NCF ALIGNED

Snapshot

A Book on Computer Science

3

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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

Integrated with NCF 2022

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

DIGITAL AID

Student's Assist

Audio and Video eBook

- ◊ Features of a computer
- Student Worksheets

Teacher's Assist

Test Paper Generator

- ◊ Random and Manual Question Paper
- ◊ Download papers in Word format
- Lesson Plans
- Worksheets
- Answer Key

Salient Features

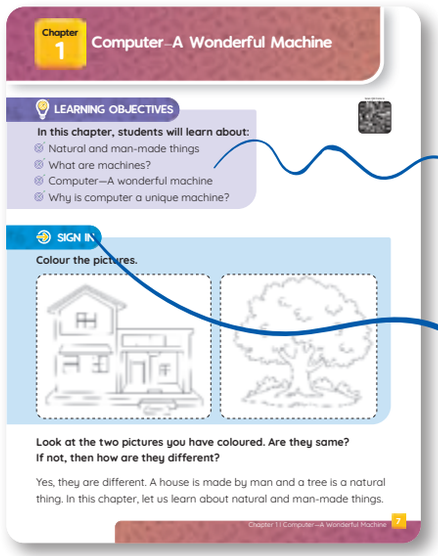
News Feed
(Additional Information)

Learning Objectives
(Lesson Outline)

Activity Time
(Creative Learning)

Sign In
(Link to the Concept)

Refresh
(Summary of the Lesson)


Chapter 1 Computer–A Wonderful Machine

LEARNING OBJECTIVES

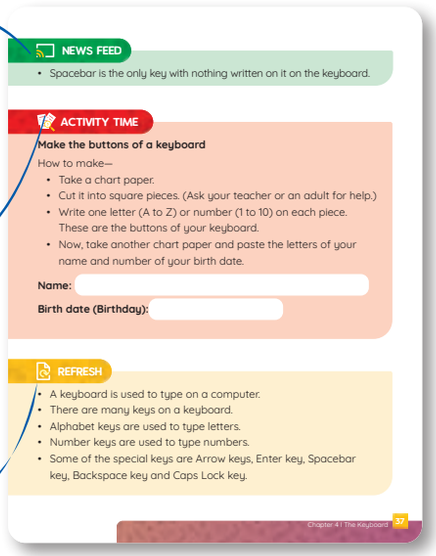
In this chapter, students will learn about:
- Natural and man-made things
- What are machines?
- Computer–A wonderful machine
- Why is computer a unique machine?

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.


NEWS FEED
- Spacebar is the only key with nothing written on it on the keyboard.

ACTIVITY TIME

Make the buttons of a keyboard

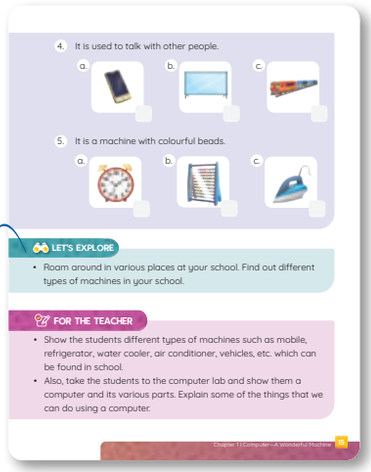
How to make—
- Take a chart paper.
- Cut it into square pieces. (Ask your teacher or an adult for help.)
- Write one letter (A to Z) or number (1 to 10) on each piece. These are the buttons of your keyboard.
- Now, take another chart paper and paste the letters of your name and number of your birth date.

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.

Let's Explore
(Practical Implementation)

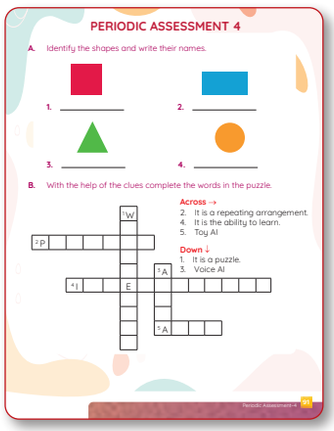

4. It is used to talk with other people.

5. It is a machine with colourful beads.

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.

Periodic Assessments
(Revision of Lessons)


PERIODIC ASSESSMENT 4

A. Identify the shapes and write their names.

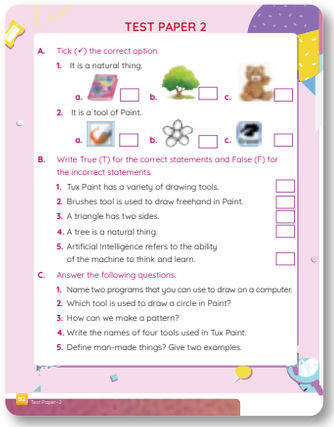
1. 2. 3. 4.

