KEYBOARD

Computer Science With Application Software

THIRD EDITION

1

TEACHING GUIDE

OXFORD
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About the Series

The computer in present-day society is an indispensable tool facilitating communication and work. From huge machines weighing several tons, the computer has evolved into light, sleek yet powerful tools that dominate today's knowledge society. Many previously complex and time-consuming tasks have been reduced to the mere touch of a few buttons on the keyboard. Basic computing skills like word processing are an essential requirement in today's job market. The Internet has revolutionised the way people communicate and interact. Geographical distances are no longer a constraint for effective business transactions, information dissemination, and interpersonal interactions, as distances have been overcome through extensive, intricately-designed communication networks.

Today computer science is an academic subject in its own right, governed by scientific and mathematical principles. It is an integral part of what is commonly called STEM (Science, Technology, Engineering, and Mathematics). Due to its increasing importance, computer classes have become an essential part of the education curriculum around the world.

However, the trend has been to favour Information and Communication Technology (ICT) rather than the science behind computers. ICT in schools usually focuses only on teaching how to use office productivity software, such as, word processors, presentation software, and spreadsheets. We, as teachers, should be careful that we teach not only ICT, but also computing, especially in the lower classes. This is an important distinction because ICT primarily involves simply understanding and memorising commands. As a consequence many students may get the impression that there is not much of creativity involved in using computers. This may possibly result in students losing interest in what they mistakenly believe to be computing. Students are not introduced to how computers work and are not provided with the opportunity to be creative through computing activities that challenge them to use their logical and analytical abilities along with being creative.

Computer science education should be such that children later on, if they choose to do so, would be capable of making a meaningful contribution either to further advance our digital society or use digital media optimally in their chosen field of study or work. Computer education in schools should equip every child with the basic understanding of how computers work and with the possibilities of information technology in a knowledge-based society and economy. This has been the rationale for developing this third edition of the **Keyboard** series—*Keyboard: Computer Science with Application Software*

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KEYBOARD: COMPUTER SCIENCE WITH APPLICATION SOFTWARE

Keyboard: Computer Science with application Software, third edition, a series of eight books for Classes 1 to 8, is a comprehensively revised edition of *Keyboard: Computer Science with application Software*, second edition, and carries forward the very same interesting and interactive approach that is a hallmark of the existing edition. The series aims to make the study of computer science engaging and interactive for students through a combination of interesting features.

The contents are based on the most recent feedback from teachers and incorporate the latest trends in computer education. We have taken particular care to update facts and figures, and to include the latest advancements in the field of information and communication technology. Thus, trendsetting topics such as social networking and cloud computing have been explained along with devices such as smartphones and tablets. Also, in keeping with the times, there is greater focus on animation and web-designing concepts.

The series introduces the subject in a language that is simple and direct. Technical jargon is used only where necessary and all such terms are defined at the end of each chapter. Comic strips, icons, cartoon characters, and illustrations make the learning process an enjoyable experience.

Keyboard: Computer Science with Application Software is an advanced course in computer science meant for those schools that wish to teach creative application software, such as **Flash**, **HTML**, **Photoshop**, and **Dreamweaver**, along with the basic concepts of computers, computer programming, and the Internet. In keeping with the times it also introduces students to sound (**Audacity**) and video-editing **(Lightworks)** software.

COURSE FEATURES AND HIGHLIGHTS

Each chapter in *Keyboard: Computer Science with Application Software* starts with an engaging introduction in comic strip format presenting a conversation between two characters, **Goggle** and **Toggle**. Goggle represents an average primary and middle school student, while Toggle is an animated laptop and an expert in computer science. Toggle helps Goggle understand all that is taught about computers and computer software in the series. The series has a hands-on approach to learning with text supported by relevant screenshots, and plenty of practical exercises. The MS Office screenshots are based on **MS Office 2013**, with the compact and user-friendly **Windows 7** as the operating system.

Practice Time, Exercises, In the Lab, and Group Project

Practice Time is a feature that has been a part of all the computer science series we have written, and it has been found by teachers to be a very useful feature. We continue with it in *Keyboard: Computer Science with Application Software* also. The feature provides practical exercises after every major topic, in which the student applies the concept(s) learnt in the previous section to solve a practical problem. The detailed solution is given after the question, so that students are able to understand the practical application of a particular concept on their own. This frees the teacher from the process of trying to individually assess whether all the students have properly grasped the concept.

The **Exercises** and **In the Lab** questions in the series deserve particular mention. as they have been developed according to Bloom's Taxonomy. The exercises in each chapter have sufficient theoretical and practical questions for concept application.

Application-Based Questions is a special analytical section within Exercises, aimed at encouraging students to evaluate a picture or a situation, and answer questions based on them.

The **In the Lab** questions are similar to those under **Practice Time** except that the solutions are not given. The questions too are more complex than those found under **Practice Time**. In both, however, the questions describe

a variety of situations across subjects. Thus, both attempt to integrate the use of computers with problem-solving in other subjects.

Group Projects encourage the students to work in collaboration with their peers and implement what they learnt in the lessons.

Worksheets and Assessment Papers

Worksheets have been introduced in Classes I to V, while for Classes VI to VIII **Assessment** and **Comprehensive Assessment** papers have been included.

Teaching Resources

The teacher's resources for the *Keyboard: Computer Science with Application Software*, series have two components: (a) Teaching Guides and (b) Teacher's Digital Resources.

Teaching Guides

The Teaching Guides accompanying each of the coursebooks is carefully structured to provide useful support to teachers.

Each Teaching guide contains the following:

- A **Lesson Plan** that details the periods recommended for a particular chapter, the topics therein, the expected learning outcomes at the end of each topic, and the digital support available for each chapter. This is intended to assist teachers in respect of overall planning. Teachers may go through the lesson plan before stepping into the class or may use the recommendations for creating their own.
- A set of **chapter-wise Worksheets** follows the lesson plans, and has questions in the form of Crossword Puzzles, Word Searches, Jumbled Words, etc. designed to reinforce conceptual understanding.
- In addition to the **Worksheets**, a set of **chapter-wise test papers** has also been provided, which may be used by teachers to create their own assessment papers, or may be used as they are for classroom tests.
- The complete **Answer Key** to the Coursebook Exercises has been given in the teaching guide, including that for the In the Lab questions, Group Project, Worksheets/Assessment papers, Revision Questions, and the Cyber Olympiad Questions.

Digital Resources

The teacher's digital support for the series is accompained by a **Test Generator**.

This comprehensive and easy-to-use **Test Generator** is an effective assessment tool designed to benefit teachers by enabling them to create a variety of test papers.

It has two sections: (a) Coursebook questions (b) Questions beyond the coursebook.

Both include an extensive pool of questions, such as multiple choice, true or false, fill in the blanks, short answer, and long answer questions, as well as lab exercises wherever relevant. Answers have been provided to enable efficient and effective evaluation. The **Test Generator** allows the teacher to create test papers for one or more chapters, with a mix of questions from both the sections. The Student's Books, and the accompanying Teaching Guides and teacher's digital support, together form a complete package enabling one to teach the subject effectively.

Continuous and Comprehensive Evaluation

Learning takes place in a variety of ways — through experience, making and doing things, experi-mentation, reading, discussion, asking, listening, thinking and reflecting, and expressing oneself in speech, movement or writing. All these modes of learning are possible both individually and in groups. It would thus be advantageous for children to be given the opportunity to involve themselves in as many of these activities as possible.

CONTINUOUS AND COMPREHENSIVE EVALUATION (CCE)

The primary objectives of this system are (1) to maintain continuity in evaluation and (2) to reliably assess broad-based learning and behavioural outcomes.

In this system the term 'continuous' is meant to emphasize that evaluation of a student's progress is a continuous process rather than an event. It is spread over the entire span of an academic session, and means regularity of assessment and unit-testing. It also includes a diagnosis of learning gaps, the use of corrective measures, retesting, as well as self-evaluation.

The term 'comprehensive' suggests that the system should cover both scholastic and co-scholastic aspects of a student's growth and development.

This system expects assessment to be both **formative** and **summative**. Formative assessment is a tool used by the teacher to continuously monitor student progress in a supportive environment. It involves regular descriptive feedback, a chance for the student to reflect on the performance, take advice and improve upon it. If used effectively it can improve student performance tremendously.

Summative assessment is carried out at the end of a course of learning. It measures or 'sums-up' how much a student has learned from the course. It is usually a graded test, i.e., it is marked according to a scale or set of grades.

It has been found that assessment that is predominantly of a summative nature will not by itself be able to yield a valid measure of the growth and development of the child. It, at best, certifies the level of achievement only at a given point of time.

The paper-pencil tests are basically a one-time mode of assessment and to exclusively rely on it to decide about the development of a child is both unfair and unscientific. Over-emphasis on examination marks makes children assume that assessment is different from learning. Besides encouraging unhealthy competition, the reliance on a summative assessment system also results in great stress and anxiety among learners.

The *Keyboard: Computer Science with Application Software,* series, comprising of **Student's Books, Teaching Guides,** and **Digital Resources,** has a number of features that aid both continuous and comprehensive evaluation.

