

Snapshot



A Book on Computer Science



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PREFACE

The computer has become an integral part of our society. It has influenced almost every aspect of our lives; be it work or leisure. It is only through computers that we are able to organise and execute even the simplest of tasks.

Snapshot is a series of five books for classes 1 to 5, which brings together 'knowledge' as well as 'knowledge application'. Each book is based on Windows 10 and MS Office 2016. The books are integrated with National Curriculum Framework (NCF) 2022.

In classes 1 and 2, students will gain basic knowledge of computer and its devices. They will also get to implement their creativity in Tux Paint and MS Paint.

In classes 3, 4 and 5, students will enhance their skills by gaining knowledge about MS Word, MS Excel, MS PowerPoint, LOGO, Scratch, E-mail, Internet, Artificial Intelligence and Logical Reasoning.

Through this book, we want to promote modern ways of teaching in which the student gets to comprehend and implement knowledge as well as technical skills. Rather than restricting the inflow of knowledge to verbal teaching, we have included all kinds of activities to further add to the independence of students so that they can learn better.

Each chapter is introduced in a systematic manner. The illustrations, application screenshots, activities and exercises are curated in simple language to assist the teaching-learning process.

—Author



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Integrated with NCF 2022

| PLAY-BASED LEARNING | Inclusion of word puzzles such as word search, crosswords, word jumbles |
|-------------------------------------|--|
| ETHICS and VALUES | Ethics and values like empathy, respect for others, equality, and justice |
| SOCIAL and EMOTIONAL LEARNING (SEL) | Self-awareness, Self-management, Decision-making, Social awareness, Relationship skills |
| COMMUNICATION | Exchange of information, thoughts, and ideas |
| EXPERIENTIAL LEARNING | Hands-on approach, learning through experience |
| CREATIVITY | Imagination, organization, problem-solving, innovation |
| TECHNOLOGY and EDUCATION | Extensive use of technology in teaching and learning |
| CRITICALTHINKING | Application of logic and reasoning in decision-making |

DIGITAL AID

Student's Assist



Audio and Video eBook

♦ Features of a computer



Teacher's Assist

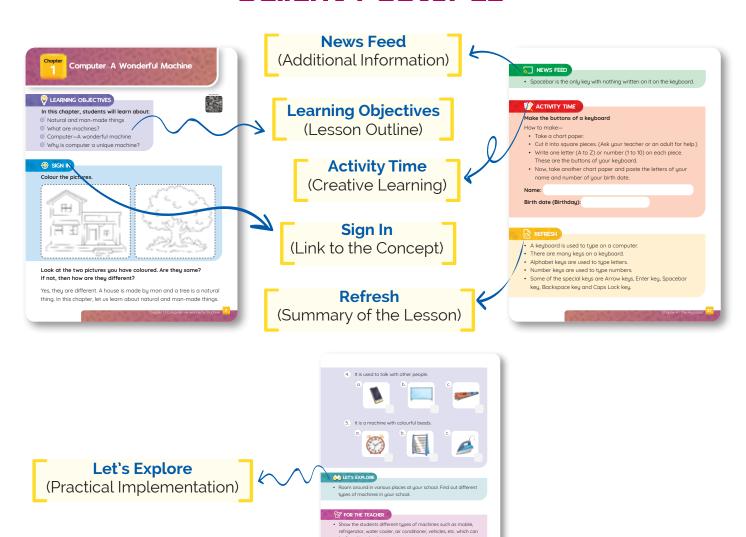


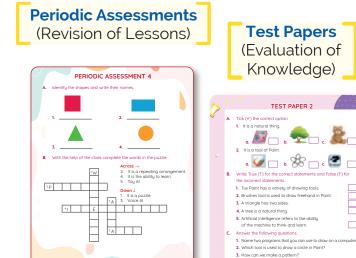
Test Paper Generator

- Random and Manual Question Paper
- ♦ Download papers in Word format
- A Lesson Plans
- Worksheets
- answer Key

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Salient Features

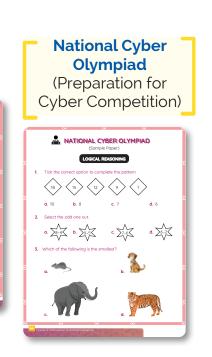






Project

(Application of



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5. Define man-made things? Give two examples

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| 1. | Computer—A Wonderful Machine Natural and man-made things What are machines? Computer—A wonderful machine Why is computer a unique machine | 7 | 6. Introduction to Tux Paint ♦ Tux Paint ♦ How to use Tux Paint ♦ Components of Tux Paint window ♦ Tools of Tux Paint | | | | |
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LEARNING OBJECTIVES

In this chapter, students will learn about:

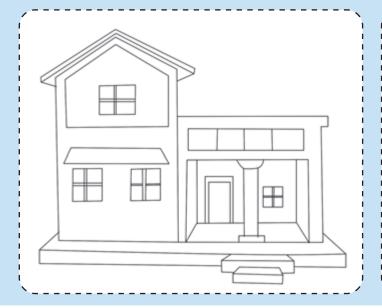
- Natural and man-made things
- What are machines?
- © Computer—A wonderful machine
- Why is computer a unique machine?

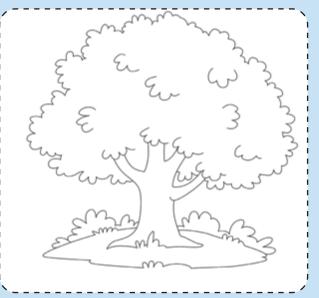


CR

⇒ SIGN IN

Colour the pictures.



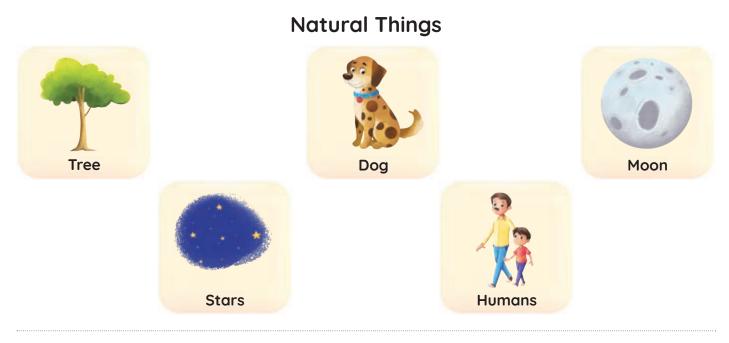


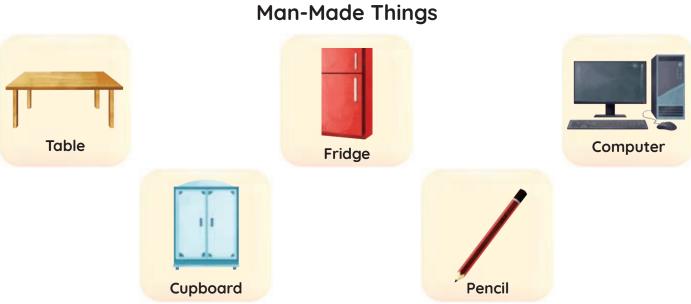
Look at the two pictures you have coloured. Are they same? If not, then how are they different?

Yes, they are different. A house is made by man and a tree is a natural thing. In this chapter, let us learn about natural and man-made things.

NATURAL AND MAN-MADE THINGS

There are many things around us. Some of them are natural and some of them are man-made. Things that occur in nature are called **natural things** and the things that are made by humans are called **man-made things**. For example:





WHAT ARE MACHINES?

Machines are man-made things that help to do our work easily. Machines save our time. They work on electricity and we use them in our daily life.

Computer G1_Ch-1.indd 8 11-02-2023 16:12:11

Let us learn about some of the machines we use in our daily life.



A **television** is used for entertainment. We watch cartoons on it. We can also listen to songs and play games on it.



A washing machine is used to wash our clothes. It needs electricity to run.



An air conditioner makes our room cool in summer. It needs electricity to work.



A refrigerator keeps our food fresh. It needs electricity to function.



Trains, aeroplanes, buses and cars are also machines. We use them to travel from one place to another.



Phones are used to talk with our friends and family members who are far away.

NEWS FEED

СМ

An abacus is also a machine. It has colourful beads used for counting.

COMPUTER—A WONDERFUL MACHINE

The computer is a smart machine. It needs electricity to work. We can do many activities using a computer. Some of them are:



- Drawing pictures
- Sending e-mails
- Listening to music
- Playing games

- Storing information
- Solving sums
- · Watching movies
- Keeping records

Why is Computer a Unique Machine?

Other machines can do only the kind of work for which they have been made. But computers can do many kinds of work.

5

NEWS FEED



 A computer cannot work on its own. It needs instructions to do any kind of work.

A

ACTIVITY TIME

СТ

Look at the pictures. Write N for natural things and M for man-made things.

1.



2.

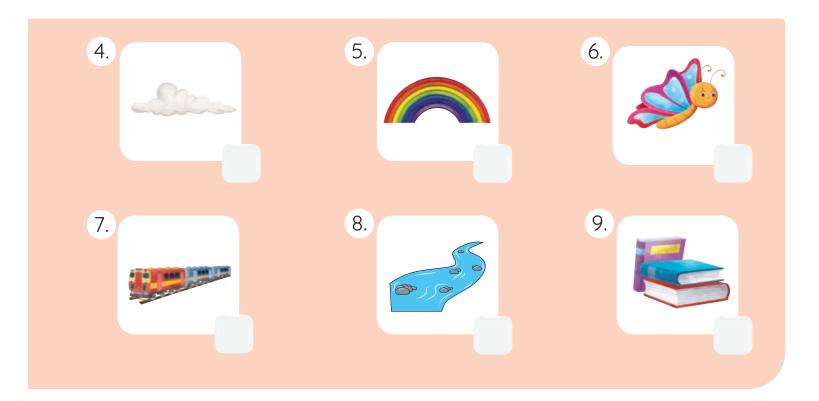


3.



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Chanter 1 | Computer - A Wonderful Machine



REFRESH

- Things are classified into two groups—Natural and Man-made.
- Machines are man-made things.
- Machines make our work easier.
- Machines save our time.

BROWSE

A Tick (✓) the machines and cross out (*) the things which are not machines.

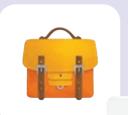
1.



