
- Restoring a file and a folder

Share with the students some new features of Windows 7 covering:

- Touch screen (just like android touch screen mobile phones)
- Jump List (jump directly to documents, pictures, songs or websites used frequently)
- Sneak (shows you on the Taskbar a preview of the windows that are opened).

Ensure that the scope of Teacher's Corner given at the end of the chapter has been covered.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is a file / folder / subfolder?
- Q. Define a computer icon.
- Q. What is Windows Explorer?
- Q. Name the default folders of Windows 7 for organizing data.
- Q. Which key is used to select multiple files?
- Q. Which key is pressed to invert the selection?
- Q. What is the difference between copying a file and moving a file?
- O. What is Sneak feature of Windows 7?

After explaining the chapter, let the students do the course book exercises given on Pages 89, 90 and 91 of the main course book as One Touch Learn and Let's Do It. After solving the course book exercises, tell the students to solve Crack the Code activity given on Page 91 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Fun in Lab given on Page 91 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to collect information about some more features of Windows 7 other than those discussed in the chapter.