CONTINUOUS EVALUATION

Coursebooks

Beginning of Instruction (Formative Assessment)

- The introductory dialogue at the beginning of each chapter between Goggle and Toggle is a starter to the chapter topic and can be employed to test the prior knowledge of students by using the dialogue to ask for possible solutions or an answer to Goggle's question. For example, in the following dialogue you can also ask them what is the alternative to clicking the **Run** button.
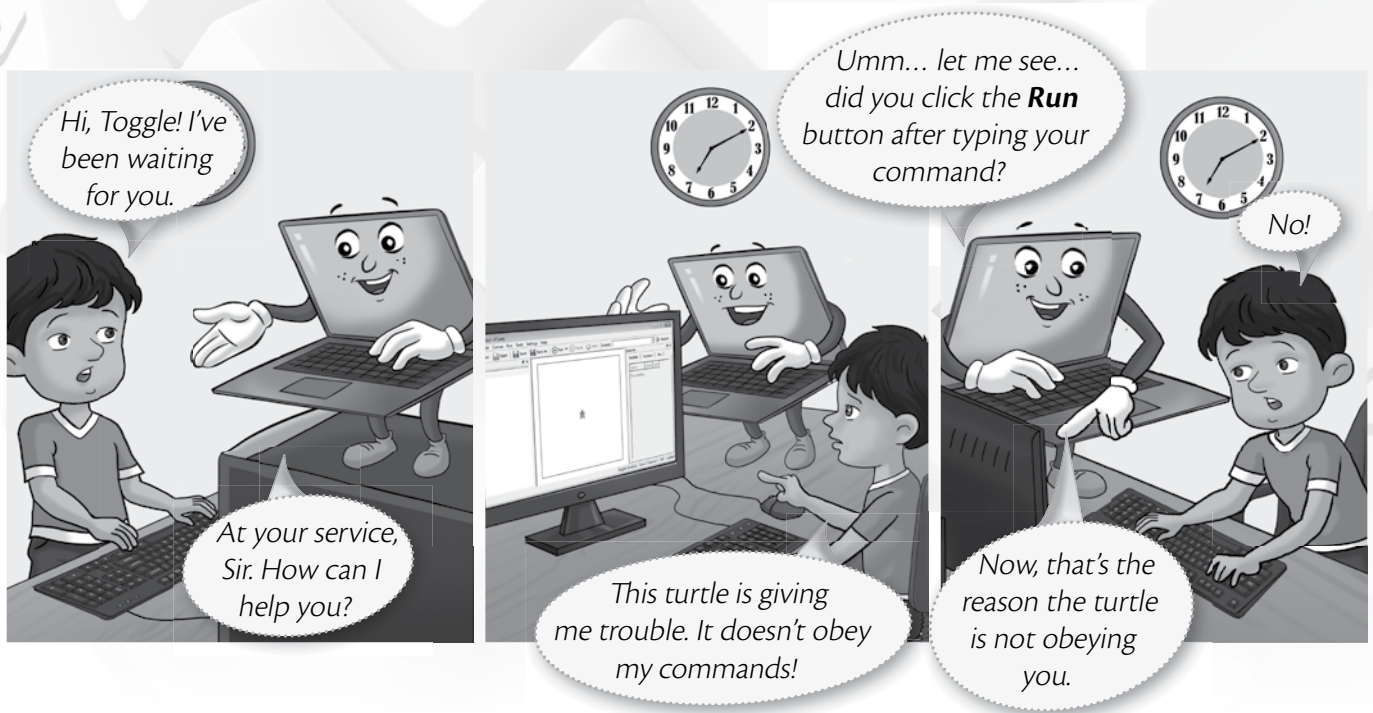
During Instruction (Formative Assessment)

- The conceptual grasp of students can be assessed during instruction through Practice Time, which has been placed after every major topic **in the Student's Book**, by observing how fast they carry out the task as given. A couple of questions may also be added to test their understanding of the concept. For example, in the question below students may be asked if they can use the tl command in the solution to this question instead of the tr command.

PRACTICE TIME

Tania wants to draw a rectangle of breadth 40 steps and length 60 steps in KTurtle using the `turnright (tr)` command. Can you help her out?

```
1 reset
2 fw 40
3 tr 90
4 fw 60
5 tr 90
6 fw 40
7 tr 90
8 fw 60
9 tr 90
```

SOLUTION

1. Tania should type the code given alongside in the KTurtle Editor pane.
2. After typing the code, she should click the **Run** button.
3. The output will appear as given here.

   Note: Try doing the same using the `tl` command also.

End-of-Chapter (Summative Assessment)

• At the end of the chapter the student can be tested on acquired knowledge through the objective and descriptive questions of the **Exercises**, the **Application-Based Questions**, and on the practical application of concepts through **In the Lab** questions, and **Group Project**.

End-of-Unit and Term (Formative as well as Summative Assessment)

• Assessment at the end of a unit, or a set of three or four chapters, is facilitated through **Worksheets** in classes I to V.

TEACHING GUIDES

The Teaching guides provide the following support for **formative** and **summative** assessment:

• **Worksheets**, **one for each chapter**, have questions in the form of Crossword Puzzles, Word Searches, Jumbled Words, etc. designed to reinforce conceptual understanding.

• **Test papers**, **one for each chapter**, which may be used by teachers by photocopying them in a larger format for classroom tests.

DIGITAL RESOURCES

The downloadable digital resources are for the series provided accompanied with **Test Generator**.

The Digital resource for *Keyboard: Computer Science with Application Software,* includes:

• **Animations** for the theoretical chapters such as that on operating systems, history of computers, input and output devices, etc. that offer an interesting audio-visual element to technically complex or difficult concepts. There are one or more modules for each such chapter which may be paused at relevant points and feedback taken on what the children have seen, heard, and understood.

• **Demo Videos** that are linked to one of the Practice Times in software chapters (those chapters that describe the features and commands available in a software), and present a step-by-step audio-visual guide to solving the problem described in that particular Practice Time question. One or more objective type question(s) has (have) been introduced at (a) strategic point(s) under the feature **Rapid Round** during the demo to encourage children to participate in the solution to the problem. These questions could be also be used as a formative assessment tool.

• **Interactive Exercises**   The **objective type questions** have been made interactive in the form of pop-up screens in which the right answer can be typed in or clicked. Clicking **Submit** will give you feedback, hence these can be used as a formative assessment tool for quick evaluation.

- **Printable documents** for every chapter in the form of soft copies of the worksheets and test papers given in the Teaching Guides. The teacher is free to use either version of the worksheets and test papers as formative assessment tools.
- Additional projects, Cyber Olympiad questions for practice, revision questions, and sample assessment papers (in classes 6 to 8).

The **Test Generator** accompanying **digital resources** is an effective assessment tool designed to benefit teachers by enabling them to create a variety of test papers.

It has two sections: (a) Coursebook questions (b) Questions beyond the coursebook.

Both have an extensive pool of questions including multiple choice, true or false, fill in the blanks, very short answer, and short answer questions, as well as lab exercises wherever relevant. The Test Generator can be used to create test papers for one or more chapters, with a mix of questions from both the sections. The wide variety of objective and descriptive type of questions makes the tool flexible enough for teachers to employ it either for formative or for summative assessment. Answers have also been provided for these questions to aid efficient and effective evaluation by teachers.

COMPREHENSIVE EVALUATION

Comprehensive evaluation involves, as explained above, both the scholastic and co-scholastic aspects of a student's growth and development. It aims to assess the student not only in the area of pure knowledge but also in the areas of their analytical and creative ability, as well as in their general attitudes and aptitudes.

The key features in *Keyboard: Computer Science with Application Software,* have been designed to provide both scholastic and co-scholastic development.

Scholastic

- The features such as Did You Know?, Fast Forward, Top Tip, Tricky Terms, and Memory Bytes, enhance and reinforce conceptual knowledge.

Did you Know?

One point equals 1/72th of an inch.

Fast Forward

Font dialog box   **Ctrl + D**

Top Tip   TIP

Starter images are backgrounds with outlines of images, or 3D photographs, that you can use in Tux Paint.

Tricky Terms

Template   A pre-defined design layout that saves time while designing

Objects   The elements you place in your publication

Guides   They are horizontal and vertical lines

Scratch Area   The grey area around the publication page where objects can be placed before insertion in the publication page

Drop Cap   A text-formatting style that enlarges the first letter of the selected text

Memory Bytes

- The AutoFill feature lets you quickly enter a predefined series of data.
- There are two ways to create custom lists: by importing the list or by entering the list in the **Custom Lists** dialog box.
- Filtering selectively displays rows/columns that meet the criteria specified by the user.
- Conditional formatting allows you to set a cell's format according to the conditions you specify.

Co-Scholastic

• The features such as Computer Manners, Projects, and the design of the practical exercises focus both on scholastic and co-scholastic areas by creating awareness on ethical and correct use of computers, as well as the use of computers as a tool for applying their creativity and enhancing their problem-solving skills.

Computer Manners

PROJECTS

KTURTLE

Type the following commands and execute it in KTurtle. Draw the figure you see on the canvas in the space provided.

Note: Read and enter the commands column-wise.

```
reset                fw 100    fw 120
canvascolor 255,0,0  bw 40     tr 45
pencolor 0, 255,0    tr 90     fw 70
penwidth 5           fw 50     tr 90
go 150,250           tr 90     fw 70
fw 120               fw 20     tl 135
tr 90                tr 90     go 60,250
fw 100               fw 50     fontsize 40
tr 90                tr 90     pencolor 0, 0, 255
fw 120               fw 60     print "This is my house"
tr 90                tr 90     spritehide
```

Find out how many rectangles there are in the figure. ....
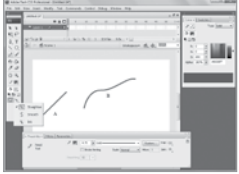
Application-Based Questions

a. Observe the given figure on the right and answer the following questions:
   i. Which tool is selected in the figure?
   ii. Name the modifier that has been used to draw line A.
   iii. Name the modifier that has been used to draw line B.
   iv. Which modifier will you use to draw lines without any modifications?

b. Danya has to create a cartoon character using tools available in Flash CS3. Which tool will she use for the following purposes?
   i. Paint freely on the stage
   ii. Draw a square

IN THE LAB

1. Amir has designed a NewYear greeting card in Paint as shown below. Make a New Year greeting card of your own, using the various tools in Paint, for your teacher.

SCHEME OF WORK AND LESSON PLANS

- A **Scheme of work** and **Lesson Plan** have been devised for each chapter which details the number of periods recommended for that chapter, the topics covered in that chapter, the recommended topic-wise allocation of periods, the learning outcomes, and the **downloadable digital resources** available for that chapter.

- The total number of periods in a year for computer science has been taken at 36 assuming one period in a week for the subject.

- Teachers may go through the lesson plan before stepping into the class. However, this is a proposed lesson plan, and teachers are free to modify it as per their teaching styles or teaching sequence in respect of the chapters.