2.



3.



Chapter 1 | Computer—A Wonderful Machine

4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

Abacus electricity machine time easier 1. Computer is a 2. Machines make our work 3. A computer needs 4. has colourful beads used for counting.

Chapter 1 I Computer—A Wonderful Machin

5.

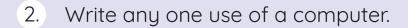
Machines save our

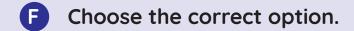
| G | | te True (T) for the correct statements and False (F) for the orrect statements. |
|----------|------|---|
| | 1. | Television is a smart machine. |
| | 2. | An aeroplane is a machine. |
| | 3. | A washing machine runs on fuel. |
| | 4. | Machines save our time. |
| | 5. | A computer can do only one kind of work. |
| | Circ | le the names of six machines in the word arid given below |

| Т | С | L | V | Р | W | V | K | Q | U | 0 | Υ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U | Е | С | 0 | М | Р | U | Т | Е | R | Z | Р |
| G | М | G | Ν | V | D | Υ | G | R | F | Е | Н |
| X | Z | Ν | Е | Z | R | G | W | 0 | Α | S | 0 |
| Т | Е | L | Е | V | ı | S | ı | 0 | Ν | В | Ν |
| S | Α | Е | R | 0 | Р | L | А | Ν | Е | Υ | Е |
| R | Е | F | R | ı | G | Е | R | Α | Т | 0 | R |
| Α | М | Q | Α | Т | R | А | 1 | Ν | Z | W | Α |

E Answer the following questions.

Write the names of any two machines that need electricity to work.





1. The machine that keeps our food fresh.

a.



b.



C.



2. It is smart machine.

a.



b.



C.



3. It needs electricity to run.

a.



b.



C.



4. It is used to talk with other people.

a.



b.



C.



5. It is a machine with colourful beads.

a.



b.



С



CONTRIBUTION LET'S EXPLORE

• Roam around in various places at your school. Find out different types of machines in your school.

FOR THE TEACHER

- Show the students different types of machines such as mobile, refrigerator, water cooler, air conditioner, vehicles, etc. which can be found in school.
- Also, take the students to the computer lab and show them a computer and its various parts. Explain some of the things that we can do using a computer.

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Chapter 2 More About Computer



LEARNING OBJECTIVES

In this chapter, students will learn about:

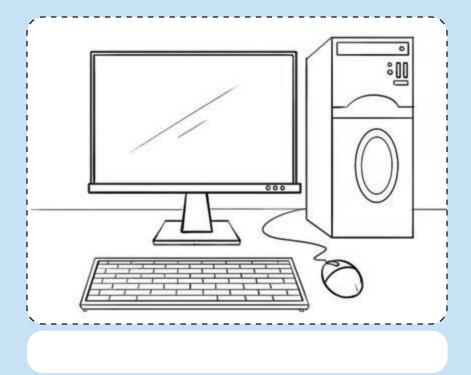
- Features of a computer
- © Uses of a computer
- Things that a computer cannot do
- Different types of computers



CR

ᢒ SIGN IN

Colour the picture. Name it.



A computer helps us to do our work faster and easier.

Chapter 2 I More About Computer

mputer G1_Ch-2.indd 16 11-02-2023 16:14:36

FEATURES OF A COMPUTER

A computer has many features that make it a smart machine. Let us learn about these features.

A computer works very fast.





- A computer does different kinds of work.
- A computer never gets tired.



 A computer can store a large amount of information.



USES OF A COMPUTER

A computer is used to do many things. It is also used in different places. Let us learn about these different uses of computers.

At Home

We use computers at home to:

- study.
- listen to music.
- play games.
- make school projects.
- draw and paint.



Chapter 21 More About Computer

Computer G1_Ch-2.indd 17 11-02-2023 16:

In Schools

We use computers in school to:

- learn.
- store information.
- search for books in the library.

In Offices

We use computers in offices to:

- keep records.
- type and print documents.

In Shops and Malls

We use computers in shops and malls to:

- maintain records.
- make bills.

In Hospitals

We use computers in hospitals to:

- maintain records.
- make reports.

At Railway Stations and Airports

We use computers at railway stations and airports to:

- · book tickets.
- give information about arrivals and departures of trains and aeroplanes.









Computer G1_Ch-2.indd 18 11-02-2023 16:14:39





 In hospital, computers are used to control machines that perform robotic surgery.

WHAT A COMPUTER CANNOT DO?

There are many things that a computer cannot do. Some of them are:

- Feel
- Think
- Eat
- Walk
- Breath
- Hear and speak

TYPES OF COMPUTERS

Computers are of many shapes and sizes. Let us learn about the different types of computers.

Desktop Computer

- A desktop computer is big in size.
- It is kept on a desk.
- It cannot be carried around.

Laptop Computer

- A laptop computer is small in size.
- It can be kept on our lap.
- It can be carried around.

Laptop

Tablet

- A tablet is a small flat computer.
- It is smaller than a laptop but larger than a mobile phone. It is operated by touching the screen.





Tablet

nanter 2 | More About Computer

19





• Charles Babbage is known as the 'father of computer.'
He developed the first computer.



СТ

Tick (\checkmark) the activities that you cannot do on a computer.

1.



Walk

2.



Watch Cartoons

3.



Eat

4.



Dance

5.



Listen to songs

6.



Read

7.



Sleep

8.



Draw

9.



Write



- Computers can work fast and continuously.
- Computers do not get tired.
- Computers do not make mistakes.
- Computers are used to do various tasks such as to study, play games, make school projects, store information, listen to music, draw and paint.
- Computers are used in many places such as homes, schools, offices, hospitals, shops, malls, airports and railway stations.
- Computers are of different types—desktop, laptop and tablet.

BROWSE

A Tick (✓) the types of computers. Cross out (×) the objects that are not a type of computer.

1.



2.



3.



4.



5.



6.



B Fill in the blanks using the words given below.

laptop eat computer study information

- 1. A computer can store a large amount of
- 2. At home, we use computer to
- 3. In shops, we use to make bills.
- 4. A computer cannot and breath.
- 5. A can be kept on our lap.
- Write True (T) for the correct statements and False (F) for the incorrect statements.
 - 1. A computer cannot work fast and continuously.
 - 2. We can store large information on a computer.
 - 3. We do not use computers at home.
 - 4. Computers are of different types.
 - 5. We cannot carry around a laptop.
- **D** Fill in the missing letters.

1.



D__S__T__P

2.



LA ___ T ___ P

3.



T__B_E_



Write any two features of computers. 1.

Name four places where computers are used.



Tick (✓) the correct option.

You can do it on a computer.

a.



b.



C.



You cannot do this task on a computer. 2.

a.



b.



C.



3. Computer is used to make bills at this place.





b.



C.



4. This is a type of computer.

a.



b.



C.



66 LET'S EXPLORE







- Visit your computer lab and count how many computers are there.
 Then, in your notebook, draw a picture of a computer.
- Find out how your teacher and parents or any family member use computers in daily life.

PA FOR THE TEACHER

- Demonstrate the uses of a computer. Play music, animation and videos on the computer. Show the students how to draw pictures on the computer.
- Demonstrate the speed and accuracy of a computer. Open the calculator on the computer and show how fast the computer calculates.
- Explain the uses of computers in schools, hospitals, banks, and railway stations.

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Chanter 2 | More About Computer



Parts of a Computer



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Parts of a computer
- Functions of different parts of a computer
- Additional devices connected to a computer

ᢒ SIGN IN



Match the actions with the correct body parts.

1.



a.



2.



b.



3.



C.



Chapter 3 I Parts of a Computer

25

Our body has different parts that do different functions. All these parts help us to function properly. Similarly, a computer also has different parts that do different functions. Let us learn about the different parts of a computer.

PARTS OF A COMPUTER

A computer has four main parts. They are **Monitor, CPU, Mouse** and **Keyboard**. Each part has different functions.



Monitor

- A monitor looks like a television.
- We can see the work we do on the monitor.
- We can see pictures, movies and cartoons on the monitor.



СМ



NEWS FEED

• The monitor is also known as Visual Display Unit (VDU).

CPU

- CPU stands for **Central Processing Unit**.
- It is present inside the CPU box.
- It is the brain of the computer.
- It connects all parts of the computer.





CPU

CPU Box

26

hanter 3 I Parts of a Computer

omputer G1_Ch-3.indd 26 11-02-2023 16:13:14





• Intel 4004 is the first CPU. It was released by Intel in 1971.

Mouse

 A mouse is used to work on a computer. It has two buttons and a scroll wheel.



Mouse

It is connected to the CPU with a wire.

Keyboard

- A keyboard has many buttons called keys.
- Numbers and letters are written on the keys.

Keyboard

OTHER DEVICES CONNECTED TO A COMPUTER

Microphone

A microphone is used to record different sounds and store them in computers.





Speaker

Speakers

Speakers are used to listen to music and sound on the computer.

Headphones

A pair of headphones is used to hear sounds and music without disturbing others.



Headphone

Printer

A printer is used to print text and pictures from a computer on paper.



Printer

Pen Drive

Pen Drive

It is a portable storage device.

Chapter 3 I Parts of a Computer

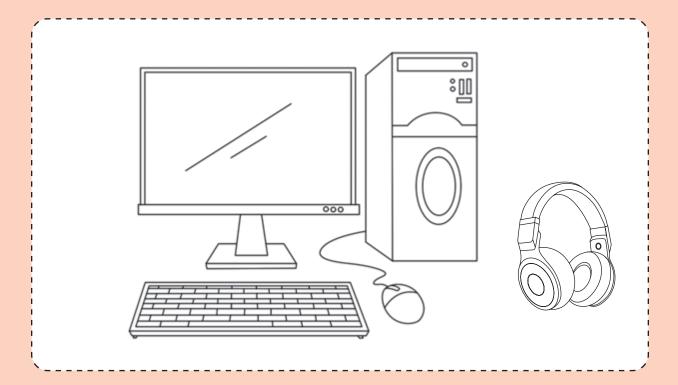






Colour the computer with the given colour code.

- Colour the monitor BLACK Colour the CPU RED
- Colour the mouse ORANGE
- Colour the keyboard GREEN Colour the headphones BLUE



REFRESH

- A computer has many parts.
- Monitor, CPU, Mouse and Keyboard are the main parts of a computer.
- We see the work we do on the monitor.
- CPU is the brain of a computer.
- Microphone, speakers, headphones, printer and pen drive are the devices that we connect to a computer.

BROWSE

A Tick (✓) the main parts of a computer. Cross out (×) the other devices.

1.



2.



3.



4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

keyboard speakers monitor CPU four

1. A computer has main parts.

- 2. Monitor, CPU, mouse and are the main parts of a computer.
- 3. A looks like a television.

Chapter 3 I Parts of a Computer



is the brain of a computer.

5.

are used to listen to music.

- Write True (T) for the correct statements and False (F) for the incorrect statements.
 - 1. A computer has three main parts.
 - 2. We see the work we do on CPU.
 - 3. A mouse has many buttons and keys.
 - 4. Pen drive is a storage device.
 - 5. A printer is used to print pictures.
- D Fill in the missing letters.

1.



M__N_T__R

2.



___ P ___

3.



M__U_E

4.



P__I__T__R

5.



K_Y_O_R_



1. How many main parts does a computer have? Name them.

2. Name four other devices connected to computers.



СТ

Tick (✓) the correct option.

1. It looks like a television.

a.



b.



C.



2. It connects all parts of the computer.

a.



b.



C



Chapter 3 | Parts of a Computer

3. It has two buttons and a scroll wheel.

a.



b.



C.



4. It is used to print text and pictures.

a.



b.



C.



5. It is a portable storage device.

a.



b.



C.



66 LET'S EXPLORE





- In the computer lab, observe the different parts of a computer.
- Then, collect pictures of different parts of a computer and paste it on a chart paper in the way a computer is set up.

FOR THE TEACHER

- Show different parts of a computer and explain the uses of each part.
- Point to the parts of the computer and ask the student to name them.

Computer G1_Ch-3.indd 32 11-02-2023 16:13:21

PERIODIC ASSESSMENT 1

A. Identify the following images and write their names.



1. _____



2.



3.



4. _____

B. Read the clues and complete the words in the puzzle.

| ¹ M | | | | | | |
|----------------|----------------|-----|----------------|---|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | ² P | | | |
| 3 N | | | | | | |
| | | | | | | |
| | | 4 T | | | | |
| | ⁵ L | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | 1 | | |
| | | | | | | |

Across →

- 1. It is used to record sounds.
- 3. It occurs in nature.
- 5. It is smaller than a desktop but bigger than a tablet.

Down ↓

- 1. It is a man-made thing.
- 2. It is used to print text on paper.
- 4. It is a small flat computer.





LEARNING OBJECTIVES

In this chapter, students will learn about:

- © Keyboard
- Alphabet keys
- Number keys
- Special keys









Look at the picture given below. It has many buttons with alphabets and numbers written on them.

- Colour the buttons with the alphabet that are used to write your name blue.
- Colour the buttons with the number of your birthday **red**.



Have you ever written something on a computer? How do you write it?

Yes, we use a keyboard to write on a computer. Let us learn about keyboards.

Chapter 4 I The Keyboard

tter G1_Ch-4.indd 34 11-02-2023 16:14:57

KEYBOARD

A keyboard has many small buttons. These buttons are called **keys**. We press these keys to type text on the computer. The process of pressing the keys of a keyboard to type text is called **typing**.

A keyboard has 104 keys. The keys are divided into three categories:

- Alphabet keys
- Number keys
- Special keys—Arrow keys, Enter key, Spacebar key, Backspace key, Caps lock key



ALPHABET KEYS

The keys on which letters A–Z are written are called **alphabet keys**. There are 26 alphabet keys on a keyboard. These keys are used to type letters, words and sentences. They are used to type both capital and small letters.



NUMBER KEYS

The keys on which numbers 1–9 and 0 (zero) are written are called **number keys**. There are 10 number keys on a keyboard. These keys are used to type numbers. There are two sets of number keys on a keyboard.



| ~ | 1 | @ | # | \$ | % | ۸ | & | * | (|) | - | + | Backspace |
|---|---|---|---|----|---|---|---|---|---|---|---|---|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | - | = | |

Chapter 4 I The Keyboard

Computer G1_Ch-4.indd 35 11-02-2023 16:

SPECIAL KEYS

There are also other keys with special functions. Some of them are the Arrow keys, Enter key, Spacebar key, Backspace key and Caps lock key.

Arrow Keys

Arrow keys are used to move the cursor in different directions. They are also called cursor control keys. They move the cursor up, down, left and right.



What is a Cursor?

A **cursor** indicates the place where we can type a letter or number. It blinks on the screen and looks like a straight standing line 'l'.



Enter Key

The **Enter key** is used to move the cursor to the next line. The Enter key is also known as the **Return key**. There are two Enter keys on a keyboard.



Spacebar Key

The **Spacebar key** is used to give a blank space between letters, numbers and words.



NEWS FEED

• Spacebar key is the longest key on the keyboard.



Backspace Key

The **Backspace key** is used to erase what we have typed.



Caps Lock Key

The **Caps lock key** is used to write in capital letters. The key is turned on and off by pressing the Caps lock key again.



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Chapter 4 | The Keyboard





• Spacebar is the only key with nothing written on it on the keyboard.

ACTIVITY TIME





Make the buttons of a keyboard

How to make—

- Take a chart paper.
- Cut it into square pieces. (Ask your teacher or an adult for help.)
- Write one letter (A to Z) or number (1 to 10) on each piece. These are the buttons of your keyboard.
- Now, take another chart paper and paste the letters of your name and number of your birth date.

Name:

Birth date (Birthday):

REFRESH

- A keyboard is used to type on a computer.
- There are many keys on a keyboard.
- Alphabet keys are used to type letters.
- Number keys are used to type numbers.
- Some of the special keys are Arrow keys, Enter key, Spacebar key, Backspace key and Caps Lock key.

Chapter 4 | The Keuboard



BROWSE

A Tick (✓) the alphabet keys. Cross out (×) the special keys.

1.



2.



3.



4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

| | Letters | numbers | keyboard | Enter | 104 | |
|----|-----------|---------|------------|------------|------------|----|
| 1. | A | | is used | to type on | a compute | r. |
| 2. | There are | | | keys on a | keyboard. | |
| 3. | | | are writte | n on alpha | ıbet keys. | |

Chapter 4 | The Kei

| | 4. | Number keys are used to type | | |
|---|-----|---|-----------|-------------------|
| | 5. | The | key is | used to move the |
| | | cursor to the next line. | | |
| G | | te True (T) for the correct state incorrect statements. | ments | and False (F) for |
| | 1. | There are 24 number keys. | | |
| | 2. | A cursor indicates the place who letter or number. | ere we | can type a |
| | 3. | Numbers are written on a Space | ebar ke | ey. |
| | 4. | The Enter key is also known as t | the Ret | urn key. |
| | 5. | The Caps lock key is used to wri | ite in co | apital letters. |
| D | Mat | ch the following. | | |
| | 1. | Spacebar key | a. | M |
| | 2. | Enter key | b. | |
| | 3. | Alphabet key | C. | Backspace |
| | 4. | Number key | d. | Enter |
| | 5. | Backspace key | e. | ! |
| | | | | |

Computer G1_Ch-4.indd 39 11-02-2023 16:14:59



1. Name the types of keys on a keyboard.

2. Name the special keys.



СТ

Tick (✓) the correct option.

1. It is used to type on a computer.

a.



b.



C.



2. Which of the following keys are used to type our name?

a.

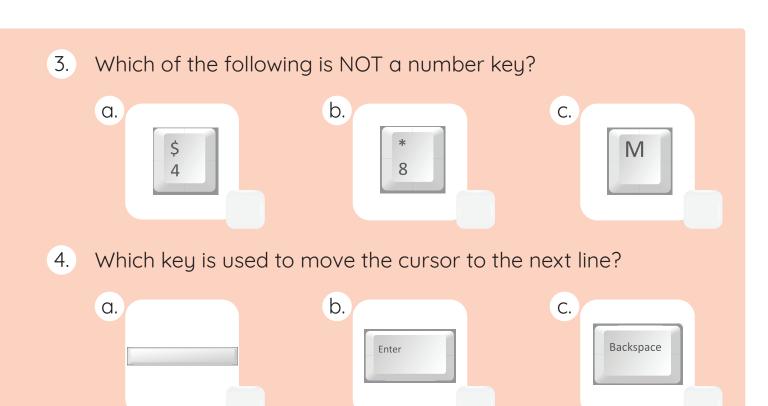


b.



C.

| Num Lock | / | | |
|-------------|---|------------|-------|
| 7 Home | 8 | 9 PE Up | + |
| 4 | 5 | 6 | |
| 1 End | 2 | 3 Pg Dn | Enter |
| O Ins | | Del | |



66 LET'S EXPLORE







 Go to the computer lab and type name and date of birth using a keyboard.

Name:

Birth date:

 Collect pictures of different types of keyboard and paste it on a chart paper.

FOR THE TEACHER

- Explain to the students the different types of keys on a keyboard.
- Explain the functions of each group of keys.
- Show them how to type name and date of birth on a computer using a keyboard.

Chapter 4 | The Keyboard

Chapter The Mouse



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Mouse
- Types of mouse
- Mow to hold a mouse?
- Mow to use a mouse?

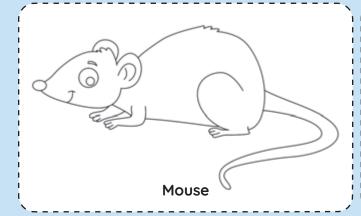


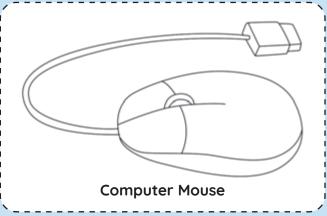
CR



ᢒ SIGN IN

Colour the pictures.





Do you see any similarities between the two pictures you have coloured?

Yes, the computer mouse looks like a real mouse. It has a wire like the tail of a real mouse which is connected to the computer. Let us learn more about computer mouse.

MOUSE

A computer mouse is a pointing device.

It is one of the main parts of a computer.

It is attached to the CPU.

A mouse is used to:

- move the cursor or pointer on the computer screen.
- point and select items on the screen.
- draw pictures.
- play games.