SCHEME OF WORK*

Chapter Title	In This Chapter	Topic-wise Allocation of Periods	Learning Outcomes
1. A Computer	A Machine	2	The student should be able to: • explain what a machine is. • discuss different machines found inside and outside the house.
	The Computer—A Smart Machine	1	• explain that the computer is also a machine. • describe what one can do using a computer.
2. Parts of a Computer	Monitor	1	The student should be able to: • identify a computer monitor. • compare a monitor with a television.
	CPU Box	1	• identify the CPU Box. • describe what it contains. • write the full form of CPU. • recall what the CPU is also known as.
	Keyboard	2	• identify a keyboard. • explain the use of a keyboard.
	Mouse	1	• identify the mouse. • demonstrate the use of a computer mouse.
	Speakers	0.5	• explain what speakers are used for.
	Printer	0.5	• describe the use of a printer. • explain what a printout is.
3. Uses of Computers	Playing Games on a Computer	0.5	The student should be able to: • discuss the use of computers in playing games.
	Typing	0.5	• show how to type on a computer.
	Making Drawings	0.5	• discuss the use of computers in drawing pictures.
	Solving Sums	0.5	• describe how to solve sums using computers.
	Listening to Music	0.5	• explain how computers can be used to listen to music.
	Watching Cartoons and Movies	0.5	• describe how computers also allow one to watch cartoons and movies.
	At School	0.5	• list the uses of computers at school.
	At Home	0.5	• specify the uses of computers at home.
4. Know Your Keyboard	Keys on the Keyboard	1	The student should be able to: • identify the different keys of the keyboard.
	Alphabet Keys	1.5	• point out the alphabet keys on the keyboard. • count the number of alphabet keys on the keyboard. • use the alphabet keys to type out names and words they have learnt.
	Number Keys	1.5	• identify the number keys on the keyboard. • correctly count the number keys on the keyboard. • enter figures using the number keys.
	Spacebar Enter Key	1	• identify the SPACEBAR and the ENTER key. • demonstrate the use of these keys in a word processing software. • type small sentences to become familiar with using the SPACEBAR key and the ENTER key.

* The topic-wise allocation of periods for each chapter may vary, as per the individual class requirements.

Chapter Title	In This Chapter	Topic-wise Allocation of Periods	Learning Outcomes
	Backspace Key	1	• identify the Backspace key on the keyboard. • explain what a cursor is. • demonstrate the use of the Backspace key by typing small sentences and erasing them using this key.
	Delete Key	1	• identify the Delete key on the keyboard. • demonstrate how to use the Delete key by typing small sentences and erasing them using this key. • differentiate between the Backspace key and the Delete key.
5. Computer Mouse	The Proper Way of Using a Mouse	1.5	The student should be able to: • describe the different types of mouse devices. • explain the use of a mouse pad. • demonstrate the correct way of holding the mouse for a left- handed person and a right- handed person.
	Mouse Pointer	0.5	• describe the shape of the mouse pointer.
	Mouse Actions	2	• explain the four mouse actions. • demonstrate the difference between click and double-click. • demonstrate the steps for the drag-and-drop action.
6. Drawing for Children	Starting Drawing for Children	0.5	The student should be able to: • start Drawing for Children.
	Parts of the Main Window	0.5	• identify different parts of the Main Window.
	Using the Tools	7	• demonstrate how to use different tools. • create a scene using tools.
			• demonstrate how to undo the last drawing. • demonstrate how to print a picture. • demonstrate how to create a new picture and also how to load a new picture. • recall how to save a picture. • describe how to stop the program.
7. Notepad and WordPad	Notepad	2	The student should be able to: • open Notepad and create a new document. • enter text in Notepad. • explain the Word Wrap feature in Notepad. • use the **Font** dialog box to change the font, font style, and font size in a Notepad document, or in the selected portion of text. • explain how to save a document.
	WordPad	2	• open WordPad. • identify the different parts of the WordPad window. • type and select text in WordPad. • use the Font family menu to select different fonts. • change the font size and font color. • save a document in WordPad.

* The topic-wise allocation of periods for each chapter may vary, as per the individual class requirements.

LESSON PLANS*

Chapter 1   A Computer

Time for each lesson: 40 minutes

Resources: a calculator, a mobile phone, a camera, dummy computer toys, books/magazines with computer pictures

Introduction (5 minutes)

Before formally beginning the chapter, introduce the topic in an informal way to the students by showing them the objects, books, and magazines you have brought in class. Elicit responses from the students about the uses of a calculator, a mobile phone, and a camera. Explain that these are simple machines and encourage them to recall the machines they have in their homes. This will later help them complete 'In the Lab' task 2.

Explanation (25 minutes)

It would be a good idea to take the students to the computer lab in the first class, so that they can make observations on their own. This will help them in completing 'In the Lab' tasks 3–4. You could also show pictures of computer in the books and magazines you have brought in for the class and explain that computers are smart machines. Computers are used in homes, schools, and offices. They have many uses, for example, they can remember (store) a lot of information but humans tend to forget things easily. Ask students to think how computers are different from human beings in other ways.

Let the students read from the text with your assistance and point to the pictures of different machines. Elaborate that there are different kinds of machines used in day-to-day life and the reason why we use machines is to make our lives easier.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- explain what a machine is.
- discuss different machines found inside and outside the house.
- explain that the computer is also a machine.
- describe what one can do on a computer.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms, given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 2   Parts of a Computer

Time for each lesson: 40 minutes

Resources: mobile phone with a charger, books, and magazines with pictures of computers

Introduction (5 minutes)

Show a mobile phone to the students and point to its various parts, e.g. screen, keypad, battery, charger, speaker, etc. Explain that just like a mobile phone, a computer also has different parts. Show them the pictures of computers in books and magazines which you have brought in class. Encourage students to observe how different parts of a computer are connected.

Explanation (25 minutes)

Ask students to label the body parts of the boy in the illustration on page 7. Let the students read the chapter with your assistance. Write the names of the parts of the computer on the board and ask students to refer to the pictures of each part as they read the chapter. There are several activities in the book which can be completed by the students as they read on. It is recommended that students should be taken to the computer lab at least once to enable them to complete the 'In the Lab' tasks. Demonstrate how to start and shut down a computer; how the speakers work; as well as how to use the printer.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- identify a computer monitor.
- compare a monitor with a television.
- identify the CPU Box.
- describe what it contains.
- write the full form of CPU.
- recall what the CPU is also known as.
- identify a keyboard.
- explain the use of a keyboard.
- identify the mouse.
- demonstrate the use of a computer mouse.
- explain what speakers are used for.
- describe the use of a printer.
- explain what a printout is.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 3   Uses of Computers

Time for each lesson: 40 minutes

Resources: a laptop with board games installed on it, a small ball, a board game

Introduction (5 minutes)

The teacher should bring a small ball and a board game to class and ask two students to demonstrate how to play in class. Then he/she should open the installed board game in the laptop and demonstrate how to play a game. Students may be asked to compare games played physically and on computer.

Explanation (25 minutes)

Let students read the chapter with your assistance. Refer to the pictures and discuss what is happening in each picture. Demonstrate how words and numbers can be typed and how objects are drawn on a computer. Allow students to take turns in typing their names or date on the computer.

Have a class discussion about the different kinds of other activities can be done on computers. Encourage students to share their observations of how computers are used in their homes.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- discuss the use of computers in playing games.
- show how to type on a computer.
- discuss the use of computers in drawing pictures.
- describe how to solve sums using computers.
- explain how computers can be used to listen to music.
- describe how computers also allow one to watch cartoons and movies.
- list the uses of computers at school.
- specify the uses of computers at home.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 4   Know your Keyboard

Time for each lesson: 40 minutes

Resources: a laptop

Introduction (5 minutes)

The students have been softly introduced to the different parts of a computer/laptop. In this chapter, they will learn about the different kinds of keys in the keyboard. Invite them to take turns to observe the keyboard of the laptop in class.

Explanation (25 minutes)

Let students read the chapter with your assistance. As they read, encourage them to complete the several activities in the chapter, which will help you to carry out formative assessment. Refer to the pictures in the chapter and demonstrate the use of various keys in class.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- identify the different keys of the keyboard.
- point out the alphabet keys on the keyboard.
- count the number of alphabet keys on the keyboard.
- use the alphabet keys to type out names and words they have learnt.
- identify the number keys on the keyboard.
- correctly count the number keys on the keyboard.
- enter figures using the number keys.
- identify the spacebar and the enter key.
- demonstrate the use of these keys in a word processing software.
- type small sentences to become familiar with using the spacebar and the enter key
- explain what a cursor is.
- demonstrate the use of the backspace key by typing small sentences and erasing them using this key.
- identify the delete key on the keyboard.
- demonstrate how to use the delete key by typing small sentences and erasing them using this key.
- differentiate between the backspace key and the delete key using the spacebar key and the enter key.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms, given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 5   Computer Mouse

Time for each lesson: 40 minutes

Resources: a laptop, a mouse, a mousepad

Introduction (5 minutes)

Show the computer mouse to students and ask how it is similar to a mouse. Encourage them to compare the shape and size of a computer mouse with a mouse. They might point out that the tail of a mouse resembles the wire of a computer mouse.

Explanation (25 minutes)

Let students read the chapter with your assistance. As they read, ask them to refer to the illustrations as well as allow them to explore the buttons and scroll wheel of the computer mouse you have brought in class. Demonstrate how a computer mouse is placed and used on a mouse pad. Allow students to take turns to hold the mouse properly.

Ask if there are left-handed students in the class. Refer to the illustrations on page 38 of the textbook, and explain the proper use of holding a mouse to such students. This activity will also help students to complete Exercise Question 3f.

Open a document in the laptop and attach the computer mouse to demonstrate the various mouse actions, e.g. left click, double-click, right-click, and drag-and-drop.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- describe the different types of mouse devices.
- explain the use of a mouse pad.
- demonstrate the correct way of holding the mouse for a left-handed person and a right-handed person.
- describe the shape of the mouse pointer.
- explain the four mouse actions.
- demonstrate the difference between click and double-click.
- demonstrate the steps for the drag-and-drop action.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 6   Drawing for children

Time for each lesson: 40 minutes

Resources: a laptop, 'Drawing for children' program installed in the computer/laptop

Introduction (5 minutes)

Students of this age are usually very interested in drawing and painting. Inform them that they are going to draw without using colour pencils and paper. Inform the students that there are several computer programs in which people can draw and colour.

Explanation (25 minutes)

Let students read the chapter with your assistance. Refer to the illustrations to describe the text and show where this program is saved in the laptop, which you have brought in class. Show the main screen and encourage the students to identify the main parts of the window.

Explain that font is a specific style of writing on a computer. Allow them to explore different types of fonts and ask which font they like the most. They should also use different font sizes and colours. Ask why they might have to write words in a drawing. Listen to their responses and accept all answers.

It is recommended that separate lessons should be allocated for each tool. Encourage students to explore all options in each tool. Explain the importance of always saving their work, and printing only when necessary. The Practice Time on page 55 will consolidate their learning and may require a separate lesson.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- start drawing for children.
- identify different parts of the main window.
- demonstrate how to use different tools.
- create a scene using tools.
- demonstrate how to undo the last drawing.
- demonstrate how to print a picture.
- demonstrate how to create a new picture and also how to load a new picture.
- recall how to save a picture.
- describe how to stop the program.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms, given at the end of the chapter.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 7   Notepad and WordPad

Time for each lesson: 40 minutes

Resources: a laptop, Notepad, and WordPad programs installed in the computer/laptop

Introduction (5 minutes)

Begin the lesson by asking students to compare hand written text from that of typed text. Their textbooks are examples of typed text. Encourage students to observe that typed text is uniform and consistent, as opposed to handwritten text.

Explanation (25 minutes)

Let the students read the text with your assistance. Demonstrate how to open the Notepad program in class. In a blank document, allow students to type simple sentences, e.g. I like flowers, I can run fast, etc. Encourage them to use the cursor with the help of arrow keys. You can use the typed text to demonstrate how to use the Word Wrap feature and formatting tools. You may require more than one lesson for this topic.

Introduce Word Pad to students once they are able to use the basic features of Notepad. Let them read the topic from their textbooks and highlight the main points of differences between Notepad and WordPad. You can copy the text (created by the students in Notepad) in WordPad and demonstrate how to apply the various formatting features.

Remind students to save their work before closing the program. The practice time may require a separate lesson to consolidate learning.

You can assign any of the following tasks for classwork.
- Exercises
- In the Lab
- Group Project
- Worksheets

Assessment

Students' learning should be assessed on Bloom's taxonomy model, as well as on their class participation, enthusiasm, inquiry, and team work. At the end of the lesson, students will be able to:

- open Notepad and create a new document.
- enter text in Notepad.
- explain the Word Wrap feature in Notepad.
- use the Font dialog box to change the font, font style, and font size in a Notepad document, or in the selected portion of text.
- explain how to save a document.
- open WordPad.
- identify the different parts of the WordPad window.
- type and select text in WordPad.
- use the Font family menu to select different fonts.
- change the font size and font color.
- save a document in WordPad.

Conclusion (10 minutes)

Encourage students to give you a recap of the main points they have learnt in the lesson. Discuss computer manners and read through the tricky terms, given at the end of the chapter.

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* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

ANSWER KEY TO THE COURSEBOOK

- The complete Answer Key to the Coursebook Exercises has been given here including that for the In the Lab questions, Group Projects, and Worksheets.

- These are only suggested answers, and variations are possible especially for the open-ended questions, such as the descriptive questions, and those of In the Lab. Teachers may use their discretion while checking the answers provided by the students, and give them marks based on conceptual accuracy and conceptual clarity.

* The lesson plan for each chapter has a flexible structure. It can be split up into daily lesson plans to suit various classroom needs.

Chapter 1   A Computer

EXERCISES

1. The crow is using a laptop. Yes, it is a computer.

   The number of animals using computers is 5.

2. a. Machines are devices/things that make our life easier. An example of a machine is a bicycle or a toaster. (Ask the children what machines they see around their house. Make a combined list on the classroom board. Assess which of the suggested items are non-machines and explain why these objects may not be considered to be machines.)

   b. Yes, a computer is a machine because it is a device that helps simplify our lives. It helps us to do many things such as, drawing shapes, solving sums, listening to music, and playing games.

   c. A computer is called a smart machine because it can be programmed to make decisions and solve problems. It can do things that humans can do, and sometimes is even better than humans, e.g. quickly counting words in an essay. Computers can often be used to complete some of the more repetitive and tedious tasks. (Ask the children which tasks they might find boring and which a computer may be able to do instead.)

   d. Liquids, food items, and chewing gum can all cause sticky fingers which can affect the efficient use of the computer. Similarly, spillages and food crumbs can easily cause damage. It is important to keep the computer table clean and organised.

   e. A computer can store large quantities of information; while it is impossible for a person to remember so much information. A computer can process the information very quickly and accurately; a person cannot always think or do things at the speed of a machine.

IN THE LAB

1. The three points of difference between us and a computer are:

   a. We can walk but a computer cannot.
   b. A computer does sums faster than us.
   c. We eat but a computer does not.

2. The students must be encouraged to look around their houses and list any five machines that they see. They can also be asked to draw the images of these machines.

3. Responses could include:
   • My school computer lab is the most amazing space.
   • It has rows of desks with twelve computers; it has chairs in front of each desk.
   • On the desk, there is a monitor, and a mouse on a mousepad. There is a keyboard in the pull-out drawer.
   • On a shelf below is the CPU box.
   • I can see wires everywhere connecting different devices.
   • Each computer table has enough space in front for putting books and notepads for taking notes.
   • On the wall there is a whiteboard and marker pens, which the teachers use to give instructions.
   • It is really cool and comfortable in the computer lab. My teacher said the temperature has to be controlled so the machines remain in good condition.

4. Show your guest how the different parts of the computer are connected together with wires. Tell them briefly what each part does and the show them how each part functions.

The basic parts of a computer system are:

- The monitor displays words and pictures.
- The CPU (Central Processing Unit) controls all other parts of the computer.
- The keyboard has keys which are used to write on the computer.
- The mouse helps to point to things on a computer monitor.
- The speakers help to hear music and voice recordings.

GROUP PROJECT

These may be some of the rules the children may include in their list. Allow them to be creative and write the rules in their own words.

- Sign in and out of the lab.
- Do not run in the lab.
- Do your work quietly.
- Follow instructions carefully.
- Use the equipment with respect and care.
- Do not bang the keyboard.
- No food or drink is allowed in the lab.
- Keep your computer table clean and tidy.
- Keep your files organised.
- Only print when necessary.
- Do not waste paper. Recycle paper you do not need.
- Do not install any software on your own.
- Do not change any settings.

WORKSHEET—1

1. Computer

2. Colour TV, Telephone, Iron, and Scooter
   Among these, Color TV, telephone, and iron are found inside the house.

3. a. Washing Machine   b. Scissors

Chapter 2   Parts of a Computer

1. Circle and colour CPU, mouse, monitor, and printer.

2. a. TV   b. CPU   c. typing   d. monitor   e. printer

3. a. F   b. F   c. F   d. T   e. T4.

4.   a. The main parts of a computer are the monitor, CPU box, keyboard, and mouse.

    b. The computer monitor and television both serve as a display device. Televisions are different from monitors because a television can be used independently but a monitor always has to be connected to other devices. Monitors generally do not have built-in speakers like most televisions. Televisions generally have much larger screens than monitors.

    c. The CPU is the brain of the computer and is the central processing unit; it controls all the other parts of the computer and hence is absolutely essential for the functioning of the computer.

    d. Yes, by using a printer.

    e. A computer mouse points at things on a monitor and helps draw pictures on screen.

IN THE LAB

1. Students must be encouraged by the teacher to identify parts of a computer such as monitor, CPU, keyboard, mouse, and printer, etc.

2. The teacher must encourage the students to list the parts of computer that they saw and also draw them.

3.   i.   Keyboard
    ii.   Speakers
    iii. CPU
    iv. Printer

4. You can connect different components to the computer such as a mouse, keyboard, printers, and scanners. A collection of computer equipment can be connected by wires, optical fibers, or wireless links; different computer devices can talk to one another and exchange information. When a number of computers are linked together so they can share resources, they are referred to as a network.

5. Steps required to open and shut down a computer are given below.

- Switch on the power supply.
- Press the power button on the CPU box to turn on the monitor.
- Direct the mouse so it points towards the Start button on the screen and click to display the menu; the menu allows the computer user to choose what he/she wants to do.
- Take the pointer to the Shut Down button on the menu.
- Click on it.
- Finally click on the Turn Off button that appears in the window that pops up.

GROUP PROJECT

Some suggestions for names of the groups can be:

- browsers
- explorers
- computer buddies

Encourage the children to make their lists look as attractive as possible.

WORKSHEET—2

1.

A	M	O	N	I	T	O	R	T	C
S	L	P	T	T	M	R	K	R	P
D	K	E	Y	B	O	A	R	D	U
F	K	N	E	W	U	T	L	A	B
T	J	M	D	A	S	H	P	S	O
S	P	E	A	K	E	R	E	F	X

2. a. –iii. brain of a computer
    b. – i. typing
    c. – ii. looks like a television

3. a Monitor
    b. CPU Box

Chapter 3   Uses of Computers

1. Playing games, and writing letters can be done on a computer.

2. a. games   b. type   c. pictures   d. sums   e. music

3. a. T   b. T   c. F   d. T   e. F

4. a. We can use a computer to help us write short essays as well as emails, draw pictures, help with projects, and solve sums. Teachers use computers in the classroom as a teaching aid and to prepare exam mark, sheets.

    b. We do different things on a computer for entertainment, e.g. we play games, listen to music, and watch television shows and films.

    c. When we play cricket on a computer, we are simply playing with a machine and are not directly interacting with another human being. This does however, improve our eye-hand coordination. On the field, we have the opportunity to interact with others and get good physical exercise.

IN THE LAB

1. The teacher must teach the students how to play games, draw pictures, and type words using a computer.

2. The teacher can open up the 'Paint' or the 'Drawing for Children' program on the computer. She can give the children a short demonstration as to how they can use the freehand tool to draw or use the shapes tool to create an image. She can also use colour to improve the image. When the children have created their own image, they can take turns to share with their class.