TYPES OF MOUSE

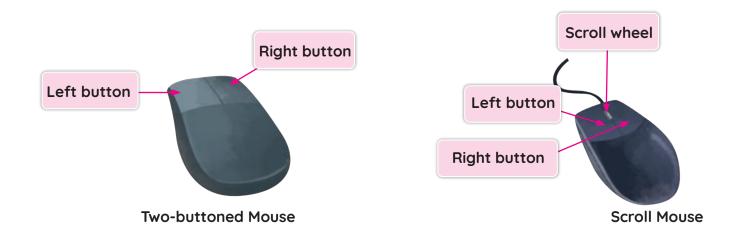
Mouse can be of different types depending on the number of buttons it has:

Mouse

Mouse pad

СМ

- A mouse that has two buttons is called **two-buttoned mouse**.
- A mouse that has two buttons and a scroll wheel is called scroll mouse.



NEWS FEED

• A mouse that is connected to the computer without a wire is called a cordless mouse or a wireless mouse.

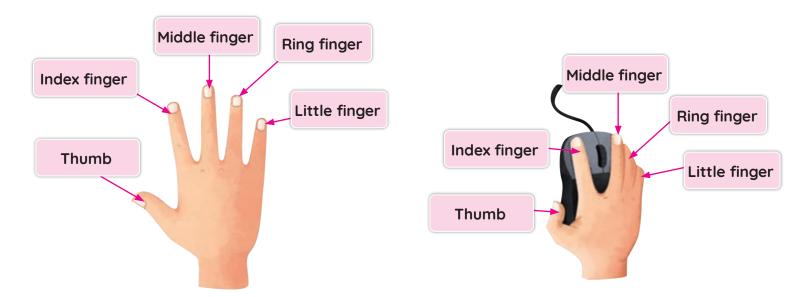
Chapter 5 I The Mouse 43

Computer G1_Ch-5.indd 43 11-02-2023 16:13

HOW TO HOLD A MOUSE?

Follow these steps to hold a mouse:

- 1. Place your palm on top of the mouse.
- 2. Use your thumb on one side and the ring finger and the little finger on the other side to hold the mouse.
- 3. Place your index finger on the left button of the mouse.
- 4. Place your middle finger on the right button.



HOW TO USE A MOUSE?

When we want to point or spot something, we use our fingers. Similarly, a **mouse pointer** is used to point to things on the computer screen. It is the **arrow** that we see on the monitor. A mouse is used to move this pointer.



Clicking

Pressing and releasing the mouse button is called clicking.

Single-Click

Pressing the button once and releasing it quickly is called single-click.



Chapter 5 | The Mouse

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Left-Click

Pressing the left button once is called left-click. It is used to select an object on the screen.

Right-Click

Pressing the right button once is called right-click. It is used to open a list of commands.





Double-Click

Pressing the left button twice quickly and releasing is called double-click. It makes two-click sounds. It is used to open any object on the computer.

Drag

To drag means to move the mouse while keeping the left button pressed. This action is called dragging. It is used to move objects on the screen.

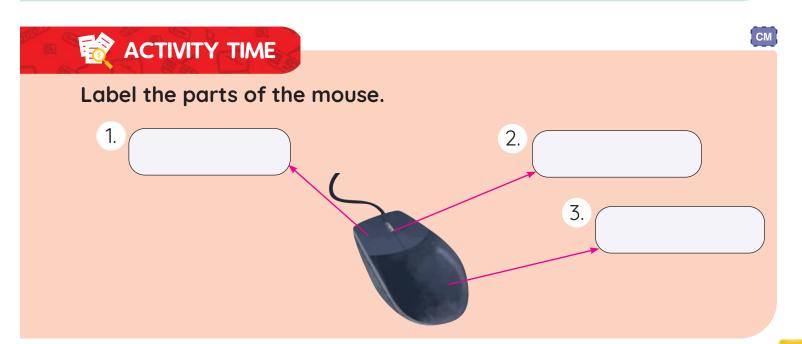


СМ



NEWS FEED

• Icons are small items seen on the monitor.



Chapter 5 | The Mouse

REFRESH

- A mouse is a pointing device.
- A two-buttoned mouse has two buttons.
- A scroll mouse has two buttons and a scroll.
- Pressing and releasing the mouse button is called clicking.

BROWSE

A Tick (✓) the correct pair. Cross Out (×) the wrong pair.

1. Proper way to hold a mouse



Proper way to hold a mouse



2. Left-Click



Left-Click



3. Right-Click



Right-Click



B Fill in the blanks using the words given below.

| | select | right | Left-click | pointing | scroll |
|----|-----------|------------|---------------|----------------|---------------|
| 1. | A mouse | is a | | device. | |
| 2. | A mouse | is used to | o point and | | |
| | objects o | n the scr | een. | | |
| 3. | A mouse | that has | two buttons a | nd a scroll wh | eel is called |

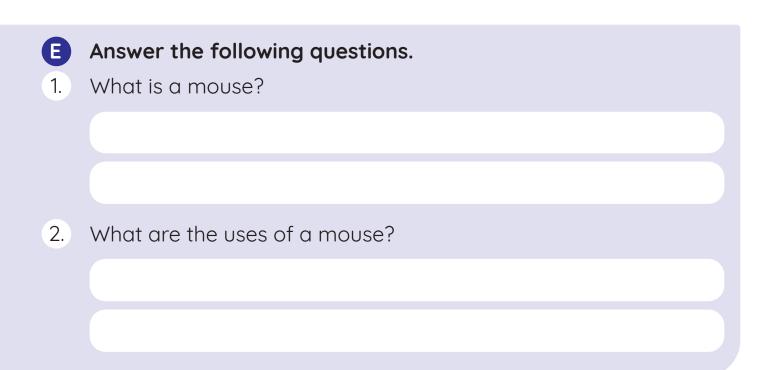
mouse.

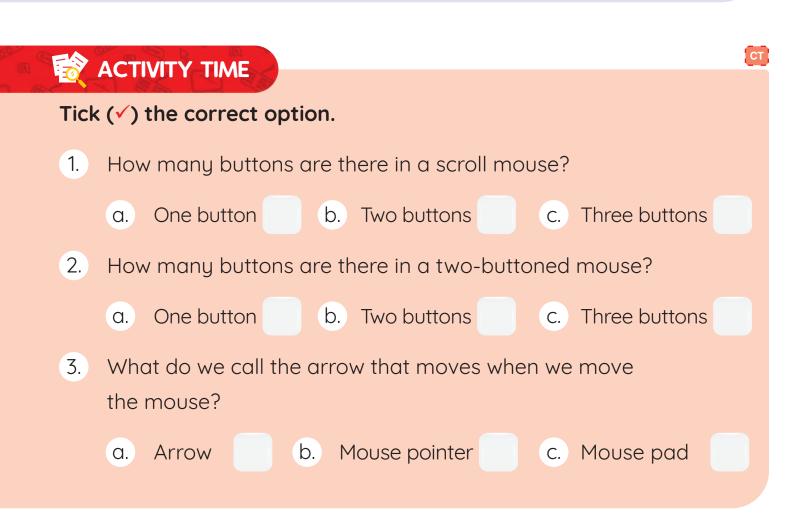
Chapter 5 | The Mouse

nputer G1_Ch-5.indd 46 11-02-2023 16:14:01

| | 4. | The middle finger is placed on the | | butto | on. |
|---|-----|--|--------|-----------------------|-----|
| | 5. | is used to | seled | ct an object on the | |
| | | screen. | | | |
| G | | te True (T) for the correct statemerrect statements. | ents | and False (F) for t | he |
| | 1. | A mouse can have two or three b | utton | IS. | |
| | 2. | We place our index finger on the le | ft but | tton of the mouse. | |
| | 3. | Pressing and releasing the mouse k | outtoi | n is called pressing. | |
| | 4. | Pressing the button once is called | sing | le-click. | |
| | 5. | Right-click makes two click sound | ls. | | |
| D | Mat | ch the following. | | | |
| | 1. | | a. | Scroll mouse | |
| | 2. | | b. | Left-click | |
| | 3. | | C. | Two-buttoned mou | ıse |
| | 4. | | d. | Double-click | |
| | 5. | | e. | Right-click | |

Chapter 5 | The Mouse





Which finger is placed on the right button? Index finger Middle finger c. Ring finger a. Which finger is placed on the left button? 5. Index finger b. Middle finger c. Ring finger a.

66 LET'S EXPLORE







- Work in pairs. In the computer lab, perform these actions:
 - Right-click on an icon on the screen. 1.
 - Double-click on the different icons on the screen. 2.
- What happens to the icons? Discuss with your partner.

FOR THE TEACHER

- Show the students a computer mouse.
- Explain the different parts of a mouse.
- Demonstrate to the students the correct way to hold a mouse.
- Show all the functions that can be done with a mouse.

Computer G1 Ch-5.indd 49

PERIODIC ASSESSMENT 2

A. Identify the following images and write their names.



1.



2. _____



3. _____



4. _____

B. Find the following words in the given word search puzzle.

ARROW CURSOR ENTER SPACEBAR SCROLL
DRAG BUTTON MOUSE KEYBOARD CLICK

| Р | J | J | U | С | L | | С | K | Ν | Н | Υ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| K | Е | Υ | В | 0 | А | R | D | S | G | U | L |
| Т | М | А | R | R | 0 | W | Υ | Е | В | Е | G |
| U | U | Е | Ν | Т | Е | R | R | L | А | В | D |
| W | А | В | U | Т | Т | 0 | Ν | U | С | Q | R |
| С | R | X | S | Р | А | С | Е | В | А | R | Α |
| М | 0 | U | S | Е | С | U | R | S | 0 | R | G |
| | L | G | Н | S | С | R | 0 | L | L | Т | R |

TEST PAPER 1



1. Which of these is a type of computer?



2. Which of these is an alphabet key?



B. Write True (T) for the correct statements and False (F) for the incorrect statements.

- 1. Machines do not save our time.
- 2. We can store large information on a computer.
- 3. Pen drive is a storage device.
- **4.** A cursor indicates the place where we can type a letter or number.
- 5. Right-click makes one click sound.

C. Answer the following questions.

- **1.** Write the names of any two machines that need electricity to work.
- 2. Name four places where computers are used.
- **3.** What are the different parts of a computer? Name them.
- 4. Write the names of different types of keys on a keyboard.
- 5. What are the uses of a mouse?

51 Test Pape

Chapter Introduction to Tux Paint



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Tux Paint
- Mow to use Tux Paint
- Components of Tux Paint Window
- Tools of Tux Paint





ᢒ SIGN IN

Do you like to draw? Draw and colour any of your favourite object in the space given below.

How would you draw the same picture on a computer?

You can draw on a computer using Tux Paint. Let us learn about Tux Paint.

TUX PAINT

Tux Paint is a free drawing program designed for young children. It has a blank canvas and a variety of drawing tools. We can draw different shapes such as stars, circles, squares, rectangles and many more. We can draw quickly and easily in Tux paint.

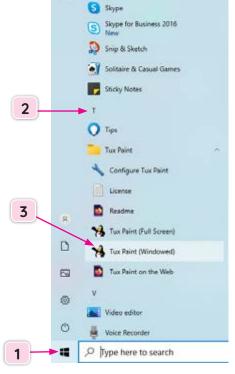
HOW TO USE TUX PAINT?

Follow these steps to start Tux paint:

- 1. Click on the **Start** button.
- 2. Scroll through the program list to the letter T.
- 3. Click on Tux paint (Windowed).



Tux Paint Window



Settings

COMPONENTS OF TUX PAINT WINDOW

The main screen has four sections.

Toolbar: It contains various drawing tools. It is shown on the left side of the screen.

Drawing canvas: It is the large part of the screen where you can draw and colour.

NEWS FEED

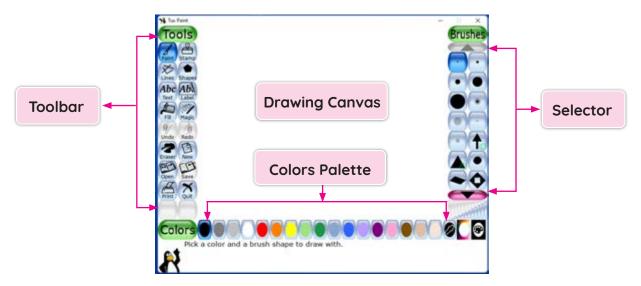
СМ

Tux Paint was developed by Bill Kendrick in 2002.

Chapter 6 I Introduction to Tux Paint

Computer G1_Ch-6.indd 53 11-02-2023 16:13:42 **Color palette:** It is the palette of colours shown at the bottom of the screen.

Selector: It has various shapes to select and draw. It is shown on the right side of the screen.



TOOLS OF TUX PAINT

Tux Paint has many tools that can be used to draw different objects.



Some of them are:

Let us learn about some Tux Paint tools.

Paint Tool

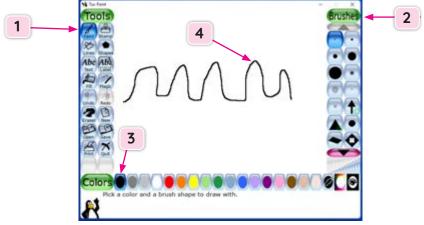
Paint tool is used to draw different patterns. This tool is used to draw freehand or previously defined shapes.

Follow these steps to use Paint tool:

- 1. Select the Paint ool.
- 2. Click on the brush pattern you like to draw from the Selector.
- 3. Select any colour from the Color Palette.
- **4.** Then, drag the mouse in the Drawing canvas to draw a picture.

Computer GI. Ch-6 indd. 54

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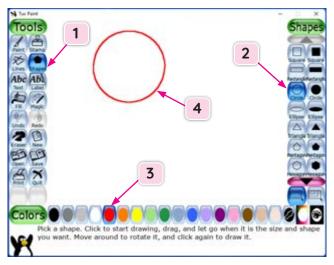
Using Paint tool

Shapes Tool

Shapes tool is used to draw different shapes such as triangles, rectangles, squares and more.

Follow these steps to use **Shapes** tool:

- 1. Select the **Shapes** tool
- 2. Click on the shape you would like to draw from the Selector.
- 3. Select any colour from the Colors palette.
- **4.** Then click and drag the mouse to fix the size of the shape, on the drawing canvas.



Using Shape tool

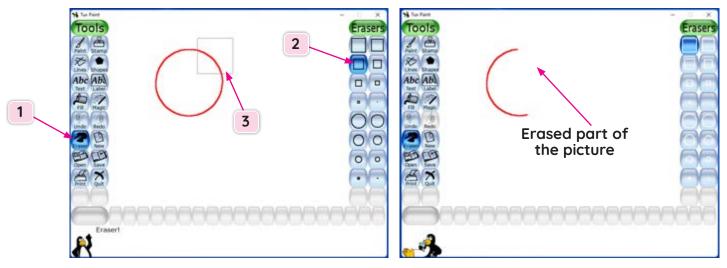
Eraser Tool

Eraser tool is used to erase the unwanted part of the drawing from the Drawing Canvas.

Chapter 6 I Introduction to Tux Paint 55

Follow these steps to use **Eraser** tool:

- 1. Click on the **Eraser** tool.
- 2. Select the **Eraser** from the **Selector**.
- 3. Click and drag the mouse pointer on the part that you want to erase.



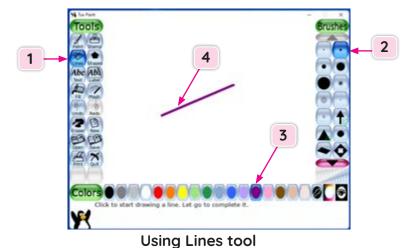
Using Eraser tool

Lines Tool

Lines tool is used to draw straight lines using different brush patterns.

Follow these steps to use **Lines** tool:

- 1. Click the Lines tool.
- 2. Select the brush pattern you like from the different **Brushes** that appears on the **Selector**.
- **3.** Select any colour from the **Colors** palette.
- 4. Press the left mouse button and drag to make a line.



C) - 898

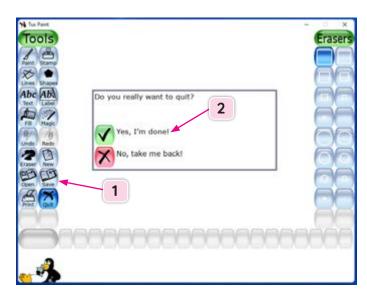
In Tux Paint you can undo and redo multiple times.

Quit Tool

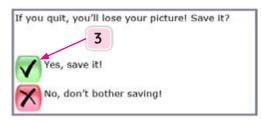
After finishing the drawing, you can close the program. Quit tool is used to save and exit the TUX Paint program.

Follow these steps to **Quit** close the program:

- 1. Click on the Quit tool. A dialog box will appear.
- 2. Click if you have not saved the drawing, a dialog box will appear asking you to save the picture.
- 3. Click on "Yes, save it!" to save the drawing. A dialog box will appear asking you to replace the old file.
- 4. Click on Yes, replace the old one!



Using Quit tool





Chapter 6 | Introduction to Tux Paint

Computer G1_Ch-6.indd 57 11-02-2023 16:13:43



Match the picture with its name.

1.



2.



3.



4.



5.



6.



- a. Save Tool
- b. Lines Tool
- c. Paint Tool
- d. Eraser Tool
- e. Quit Tool
- f. Shapes Tool

REFRESH

- Tux Paint is a free drawing program designed for young children.
- Toolbar, Drawing Canvas, Selector and Colors Palette are the four main sections of Tux Paint.
- Paint tool is used to draw freehand.
- Shapes tool is used to draw different shapes.
- Eraser tool is used to erase a picture or an unwanted part of it.
- Lines tool is used to draw straight lines.
- Quit tool is used to save and quit the program.

BROWSE

A Tick (✓) the tools of Tux Paint. Cross Out (x) the tools that are not used in Tux paint.

1.



2.



3.



4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

Shapes freehand draw drawing Selector

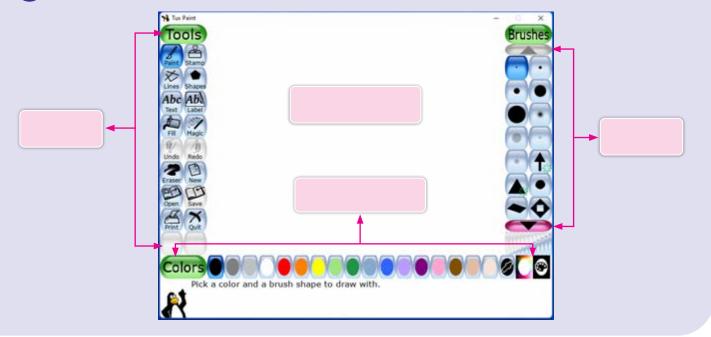
1. Tux Paint is a

program.

2. Drawing canvas is the large part of the screen where we

Chapter 6 I Introduction to Tux Paint

- 3. has various shapes to select.
- 4. The Paint tool is used to draw drawings.
- 5. The tool is used to draw different shapes.
- Write True (T) for the correct statements and False (F) for the incorrect statements.
 - 1. Toolbar is shown on the right side.
 - 2. Tux Paint has a variety of drawing tools.
 - 3. The toolbar contains different colour pallets.
 - 4. Colors palette is shown on the right side in Tux Paint window.
 - 5. To start Tux Paint, click on Quit tool.
- D Label the main sections of the Tux Paint window.



Chapter 6 | Introduction to Tux Paint

G1_Ch-6.indd 60 11-02-2023 16:13:44



1. What is Tux Paint?

2. Name some of the tools used in Tux Paint.



СТ

Tick (✓) the correct option.

1. Which tool do you use to draw shapes?

a.



b.



C.



2. Which tool do you use to draw straight lines?

a.



b.



C.



Chapter 6 | Introduction to Tux Paint





b.



C.



4. Which tool do you use to draw freehand drawing?





b.



C.



5. Which tool do you click to quit the program?





b.



C.



6. Which tool do you use to save a drawing?

a.



b.



C.