3. Explain that just as everyone has an address of their homes similarly on the Internet, they can create an email id and address of their own, e.g.sam@gmail.com.

    Instruct them to write a note to their friend, thanking them for the lovely gift they have received. They can write a note similar to the one given below.

    My Dear Sam,

    Thank you for coming to my birthday party yesterday. I hope that you had a good time.

    I am writing to thank you for the beautiful gift you gave me. The teddy bear is lovely and I have put it right next to my bed.

    Your present showed how much how much you care about me. Thank you once again for the awesome present!

    Please convey my best regards to your parents.

    Love,

    Tommy

4. i. $4 + 1 = 5$
    ii. $5 + 3 = 8$
    iii. $3 + 6 = 9$
    iv. $2 + 3 = 5$

GROUP PROJECT

The teacher can give the children examples of what the different steps might be, making sure the speakers are turned on, how to control the volume, how to turn the computer on, how to play the film or music, and how to turn it all off at the end. He/she can explain to them to take turns carrying out the different activities given following.

- Switch on the power unit.
- Switch on the computer.
- Click on the film icon or music icon.
- Turn on the speakers.
- Adjust the volume.
- When you are done, turn off the speakers.
- Switch off the computer.
- Switch off the power unit.

WORKSHEET—3

1. a. drawing   b. music   c. project   d. solving

2. playing football, doing homework, and cooking.

   Two of these activities i.e. playing football and doing homework, can be done on a computer.

3. a. teaching   b. preparing exam results

   c. solving sums   d. making drawings

Chapter 4   Know Your Keyboard

1. a. keyboard   b. keys   c. two   d. spacebar   e. Enter

2. Jumbo's missing keys: 2, 7, Q, Caps lock, G, <, ⟶, 5, 9, and Enter

3. a. The longest key on the keyboard is called the spacebar. It is used to insert spaces between words or letters.

   b. The backspace and delete keys help us to correct mistakes. The backspace key erases anything on the left side of the cursor, whereas the delete key erases anything on the right side of the cursor.

   c. The cursor is the blinking line that you see on the screen. Its function is to help keep your place on the screen.

   d. These are the different keys mentioned in Chapter 4 which can be seen on a keyboard:

   • Alphabet keys
   • Number keys also known as numeric keys
   • Enter key
   • Backspace key
   • Delete key
   • Spacebar

   e. Alphabet keys cannot be used to delete a word as their function is to type in the letters of the alphabet. (This is the correct answer for this level of knowledge).

IN THE LAB

1. Students to be encouraged to identify different kinds of keyboard present in the computer lab. Then, they could be asked to identify different keys on the keyboard.

2. The teacher can call out 6 words and then tell the next child to take a turn at the keyboard. The team with the greatest number of correct answers will win. They could use any of the three letter words given below:

   ant bed bow boy bus cat cow dog dad fan gum hat hop hug jam joy jet key kit lap lip map mom nun not old owl one pat pay ram rod sum say sun tar tie tax two vet way who yak zip

3. i.   number keys
    ii. backspace key
    iii. spacebar
    iv. alphabet keys
    v.   enter key
    vi. delete key

GROUP PROJECT

The teacher can help the children to insert a table with four columns and about 5-6 rows depending on how many children comprise each group.

Names	Birthdate	current year	Age
Student 1	September 6, 2012	2019	7
Student 2	July 4, 2012	2019	7
Student 3	January 1, 2013	2019	6
Student 4	May 5, 2012	2019	7

WORKSHEET—4

1.

A	A	S	R	T	Y	E	W	A
D	F	P	R	E	Z	X	X	C
V	B	A	N	M	K	L	A	S
B	A	C	K	S	P	A	C	E
A	F	E	R	T	Y	H	G	N
S	G	B	M	N	T	P	O	T
F	H	A	D	E	L	E	T	E
G	J	R	G	F	D	E	S	R

2. a. Spacebar   b. Delete   c. Backspace   d. Enter

3.
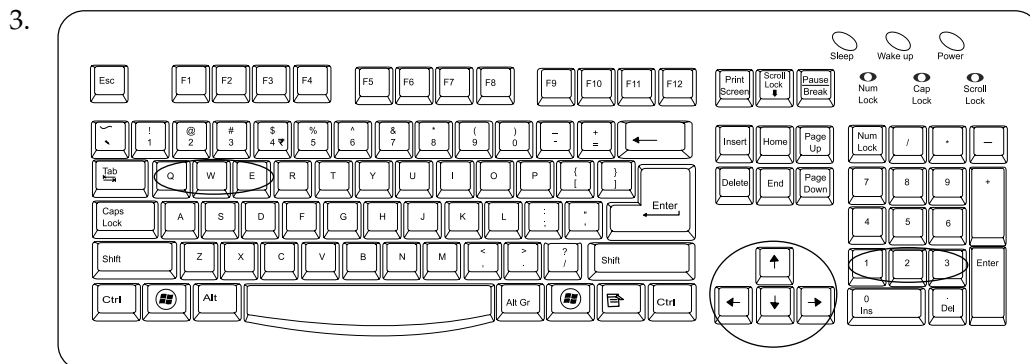
The names of the circled keys are missing from the keyboard.

Chapter 5   Computer Mouse

1. Students can draw a path in the maze.

2. a. mouse pad   b. Click   c. Double-click   d. Right   e. Move or Copy

3. a. The primary function of the computer mouse is to point to objects on the monitor screen and select them.
    b. When you press the buttons on the mouse, you hear a click. You can right click, left click, double click, and drag and drop to do different things with the mouse.
    c. The scroll wheel helps you to move up and down a page.
    d. The mouse allows us to carry out many different actions by simply clicking. We can select things, open windows, select from a list of commands and move an item from one place to the other on the monitor screen.
    e. Always direct the mouse towards the computer. Place it on a mousepad, so it points towards the computer.
    f. My friend is right-handed, so he would put the index finger of his right hand on the left button of the mouse and his middle finger on the right button of the mouse. I am left-handed, so I will put the middle finger of my left hand on the left button of the mouse and my index finger on the right button of the mouse.

IN THE LAB

1. The students could be shown different mouse devices attached to the computers. The teacher must also demonstrate different mouse actions such as moving and clicking. After this, students must be asked to practice the various mouse actions on their own.

2. The computer mouse is a pointing device we hold in our hands; we use it to position a cursor on a computer screen. With the mouse, we can select items we see on the monitor, select them, and perform actions on them. When we move the mouse along a flat surface, we can move the cursor to different icons on the screen. We can move or select by pressing the mouse buttons; this action is called clicking.

3. The standard mouse has two buttons and a scroll wheel in the middle. When we left-click on the mouse, this is a regular-click we use for many computer tasks, such as to select objects, open links, and close windows. Most tasks can be done by using the left mouse button. When you press the button on the right, it is called a right click. The right mouse button is used to open a list of commands that open up. When you double-click the left mouse button, it is used to open a file, folder, or software program. For example, if you want to open your Internet browser, you must double-click on the shortcut icon for the browser.

GROUP PROJECT

The teachers are encouraged to do a demonstration in the lab to show how to 'drag and drop'. This will make it clear to the children how to use the mouse for such an action. The steps required to drag and drop are given below:

*   Point at the icon you want to move with the pointer.
*   While holding down the left hand button, drag the mouse, so the pointer moves in the direction you want to place the icon.
*   Release the mouse button when you have positioned the icon in the required position on the screen.

WORKSHEET—5 ANSWERS

1. Mouse

2.

D	A	D	S	C	E	R
O	F	R	D	L	R	I
U	G	A	F	I	W	G
B	R	G	G	C	A	H
L	E	A	B	K	S	T
E	T	N	U	P	Q	C
C	Y	D	T	L	Z	L
L	B	D	P	K	D	I
I	N	R	O	N	G	C
C	J	O	I	C	H	K
K	M	P	J	R	B	N

3. a. 4

   b. Click

Chapter 6   Drawing for Children   Answers

1. a. iv. Load a Picture   b. iii. Draw text tool   c. i. New Picture   d. ii. Special effects tool

2. a. Draw ClipArts Tool   b. Draw Shapes Tool
   c. Draw Backgrounds Tool   d. Draw Special Things Tool

3. a. Font   b. Sketch Lines Tool
   c. Draw Stamps Tool   d. Load a Picture

4. a. Drawing for Children is a program that enables you to draw and colour on the computer.
   b. We use the font tool to select a style for the words we type.
   c. The 'draw special things' tool will be used to draw special shapes such as stars and buildings.
   d. The special effects tool will be used to lighten the colour of grass.
   e. I will do the following to save a picture and then print it.

   • Use the mouse to click on the save tool.
   • A Save dialog box will appear.
   • Select the drive and the folder in which we want to save it.
   • Type the file name in the file name box.
   • Click the save button.
   • Click the print tool and print.

   f. I will use the 'draw special things' tool to make a picture of a star filled sky.

   g. With the 'draw stamps' tool, only images of the given size can be added whereas with the 'draw clip arts' tool, an image of any size can be created.

IN THE LAB

1a. To draw the given picture:

1. Click **Start → All Programs → Drawing for Children**

2. To apply a background, do the following:

   • Click the **Draw backgrounds** tool.
   • Click the background you want from the list on the left-hand side.

3. To place aeroplanes in the picture:

   • Click the **Draw stamps** tool and select the **vehicles** collection.
   • From the left-hand side, select **Aeroplane**.
   • Click to place the different types of aeroplanes in the picture.

4. To add more planes, you can also use the **Draw cliparts** tool. To add the images using this tool:

   • Click the **Draw cliparts** tool and select the collection of images you want.
   • From this selection, choose an aeroplane and drag to draw the image.

b. To draw the given picture:

1. Click **Start → All Programs → Drawing for Children**

2. To apply a background, do the following:

   • Click the **Draw backgrounds** tool.
   • Click the background you want from the list on the left-hand side.

3. To place the trees in the picture:

   • Click the **Draw stamps** tool and select the **trees** collection.
   • From the left-hand side, select the desired type of tree.
   • Click to place the tree in the picture.

4. To place the vehicles and dogs in the picture:

   • Click the **Draw cliparts** tool and select the collection of images you want.
   • From this selection, choose the required images and drag to draw the image.

c. To draw the given picture:

1. Click **Start → All Programs → Drawing for Children**

2. To draw the vase:

   • Click the **Sketch lines** tool.
   • Select the pen or the brush or the spray and draw the vase as shown in the figure.

3. To place the flowers:

   • Click the **Draw stamps** tool and select the **flowers** collection.
   • From the left-hand side, select the desired type of flowers.

d. To draw the given picture:

  1. Click **Start → All Programs → Drawing for Children**

  2. To apply a background, do the following:

     • Click the **Draw backgrounds** tool.

     • Click the background you want from the list on the left-hand side.

  3. To insert the trees and animals, you can use both the **Draw stamps** tool and the **Draw Cliparts** tool.

  4. To use the **Draw stamps** tool, click this tool in the **Drawing For Children** window. Select the desired stamp collection and from the options on the left hand side, choose the required stamp.

  5. To use the **Draw cliparts** tool, click this tool in the **Drawing For Children** window. Select the desired clipart collection and from the options on the left hand side, choose the required clipart.

2. To create a vehicle:

   • Select a colour you like from the color box.
   • Use the Draw shapes tool to create a rectangle first and then make circles to add wheels to the vehicle. Make small squares to create two small windows on the vehicle.
   • Use the Sketch Lines tool to draw the road on which the vehicle is travelling.

   To create a flower:

   • Select a colour you like from the color box.
   • Use the Draw shapes tool to create circles overlapping each other so a flower is formed. Use different coloured petals around the middle circle.
   • Use the Sketch Lines tool to draw the stem and leaves.

   To create a building:

   • Select a colour you like from the color box.
   • Use the Draw shapes tool to create a rectangle-shaped building first and then make squares to create small windows and a rectangle-shaped door.
   • Use the Sketch Lines tool to draw grass in front of the building.

3. To create a rocket:

   • Select a colour you like from the color box.
   • Use the Draw shapes tool to create a rectangle first and then make a triangle on top of the rectangle.
   • Use the Draw Special Things tool to create stars in the sky around the rocket.

GROUP PROJECT

Encourage your students to use this as a guide. However, explain to them that they are free to use their creativity in whatever way they choose. Suggest them the title can be 'My Dream House' or they can give their house a name and use that for the title. Tell them to make it as beautiful as possible.

WORKSHEET—6   ANSWERS

1.
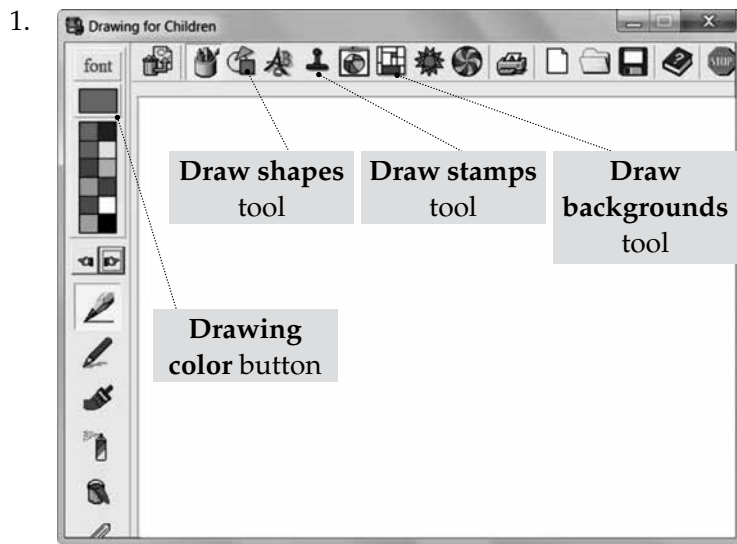
2. a. ii. Print a picture   b. iii. Undo the last drawing   c. i. Save a picture

3. a. Draw shapes Tool   b. Draw text Tool   c. Draw stamps Tool

---

Chapter 7   Notepad and WordPad

1. a. Notepad   b. File   c. cursor   d. Underline

2. a. Notepad and WordPad are both programs used to create word documents.

   b. Two similarities are:

   (i) both are wold processors.

   (ii) the font can be changed.

   Two difference are:

   (i) Wordpad has more formatting features than Notepad.

   (ii) There is a ribbon in Wordpad which is not there Notepad.

   c. To select text in WordPad, we bring the cursor to the beginning of the text, click the left mouse button and drag it over the text.

   d. The word wrap feature in Notepad enables a word to move to the next line automatically.

   e. The main advantage of horizontal and vertical scroll bars is that you can move the on screen page right or left or up and down to see an entire document.

   f. To save a story written in Notepad, click on File and then Save as. When the Save as dialog box appears, choose the drive and the folder, type and save the name of the file.

IN THE LAB

1. To write a paragraph in Notepad:

   a. Click **File ▶ New** to create a new document.
   b. The cursor shows the position of the next letter or number to be entered. Type the paragraph on 'My family'.
   c. Notice that the whole paragraph is in one line. Select the **Word Wrap** option in the **Format** menu**.**
   d. Now the text will appear as a paragraph.
   e. To save the file, click **File ▶ Save As.** Select the drive and the folder, type the name of the file, and click the **Save** button.

2. Write the names of five fruits and five vegetables in WordPad. To change the color of text do the following:

   a. Select a fruit or vegetable name.
   b. Click the Text color menu arrow and select the color of your choice.
   c. Do the same with other names of fruits and vegetables.

3. A list of animals, flowers, and trees are given below. Examples of how different names can be in different fonts and colours have also been shown in the first two lines. Instruct the children to create a list in a similar manner but they need not have the name of an animal, a flower, and a tree with every letter.

alligator	anemone	ash		
butterfly	bluebell	beech		
cat	carnation	cypress		
donkey	daffodil	dogwood		
elephant	evening	primrose	elm	
fox	forget	me	nots	fig
goat	gladiolus	gumtree		
horse	honeysuckle	hemlock		
iguana	iris	ivory	palm	
jaguar	jasmine	juniper		
kitten	kalmia	katsura		
lion	lily	lemon		
monkey	marigold	magnolia		
nightingale	narcissus	nutmeg		
owl	orchid	oak		
parrot	pansies	pine		
quail	quince	quiver		
rabbit	rose	rubber		
seal	snowdrop	sequoia		
tiger	tulip	talipalm		
umbrellabird	ursinia	umbrella		
vulture	violet	vitex		
wallaby	wallflower	walnut		
xylosma				
yak	yellow	bell	yew	
zebra	zenobia			

4. The teacher needs to discuss the differences between Notepad and WordPad with the children. Ask them what the difference is and why they would prefer to write their story in one over the other. The advantages of writing in WordPad is that they will be able to insert pictures and objects and even add a picture they have created. Notepad has limited features in comparison. Instruct them to type the story in WordPad.

They can give a title to their story and can highlight it by using a larger and different font. They can also use a different colour for the font if they wish. They can add pictures to their stories if they like in WordPad.

GROUP PROJECT

If they are writing a poem from any other source, encourage them to give credit to the poet. The students could also work on this project using a nursery rhyme like 'Twinkle Twinkle Little Star'.

Twinkle Twinkle little **star**
How I *wonder* what you *are*
Up above the **world** so high
Like a **diamond** in the **sky**

WORKSHEET—7

1. i. Italics   ii. WordPad button   iii. Font Style   iv. Maximize/Restore button

2. b.

3. a. Start   b. All Programs, Accessories, WordPad   c. Ribbon

WORKSHEETS

- Worksheets have been provided for all the chapters of the course book.
- Each worksheet is of 10 marks and is recommended as a formative assessment paper.
- It is possible to use these worksheets as they are by photocopying them in magnified size (120% approx.) and distributing to the students.
- The questions in the worksheets may also be used as samples to create your own additional worksheets.
- They are also available as printable documents in **digital resources.**

Chapter 1   A Computer

1. Unjumble the letters to form words using the hints given below.   **(3)**

a. I N E C H A M

Hint: .... are things made by humans to make their work easier.

b. E R T U C M P O

Hint: This is a smart machine used for solving sums, playing games, etc.

c. R C A

Hint: A machine found outside the house which is used to travel from one place to another.

2. Join the dots to complete the picture given and color it with your favorite colour.   **(3)**
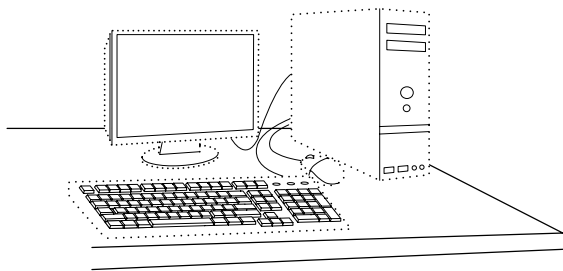
Which machine is this?

....

3. Look at the following pictures and encircle the machine names in the given grid.   **(4)**
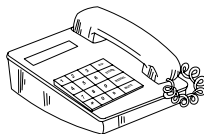
(a)   (b)   (c)   (d)

T	D	S	W	A	T
E	F	C	E	E	O
L	T	I	R	R	A
E	Y	S	T	O	S
P	H	S	F	P	T
H	N	O	D	L	E
O	M	R	S	A	R
N	K	S	A	N	F
E	D	G	H	E	M

Chapter 2   Parts of a Computer

1. Unjumble the letters to form words using the hints given below.   **(2)**

   a. U S M O E

     Hint: This device helps us draw pictures and point at things on the computer.

   b. R O M I N T O

     Hint: It is a computer device that looks like a TV.

2. Label the devices of a computer that you can see in the given picture.   **(3)**
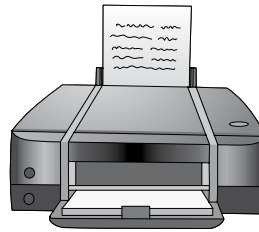
(a) ....   (b) ....   (c) ....