66 LET'S EXPLORE



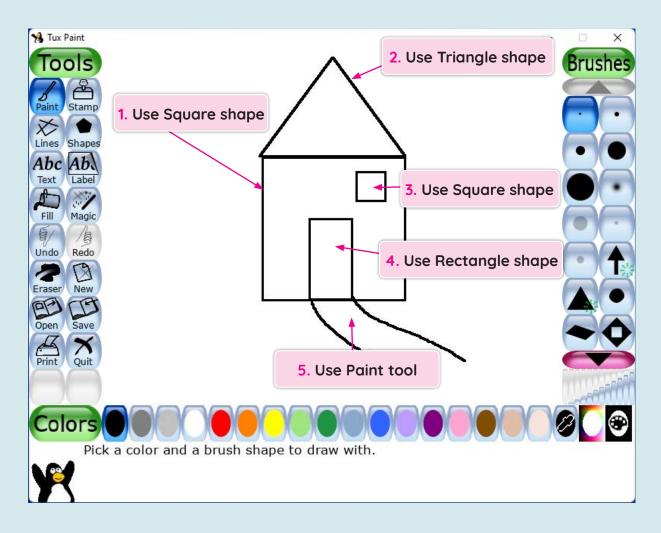




• In Tux Paint, use the 'Shapes and Paint tools' to draw a hut.

After completing the picture quit the program.

Steps:



FOR THE TEACHER

- Show the students how to open Tux Paint.
- Explain all the components of the Tux Paint window.
- Help the students to use the different tools.

Chapter 6 | Introduction to Tux Paint

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Chapter Introduction to Paint



LEARNING OBJECTIVES

In this chapter, students will learn about:

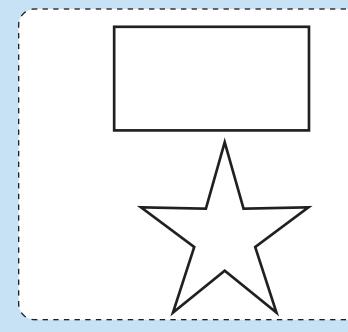
- Steps to start Paint
- Parts of Paint window
- **Solution** Using Paint Tools
- Trawing Lines
- Orawing Rectangles
- **Trawing Circles**
- Filling Colour
- Trawing Freehand

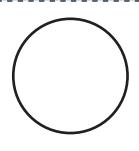


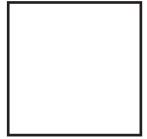
CR

♦ SIGN IN

Identify the shapes. Paint them with different colours.







Which tools did you use to paint these shapes?

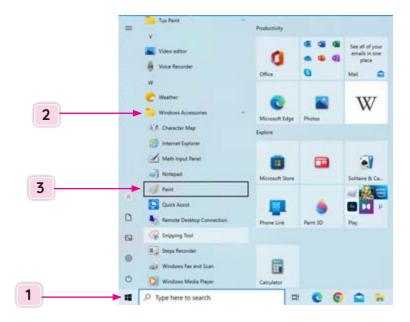
Just like we draw on paper using pencil and colour, we can draw on a computer using certain programs. We have learnt to paint using Tux Paint in the previous chapter. Let us learn about another drawing program, Paint.

Paint is a program used to draw and colour pictures. It has all the tools required to draw and paint.

STEPS TO START PAINT

Follow these steps to open Paint:

- 1. Click on the **Start** button.
- 2. Scroll through the list of programs and click on Window Accessories.
- 3. Click on Paint.



Another way to open Paint is:

- Type Paint in the search box on the taskbar.
- Select and click on Paint from the list of programs.



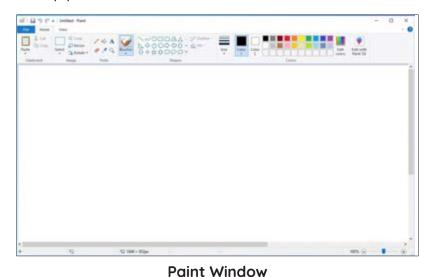
СМ

• Paint was introduced in November 1985 by Microsoft.

Chapter 7 I Introduction to Paint 65

Computer G1_Ch-7.indd 65 27-02-2023 09:51:1.

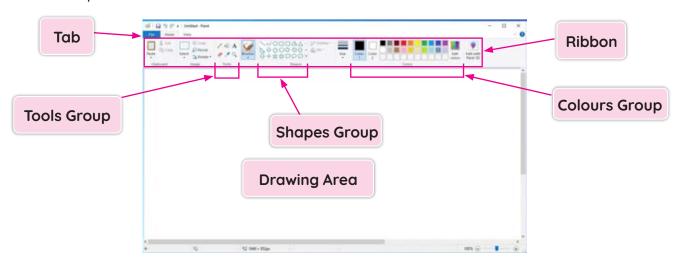
Paint window will appear on the screen.



Fullit William

PARTS OF PAINT WINDOW

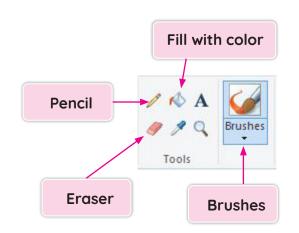
The Paint window has many components. Let us learn about these main components.



Ribbon: It is a bar that contains tabs and groups.

Colors Group: It contains different colour options. We can choose any colour from here.

Tools Group: It contains different tools such as Pencil, Eraser, Brushes, Fill with colour and more.



Chapter 7 | Introduction to Paint

outer G1_Ch-7.indd 66 27-02-2023 09:51:11

Shapes Group: It contains different shapes such as Line, Rectangle, Curve, Triangle and more.

Tab: It contains tools of different groups.

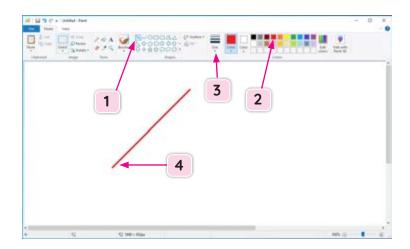
Drawing Area: It is the blank space where we draw and paint.

DRAWING STRAIGHT LINES

Follow these steps to draw a straight line:

- 1. Click on the **Line** shape in the **Shapes** group.
- 2. Select any colour from the Colors group.
- 3. Select the thickness from the **Size** button.
- **4.** Move the mouse to the drawing area. Then, click and drag the mouse to draw a line.

Release the mouse button when you want to end the line.



DRAWING RECTANGLES

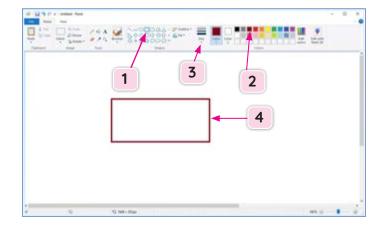
Follow these steps to draw a rectangle:

- 1. Click on the **Rectangle** shape in the **Shapes** group.
- 2. Select any colour from the Colors group.
- 3. Select the thickness from the Size button.
- **4.** Move the mouse to the drawing area. Then, click and drag the mouse to draw a rectangle.

Release the mouse button when a rectangle is made.

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Computer G1_Ch-7.indd 67 27-02-203

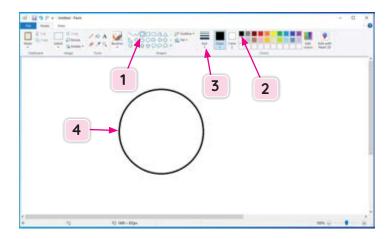


DRAWING CIRCLES

Follow these steps to draw a circle:

- 1. Click on the **Oval** shape in the **Shapes** group.
- 2. Select any colour from the Colors group.
- 3. Select the thickness from the Size button.
- **4.** Move the mouse to the drawing area. Then, click and drag the mouse to draw a circle.

Release the mouse button when a circle is made.

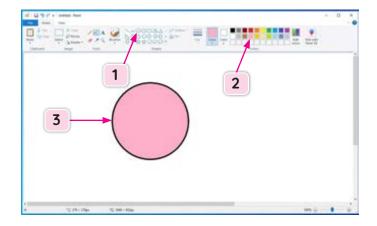


FILLING COLOURS

To fill an object with any colour, follow these steps:

- 1. Click on the Fill with color tool in the Tools group.
- 2. Select any colour from the **Colors** group.
- 3. Move the mouse pointer and click inside the shape to fill it with colour.

Chapter 7 I Introduction to Paint

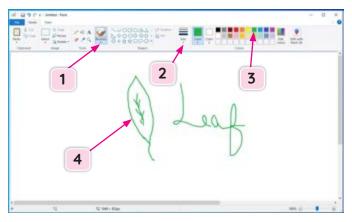


DRAWING FREEHAND

Follow these steps to draw freehand:

- 1. Click on the **Brushes** Tool from the **Tools** group.
- 2. Select any colour from the Colors group.
- 3. Select the thickness from the Size button.
- **4.** Move the mouse to the drawing area. Then, click and drag the mouse to draw or write freehand.

Release the mouse button when you want to stop the drawing.



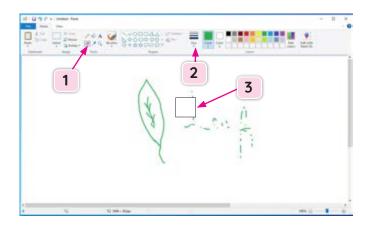
ERASING A DRAWING

The Eraser tool is used to erase any unwanted part of a picture. Follow these steps to erase a drawing or part of it:

- 1. Click on the **Eraser** Tool 🧳 from the **Tools** group.
- 2. Choose the thickness by clicking on the Size button.

Chapter 7 I Introduction to Paint 69

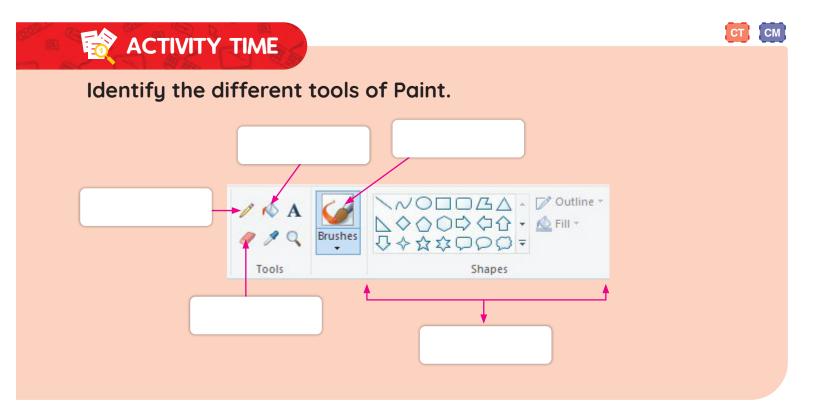
3. A square will appear on the screen. Hold it and move it to the part of the drawing you want to erase.





СМ

Paint is also used to add text to images saved on a computer.



Computer G1_Ch-7.indd 70 27-02-2023 09:51:12



- Paint is a program used to draw and colour pictures.
- Colors Group contains different colour options.
- Tools Group contains different tools such as Pencil, Eraser, Brushes,
 Fill with Color and more.
- Shapes Group contains different shapes such as Line, Rectangle, Curve, Triangle and more.
- Tab contains tools of different groups.
- Drawing Area is the blank space where we draw and paint.

BROWSE

A Tick (✓) the tools or shapes of Paint. Cross out (×) the tools which are not part of paint.

1.



2.



3.



4.



5.



6.



B Fill in the blanks using the words given below.

| | | colour | Eraser | Drawing | shapes | Tools | | | | |
|---|-----|--|-------------|-------------------|--------------|-------------|----------|--|--|--|
| | 1. | | C | area is the spac | e where we | draw and po | int. | | | |
| | 2. | Colors gro | oup conto | ins different | | options | . | | | |
| | 3. | | Q | group contains | different to | ols. | | | | |
| | 4. | Shapes g | roup cont | ains different | | | | | | |
| | 5. | | t | ool is used to e | erase any ur | nwanted pa | rt | | | |
| | | of a pictu | re. | | | | | | | |
| G | | re True (T) for the correct statements and False (F) for incorrect statements. | | | | | | | | |
| | 1. | Paint prog | gram is us | sed to draw an | d colour on | paper. | | | | |
| | 2. | Tab contains tools of different groups. | | | | | | | | |
| | 3. | Fill with co | olour tool | is used to fill c | olour in any | shape. | | | | |
| | 4. | Brushes t | ool is used | d to draw freel | nand. | | | | | |
| | 5. | Eraser to | ol is used | to erase pictur | es. | | | | | |
| D | Mat | ch the foll | owing. | | | | | | | |
| | 1. | | | | a. Size b | utton | | | | |
| | 2. | | | | b. Line s | hape | | | | |
| | 3. | | | | c. Erase | r tool | | | | |
| | 4. | | | | d. Brush | es tool | | | | |

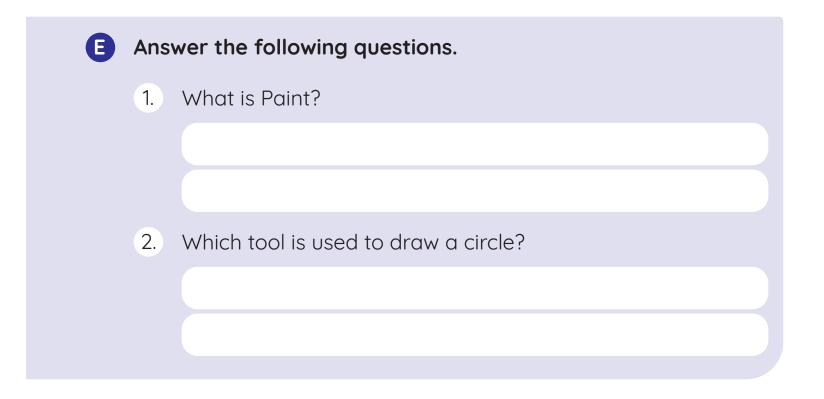
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5.

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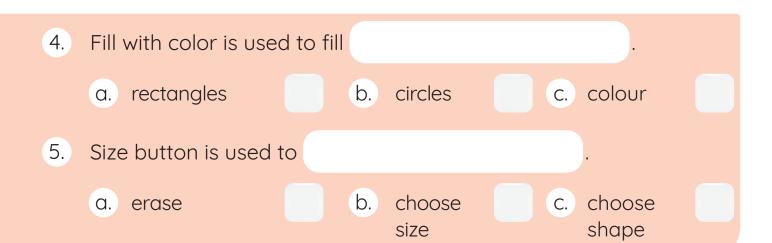
Rectangle shape

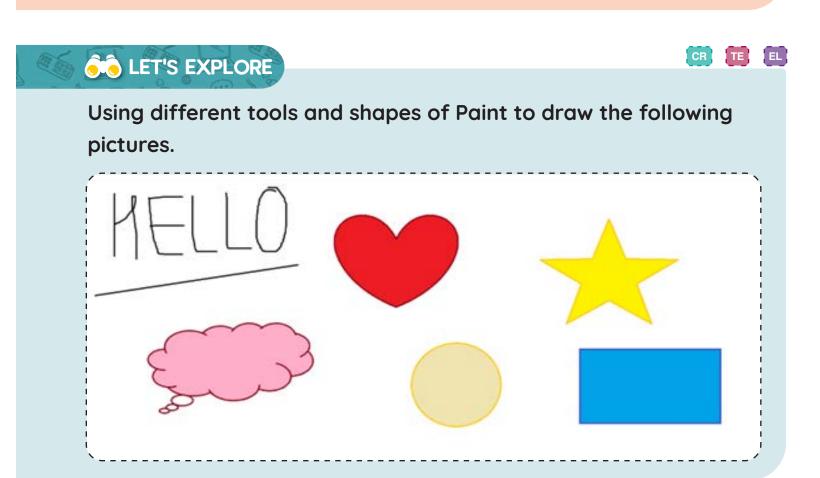
e.



| ACTIVITY TIME | | CT |
|------------------------------|---------------------|----------------|
| Tick (✓) the correct option. | | |
| 1. Brushes Tool is used to | | |
| a. draw freehand | b. erase | c. fill colour |
| 2. Eraser Tool is used to | | |
| a. draw rectangles | b. draw freehand | c. erase |
| 3. Oval shape is used to | | |
| a. draw freehand | b. draw rectangles | c. draw circle |

Chapter 7 | Introduction to Paint





FOR THE TEACHER

- Show the students how to open Paint.
- Explain all the components of the Paint window.
- Show the students how to draw different shapes on Paint.

Chapter 7 I Introduction to Paint

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PERIODIC ASSESSMENT 3

A. Identify the tools and write their names.







1. _____

2. _____

3.







4. _____

5. _____

6. _____

B. Find the following words in the given word search puzzle.

CANVAS CIRCLE SQUARE RECTANGLE TOOLBAR SELECTOR
PAINT TOOL SHAPES ERASER COLOUR RIBBON

| R | J | S | S | С | | R | С | L | Е | В | R |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S | С | 0 | L | 0 | U | R | Υ | Υ | С | Р |
| В | Н | R | Е | С | Т | Α | Ν | G | L | Е | Α |
| В | Α | G | Т | 0 | 0 | L | В | А | R | U | 1 |
| 0 | Р | D | S | Е | L | Е | С | Т | 0 | R | Ν |
| Ν | Е | С | Α | Ν | V | Α | S | Ν | U | С | Т |
| Н | S | Т | Е | R | Α | S | Е | R | U | D | Н |
| W | Υ | Z | Т | S | Q | U | Α | R | Е | G | S |

Periodic Assessment 3

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LEARNING OBJECTIVES

In this chapter, students will learn about:

- **Shapes**
- Pattern
- **Word search**









Colour the matching shape with same colour.













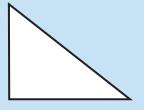






















SHAPES

We see objects that are made of different shapes. Let us learn about these shapes.

Square

- A square has four sides.
- All the sides of a square are of equal length.
- It is made up of sleeping and standing lines.

Rectangle

- A rectangle has four sides.
- Opposite sides of a rectangle are equal.
- It is made up of sleeping and standing lines.

Triangle

- A triangle has three sides.
- The sides of a triangle may or may not be equal.

Circle

- A circle has no edges.
- It is a round shaped figure.

PATTERN

A pattern is a repeating arrangement of numbers, colours or shapes. We can make a pattern by drawing and writing the same thing again and again.



Patterns exist in various forms, natural as well as man-made.











СМ

Let us look at some examples of different kinds of patterns.

| 1. | | | | | | |
|----|----|----|----|----|----|----|
| 2. | | | | • | | |
| 3. | | | (| | | (|
| 4. | A | В | C | Α | В | С |
| 5. | 23 | 45 | 67 | 23 | 45 | 67 |

WORD SEARCH

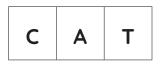
A word search is a puzzle in which letters are given in a grid and we have to find the words hidden in the grid.

In a grid, the letters of a word are arranged horizontally (in a row) or vertically (in a column).

Horizontal (Row) Arrangement

In a horizontal arrangement, the set of letters is arranged from left to right. It is also known as a row.

| C | Α | T | М | 0 | B |
|---|---|---|---|---|---|
| Т | E | T | Н | Ε | Α |
| 0 | K | 0 | ı | K | T |
| N | L | Y | Z | R | М |
| М | A | Р | Р | L | E |



Letters arranged horizontally





The first word search game was published in 1968.

Chapter 8 I Computational Thinking and Reasoning

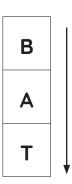
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Vertical (Column) Arrangement

In the vertical arrangement, the set of letters is arranged from up to down. It is also known as a column.

How to play word search

- Look at the hints. Hints will tell you about the words that are hidden in the grid.
- Look at all the rows one by one.
- Look at the columns one by one.



Letters arranged vertically

PL



Find the given words in the word search. The words are hidden horizontally and vertically.

Dog Bat Hen Rose Boat Book Leaf Moon Nine



















| J | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ε | М | N | ı | N | E | E | F | L | S | L | В |
| F | В | С | С | L | Y | Н | G | М | K | ٧ | 0 |
| В | 0 | Α | Т | E | K | Y | Α | М | J | J | 0 |
| М | 0 | 0 | N | Α | R | 0 | S | E | Q | X | K |
| R | Т | ı | K | F | R | Q | ı | D | 0 | G | М |
| U | G | ı | В | K | K | N | K | Т | С | S | Т |
| Н | ı | Р | ٧ | Н | E | N | L | ı | G | Α | W |
| J | Q | F | G | D | В | Α | Т | U | М | N | 0 |

Chapter 8 I Computational Thinking and Reasoning

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REFRESH

- Objects are made up of different shapes.
- Square, rectangle, triangle and circle are some different shapes.
- A pattern is a repeating arrangement of numbers, colours and shapes.
- In a word search puzzle, words are hidden in a grid.