3. Look at the following pictures and encircle the device names in the given grid.   **(5)**
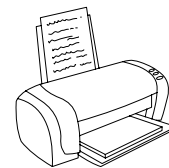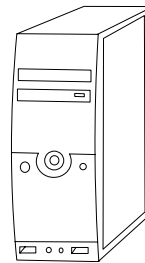
(a)   (b)   (c)   (d)   (e)

T	M	O	N	I	T	O	R
M	F	C	E	E	O	D	A
O	P	R	I	N	T	E	R
U	Y	S	T	O	C	P	U
S	H	S	F	P	T	I	P
E	N	O	D	L	E	K	J
K	E	Y	B	O	A	R	D

Chapter 3   Uses of Computers

1. Unjumble the letters to form words using the hints given below.   **(3)**

a. I Y T N P G

Hint: Writing on a computer is called ....

b. G D A R W N I

Hint: The computer can be used for .... pictures.

c. H S O C O L

Hint: Here computers are used for teaching.

2. Different types of games can be played on computer. Identify the games being displayed on different monitors and write them in the space provided.   **(4)**

(a) ....
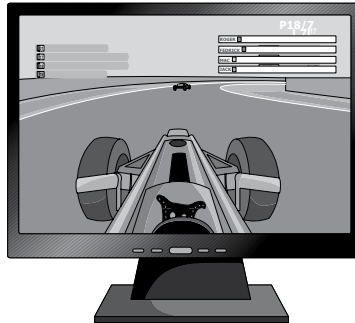
(b) ....
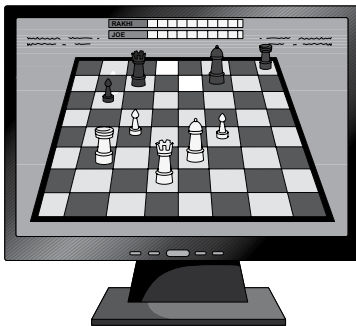
(c) ....

(d) ....

3. Identify the pictures and encircle the activities being done on computer in the given grid. (3)

(a)

(b)

(c)

T	E	A	C	H	I	N	G
A	G	D	F	L	K	J	B
D	R	A	W	I	N	G	K
O	T	M	O	U	D	R	N
P	L	A	Y	I	N	G	T

Chapter 4   Know your Keyboard

1. Unjumble the letters to form words using the hints given below.   **(3)**

   a. U R C R O S
   Hint: This is the blinking line you see on your screen.

   b. Y S E K
   Hint: We can type on a computer by pressing these.

   c. R T E N E
   Hint: This key is pressed to move to the next line.

2. Look at the picture carefully and colour.   **(4)**
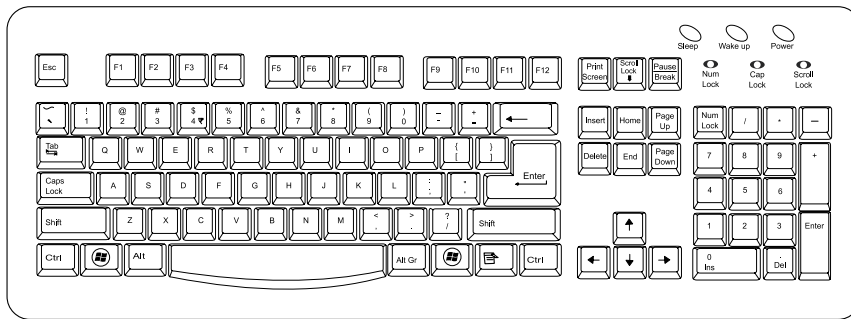
   a. Alphabet keys–Red   b. Both sets of number keys–Blue

   c. Enter key–Green   d. Space bar–Yellow

3. Identify the keys and encircle their names in the grid given below   **(3)**
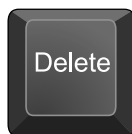
    (a)   (b)   (c)

B	A	C	K	S	P	A	C	E
U	D	G	B	N	M	K	I	Y
R	S	C	V	X	Z	B	N	M
S	D	E	L	E	T	E	H	G
O	Q	W	R	G	N	F	S	X
R	Z	X	F	B	H	M	L	D
N	U	M	B	E	R	K	E	Y

Chapter 5   Computer Mouse

1. Unjumble the letters to form words using the hints given below. **(4)**

a. R O L C S L H E L E W
Hint: This part of the mouse helps you move up and down a page.

b. K C L C I
Hint: This mouse action is used to select a word on the monitor.

c. T R E P I O N
Hint: The arrow on the computer monitor is called the mouse ....

d. G H I R T
Hint: .... clicking shows a list of things one can do.

2. Look at the pictures carefully and identify the actions being performed in them. **(2)**

(a)   (b)

3. Identify the pictures and encircle them in the given grid. **(4)**

(a)
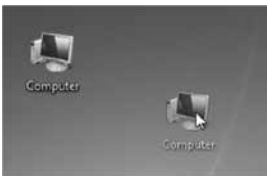
(b)
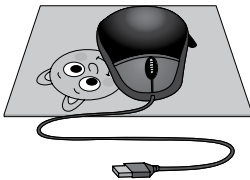
(c)

M	X	A	O	D
O	D	W	L	R
U	E	E	K	A
S	W	M	J	G
E	S	O	H	G
P	M	U	T	I
O	O	S	R	N
I	U	E	B	G
N	S	P	N	I
T	D	A	M	C
E	F	D	K	O
R	H	F	G	N

Chapter 6   Drawing for Children

1. **Unjumble the letters to form words using the hints given below.**   **(3)**

   a. O N T F
       Hint: It is the style for the words you type.

   b. T A S P M
       Hint: This tool is used to add a number of images like animals, flowers, etc.

   c. C I P L A T R S
       Hint: Pictures you can add to your drawing if you do not want to draw the entire image.

2. **Identify the tools given below carefully and write their names.**   **(4)**

   (a) ....   (b) ....   (c) ....   (d) ....

3. **Identify the different tools given below and encircle their names in the given grid.**   **(3)**
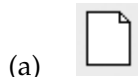
   (a)

N	X	A	O	D
E	D	W	L	R
W	E	D	K	A
P	W	R	J	P
I	S	A	H	R
C	P	W	T	I
T	Q	T	R	N
U	I	E	B	T
R	S	X	N	I
E	T	T	M	C
T	F	D	K	O
R	H	F	G	N

   (b)

   (c)

Chapter 7   Notepad and WordPad

1. Unjumble the letters to form words using the hints given below.   **(3)**

  a. O T N P D E A

  Hint: This is a software used for typing text on the computer.

  b. D O W D R A P

  Hint: This is another software used for typing text on the computer.

  c. I A L D G O X B O

  Hint: A window in which you select options as per your choice.

2. Identify and name the different HOME tab options shown in the figure below.   **(5)**
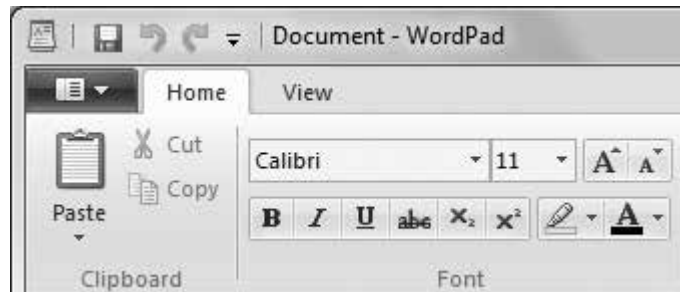
3. Identify the software given below and encircle their names in the given grid.   **(2)**
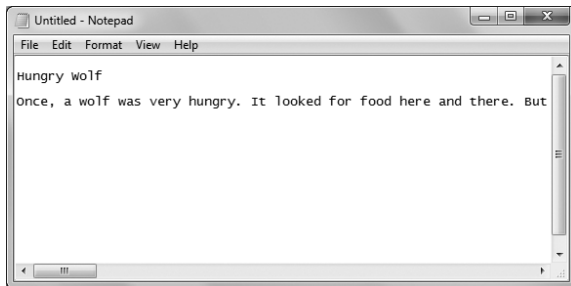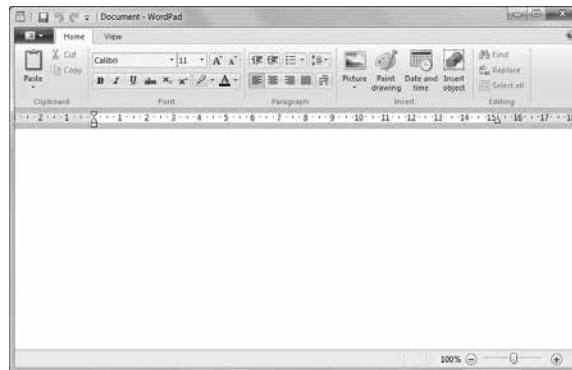
(a)	(b)

N	O	T	E	P	A	D	E
G	F	R	H	Y	P	A	L
Q	K	Z	V	X	B	L	U
W	O	R	D	P	A	D	T
T	I	T	L	E	B	A	R

WORKSHEET ANSWERS

Chapter 1   A Computer

1. a. Machine   b. Computer   c. Car

2. It is a computer.

3. a. Aeroplane   b. Scissors   c. Telephone   d. Toaster

T	D	S	W	A	T
E	F	C	E	E	O
L	T	I	R	R	A
E	Y	S	T	O	S
P	H	S	F	P	T
H	N	O	D	L	E
O	M	R	S	A	R
N	K	S	A	N	F
E	D	G	H	E	M

Chapter 2   Parts of a Computer

1. a. Mouse   b. Monitor

2. a. CPU Box   b. Speakers   c. Printer

3. a. Keyboard   b. Monitor   c. Mouse   d. CPU   e. Printer

T	M	O	N	I	T	O	R
M	F	C	E	E	O	D	A
O	P	R	I	N	T	E	R
U	Y	S	T	O	C	P	U
S	H	S	F	P	T	I	P
E	N	O	D	L	E	K	J
K	E	Y	B	O	A	R	D

Chapter 3   Uses of Computers

1. a. Typing   b. Drawing   c. School

2. a. Cricket   b. Racing   c. Chess   d. Basketball

3. a. Teaching   b. Drawing   c. Playing

T	E	A	C	H	I	N	G
A	G	D	F	L	K	J	B
D	R	A	W	I	N	G	K
O	T	M	O	U	D	R	N
P	L	A	Y	I	N	G	T

Chapter 4   Know your Keyboard

1. a. Cursor   b. Keys   c. Enter

3. a. Number Key   b. Delete   c. Backspace

B	A	C	K	S	P	A	C	E
U	D	G	B	N	M	K	I	Y
R	S	C	V	X	Z	B	N	M
S	D	E	L	E	T	E	H	G
O	Q	W	R	G	N	F	S	X
R	Z	X	F	B	H	M	L	D
N	U	M	B	E	R	K	E	Y