BROWSE

A Tick (✓) the objects that are of square shape. Cross-out (*) the objects that are of triangle or circle shape.

1.



2.



3.



4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

edges four row Opposite pattern

1. A square has sides.

2. sides of a rectangle are equal.

Chapter 8 | Computational Thinking and Reasoning

| | 3. | A circle has no | | |
|---|------|---------------------------|-------|--------------------------------|
| | 4. | We can make a | | by repeating the same |
| | | thing again and again. | | |
| | 5. | In a | , the | letters of a word are arranged |
| | | from left to right. | | |
| G | Writ | e True (T) for the corre | ct st | atements and False (F) for |
| | the | incorrect statements. | | |
| | 1. | All the sides of a square | are | of different lengths. |
| | 2. | A triangle has four sides | 5. | |
| | 3. | A circle has no edges. | | |
| | 4. | We can make a pattern | repe | eating the same thing |
| | | again and again. | | |
| | 5. | In a word search, words | are (| given in only one direction. |
| D | Mat | ch the following. | | |
| | 1. | | a. | Square |
| | 2. | | b. | Circle |
| | 3. | | C. | Letters arranged vertically |
| | 4. | | d. | Rectangle |
| | 5. | C A T | e. | Triangle |

Chapter 8 I Computational Thinking and Reasoning



1. How can we make a pattern?

2. What is word search?





ACTIVITY TIME

Complete the patterns.

1.

2.

3.

4.

5. **A B A B**

6.

Chapter 8 | Computational Thinking and Reasoning

Observe the things that you see at your school and at home. Make a list of 10 objects that are of different shapes. Identify their shapes.

| | Objects | Shapes |
|-----|---------|--------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |

FOR THE TEACHER

- Show objects of different shapes to the students.
- Show real-life examples of patterns that can be found in nature.

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LEARNING OBJECTIVES

In this chapter, students will learn about:

- Natural and Man-made things
- Natural Intelligence
- Artificial Intelligence
- Artificial Intelligence Devices



СМ



ᢒ SIGN IN

Look at the pictures given below. Say one difference and one similarity between them.





NATURAL AND MAN-MADE THINGS

Things around us can be grouped into two categories—Natural and Man-made things.

Natural things are the things that occur in nature. These things are not made by humans. Some examples of natural things are the Sun, water, plants, birds and human beings.

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Man-made things are the things created or made by the humans. These are also known as artificial things. Some examples of man-made things are books, pencils, car, toys and houses.

NATURAL INTELLIGENCE

Intelligence is the ability to learn, understand and gather information

from experience and applying it to a new situation. An experience is something that you have already done or seen it. For example, when we eat something hot, we feel the heat and it is difficult to eat. So next time, we will think and check whether the food is too hot or not before eating it.



ARTIFICIAL INTELLIGENCE (AI)

Artificial Intelligence refers to the ability of the machine to think and learn. It is created by humans to make machines perform tasks that are done by humans.

ARTIFICIAL INTELLIGENCE DEVICES

Machines are used to do work easier and faster. Some of these machines are developed with artificial intelligence. They have the ability to learn and perform some of the tasks performed by humans. Let us learn about some of these devices.



СМ

Aibo was created in 1999 in Japan.

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Voice Al

Some of the devices can recognise the human voice. We can speak to them and ask them to perform certain tasks. For example, we call out Siri, Alexa or Google when we want to search for something on our phone without typing the text.

Toy Al

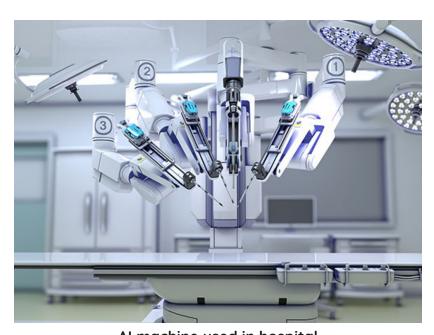
Aibo is an artificial dog with artificial intelligence which can do many things that a dog can do. It can bark and listen to commands and identify different people. It can also play with toys.



Aibo

Al Machines

Artificially Intelligent
machines are used in
factories and hospitals.
These machines are
capable of performing
many tasks just like human
such as lifting, moving and
packing objects.



Al machine used in hospital



CM

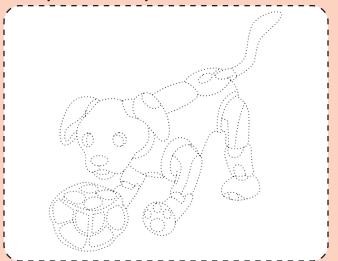
Amazon Echo is a speaker that can be controlled by human voice.

Chapter 9 I Introduction to Artificial Intelligence

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Join the dots to complete the picture and colour it.



REFRESH

- Natural things are things that occur in nature.
- Man-made or artificial things are things made by humans.
- Intelligence is the ability to learn, understand and gather information from experience and apply in a new situation.
- Artificial Intelligence refers to the ability of the machine to think and learn.

BROWSE



Tick (✓) the natural things. Cross out (×) the man-made things.

1.



2.



3.



Chapter 9 I Introduction to Artificial Intelligence

4.



5.



6.



7.



8.



9.



B Fill in the blanks using the words given below.

| A | rtificial | hospitals | Aibo | natural | man-made |
|----|--------------|------------------|------------|---------------|-----------|
| 1. | Water is | а | t | hing. | |
| 2. | Compute | er is a | | thing. | |
| 3. | | Int | elligence | is created by | y humans. |
| 4. | | is | an Al toy. | | |
| 5. | Artificiallų | y Intelligent ma | achines a | re used in | |

- Write True (T) for the correct statements and False (F) for the incorrect statements.
 - 1. Natural things are made by humans.
 - 2. Book is a natural thing.

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- 3. Man-made things are created by humans.
- 4. Printer is a man-made thing.
- 5. Artificial Intelligence refers to the ability of the machine to think and learn.
- Answer the following questions.
 - 1. What are natural things? Give two examples.

2. What are man-made things? Give two examples.

ACTIVITY TIME

Circle the odd one out.











2.









Chapter 9 I Introduction to Artificial Intelligence





























 Look at the devices that are used at your home. Make a list of devices with AI and paste pictures.

FOR THE TEACHER

- Explain natural and artificial things to the students.
- Using pictures and videos, explain about the artificially intelligent machines discussed in the chapter.

Chapter 9 I Introduction to Artificial Intelligence

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PERIODIC ASSESSMENT 4

A. Identify the shapes and write their names.



1. _____



2.



3. _____



4. _____

B. With the help of the clues complete the words in the puzzle.

2 P 3 A

 $Across \rightarrow$

2. It is a repeating arrangement.

4. It is the ability to learn.

5. Toy Al

Down ↓

1. It is a puzzle.

3. Voice Al

5 A

TEST PAPER 2











It is a tool of Paint. 2.







Write True (T) for the correct statements and False (F) for В. the incorrect statements.

- 1. Tux Paint has a variety of drawing tools.
- 2. Brushes tool is used to draw freehand in Paint.
- **3.** A triangle has two sides.
- **4.** A tree is a natural thing.
- 5. Artificial Intelligence refers to the ability of the machine to think and learn.

Answer the following questions. C.

- 1. Name two programs that you can use to draw on a computer.
- 2. Which tool is used to draw a circle in Paint?
- 3. How can we make a pattern?
- 4. Write the names of four tools used in Tux Paint.
- 5. Define man-made things? Give two examples.

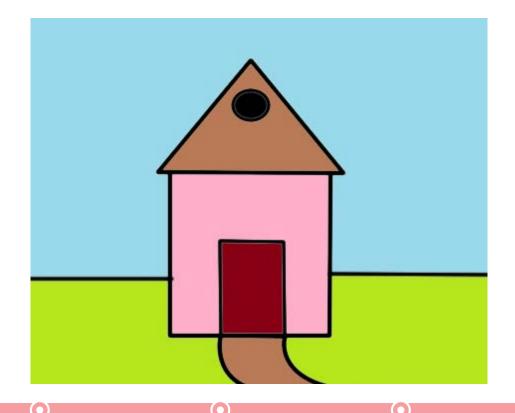


(•)

A. Draw the following in Tux Paint.



B. Draw the following in MS Paint.



Project 93



NATIONAL CYBER OLYMPIAD

(Sample Paper)

LOGICAL REASONING

1. Tick the correct option to complete the pattern.



- **a.** 10
- **b.** 8

c. 7

d. 6

2. Select the odd one out.



b. 9-5

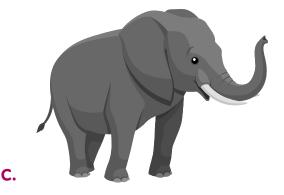


d. >6-2

3. Which of the following is the smallest?









COMPUTERS AND INFORMATION TECHNOLOGY

- The monitor is also known as _ 4.
 - a. Central Processing Unit (CPU)
 - **b.** Visual Display Unit (VDU)
 - c. Random-Access Memory (RAM)
 - **d.** Read-Only Memory (ROM)
- 5. You use a computer mouse for ____
 - a. selecting
- **b.** typing
- c. pushing
- d. hitting
- Which of the following action cannot be done using a computer? 6.
 - a. Play music

- **b.** Play movies
- **c.** Type documents
- d. Eat food
- Which of the following is used to type on a computer? 7.









Which of the following device cannot be connected to a computer? 8.











ACHIEVERS SECTION

9. Which of the following tool is used to fill colour in MS Paint?

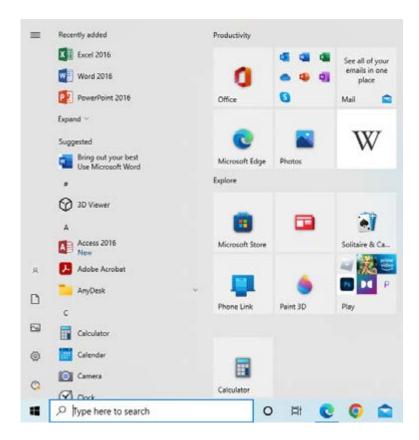






 \mathbf{A}

10. When does the given image appear on the computer screen?



- **a.** When you click on on the keyboard.
- **b.** When you click on caps Lock on the keyboard.
- c. When you click on on the keyboard.
- d. When you right-click on the mouse.

National Cyber Olympiad

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