Chapter 5   Computer Mouse

1. a. Scroll Wheel   b. Click   c. Pointer   d. Right

2. a. Clicking the mouse b. Double-clicking the mouse

3. a. Dragging icon   b. Mouse pad   c. Mouse pointer

TEACHER'S RESOURCE 35

M	X	A	O	D
O	D	W	L	R
U	E	E	K	A
S	W	M	J	G
E	S	O	H	G
P	M	U	T	I
O	O	S	R	N
I	U	E	B	G
N	S	P	N	I
T	D	A	M	C
E	F	D	K	O
R	H	F	G	N

Chapter 6   Drawing for Children

1. a. Font b. Stamp c. Cliparts

2. a. Load Picture b. Special Effects c. Draw Stamps d. Draw Clipart

3. a. New Picture b. Draw Text c. Print

N	X	A	O	D
E	D	W	L	R
W	E	D	K	A
P	W	R	J	P
I	S	A	H	R
C	P	W	T	I
T	Q	T	R	N
U	I	E	B	T
R	S	X	N	I
E	T	T	M	C
T	F	D	K	O
R	H	F	G	N

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Chapter 7   Notepad and WordPad

1. a. Notepad   b. WordPad   c. Dialog Box

2. a. Bold   b. Italics   c. Underline   d. Font family   e.   Font size

3. a. Notepad   b. WordPad

N	O	T	E	P	A	D	E
G	F	R	H	Y	P	A	L
Q	K	Z	V	X	B	L	U
W	O	R	D	P	A	D	T
T	I	T	L	E	B	A	R

TEST PAPERS

- Test papers have been provided for all the chapters of the course book.
- Each test paper is of **10 marks**.
- The test papers may be used for pen and paper assessment or the questions in them could be used to create your own assessment papers.
- They are also available as printable documents in **digital resources.**

TEST PAPER 1   CHAPTERS 1 AND 2

1. **Fill in the blanks with correct words:**   (3)

   smart   machines   mouse

   a. …………………………are the things made by us to make our work easier.

   b. A computer…………………helps to point at things on a computer monitor.

   c. A computer is a ……………………………….machine.

2. **Write T for the true statement and F for the false one:**   (3)

   a. A pair of scissors is a simple machine.

   b. Speakers are not the main part of a computer.

   c. We cannot print on a paper using a printer.

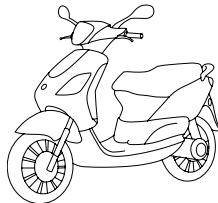3. **Identify the machines given below and name them:**   (4)

   (a)   (b)   (c)   (d)

**TEST PAPER 2**   **CHAPTERS 3 AND 4**

1. **Fill in the blanks with correct words:** (3)

   number   cursor   results

   a. Computers are used for preparing ……………………….. in school.

   b. ………………………….. keys are used to type numbers on screen.

   c. The …………………………. is the blinking line you see on the screen.

2. **Write T for the true statement and F for the false one:** (3)

   a. A computer is used for cooking food at home.

   b. There are two sets of number keys on the keyboard.

   c. Computers are used for sending e-mails.

3. **Look at the picture carefully and colour the name of the activity being done on the computer in blue and your roll number in orange colour on the given picture of keyboard below:** (4)
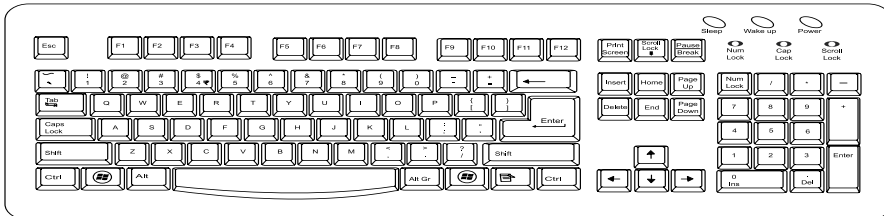
TEST PAPER 3   **CHAPTERS 5 AND 6**

1. **Fill in the blanks with correct words:**   **(3)**

    Draw stamps   scroll   Sketch lines

    a. A mouse can also have two buttons and a ………………………… wheel at the centre.

    b. The ………………………………. tool is used to draw different lines and shapes.

    c. ……………………….. tool is used to add a number of images like animals, flowers, etc.

2. **Write T for the true statement and F for the false one:**   **(3)**

    a. New picture tool is used to open a saved picture.

    b. Clicking is pressing the left mouse button once.

    c. Drawing for children is a fun program.

3. **Simra has designed a beautiful birthday card for her friend. Name the tools used for drawing the card:**   **(4)**

**TEST PAPER 4**   **CHAPTER 7**

1. **Fill in the blanks with correct words:**   **(3)**

    Save   Dialog   Restore Down

    a. …………………… box is a window where you select options as per your choice.

    b. The ………………………………….. button is used to make the window smaller.

    c. ……………………… button helps you save your work.

2. **Write T for the true statement and F for the false one:**   **(3)**

    a. We can type text in the document window.

    b. WordPad and Notepad are commonly used Software for typing text.

    c. The Bold option is used to set the text in italics form.

3. **Place the name of the following parts of WordPad window with an arrow in the window given below:**   **(4)**

    i.   Title bar   ii.   Minimize button

    iii.   Text color   iv.   Document window
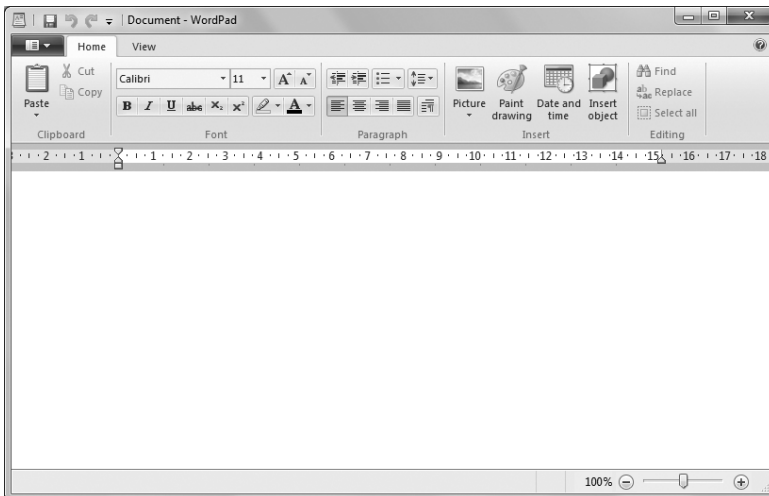
TEST PAPER ANSWERS

Test Paper 1

1. a. machines   b. mouse   c. smart

2. a. T   b. T   c. F

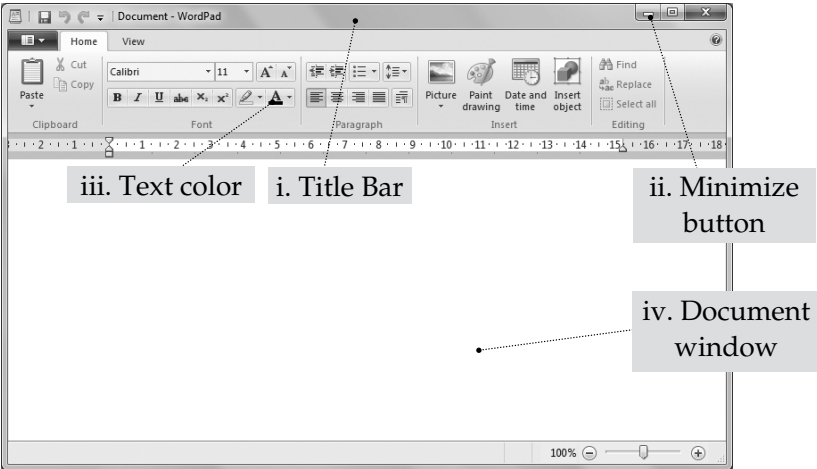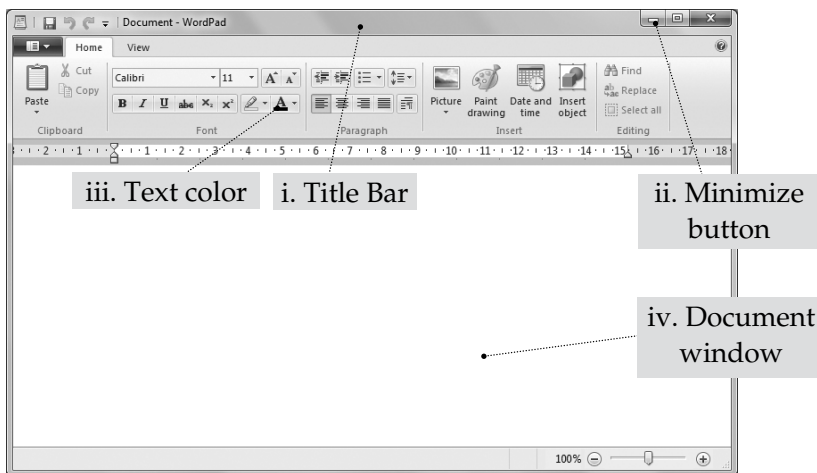3. a. toaster   b. mouse   c. scooter   d. speakers

Test Paper 2

1. a. results   b. Number   c. cursor

2. a. F   b. T   c. T

3. drawing

Test Paper 3

1. a. scroll   b. Sketch lines c. Draw stamps

2. a. F   b. T   c. T

3. i. Draw backgrounds tool   ii. Draw text tool

   iii. Draw stamps tool (twice)

Test Paper 4

1. a. Dialog   b. Restore Down c. Save

2. a. T   b. T   c. F

3.

iii. Text color   i. Title Bar

ii. Minimize button

iv. Document window

Notes

Notes