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

Across →
2. It is a repeating arrangement.
4. It is the ability to learn.
5. Toy AI

Down ↓
1. It is a puzzle.
3. Voice AI

Test Papers
(Evaluation of Knowledge)


TEST PAPER 2

A. Tick (✓) the correct option.

1. It is a natural thing.
a. b. c.

2. It is a tool of Paint.
a. b. c.

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

C. Answer the following questions.
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.

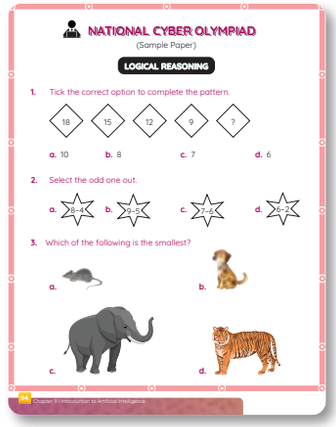
Project
(Application of Knowledge)


PROJECT

A. Draw the following in Tux Paint.

B. Draw the following in MS Paint.

National Cyber Olympiad
(Preparation for Cyber Competition)


NATIONAL CYBER OLYMPIAD
(Sample Paper)

LOGICAL REASONING

1. Tick the correct option to complete the pattern.
18 15 12 9 7
a. 10 b. 8 c. 7 d. 6

2. Select the odd one out.
a. b. c. d.

3. Which of the following is the smallest?
a. b. c. d.

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Chapter 1 A Computer System

LEARNING OBJECTIVES

Scan QR Code to watch a video

In this chapter, students will learn about:

- Features of a computer
- A computer system—how does it work?
- Input
- Process
- Output

SIGN IN

CT

Look at the pictures and write 1, 2, and 3, according to the correct sequence.

Coffee

Mixing coffee and milk

Coffee and milk

A drawing

Paper, coloured pencil and eraser

Making a drawing

Planting

Beans, soil and water

A plant

A computer is a smart machine. We use computer to do various activities such as playing games, watching movies, listening to music, drawing pictures, studying, storing information etc.

A computer is used to do various tasks at different places such as:

- At home, it is used to watch movies and do assignments.
- In school, it is used by both teachers and students.
- In offices, it is used to type documents.
- In shops and restaurants, it is used to keep records and make bills.
- In hospitals, it is used to maintain medical records and examine X-rays.
- At railway stations and airports, it is used to book tickets and give information.

Teacher and students working on computers at school

Nurses using computer in hospital

Booking ticket using computer

A shopkeeper using computer

FEATURES OF A COMPUTER

It has many important features that make it a smart machine.

Speed

A computer works with a higher speed compared to humans. It can do calculations at a very high speed.

Accuracy

A computer does not make mistakes. It gives accurate results.

Diligence

A computer can work for a long duration with the same efficiency.

NEWS FEED

CM

The first fully operational digital computer is **Z1** developed by **Konrad Zuse** in **1936**.

Reliability

A computer gives consistent results for a similar set of data.

Memory

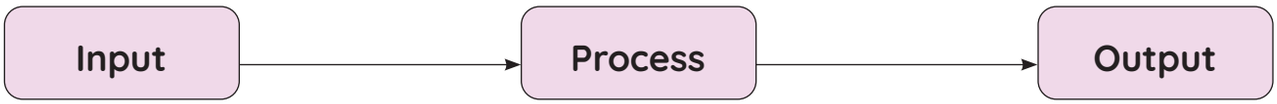
A computer has a very large memory which can store a large amount of information. The information can be accessed quickly when it is required.

Multi-tasking

A computer can do various tasks simultaneously without getting tired.

A COMPUTER SYSTEM: HOW DOES IT WORK?

A computer works on the Input-Process-Output (IPO) cycle.



It means that a computer receives an input, processes the information and then gives the output. For example, calling a friend on a phone:

- Input: dial a number
- Process: the phone processes the command and connects the number
- Output: speaking to your friend

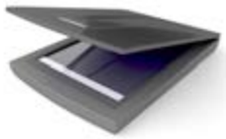
A **computer system** is made up of various devices such as keyboard, mouse, monitor, CPU, printer scanner, etc. These devices perform different works. The input or the instruction is entered through a mouse or keyboard. The CPU processes the command and the output is displayed on the monitor.

INPUT

Input is the data or the instruction that the computer receives. The device that is used to send input to a computer is called an **input device**. Keyboard, mouse, scanner, camera or webcam are some of the input devices.

Keyboard

Mouse



Scanner

Webcam

Some other examples of input devices are:

Joystick

Joystick

It is an input device used for playing games. It is a cursor control device that helps to move the items on the screen.

Light Pen

Light Pen

It is a pen that is used on a special pad. The text or drawing we make on this pad is visible on the monitor.

PROCESS

The input that the computer received is processed with the help of the processor in the CPU. Processing means the conversion of data entered by the user to produce meaningful information.

CPU

The CPU is also called the brain of the computer. It has three parts—**Arithmetic and Logic Unit, Main Storage, and Control Unit.**

Arithmetic and Logic Unit (ALU)

Arithmetic and Logic Unit (ALU) performs various arithmetic calculations such as addition, subtraction, multiplication and division. It also performs logical operations such as comparing (greater than, less than, equal to, etc.), selecting and matching data.

Memory Unit (MU)

The Memory Unit (MU) stores all the information and data given to the computer. It also stores the data required for processing and the final result of the processing.

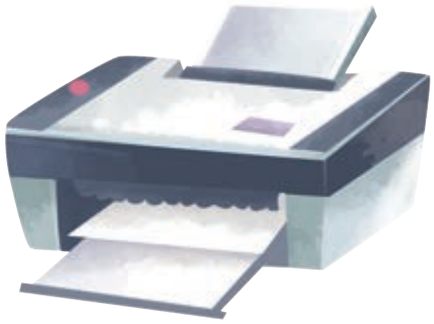
Control Unit (CU)

The Control Unit (CU) coordinates the operation between the function of all the parts of the computer. It controls the transfer of data and instruction from the memory unit to the ALU.

OUTPUT

The output is the final result we get after processing the input. The device on which the output is displayed is called the **output device**. Monitor, printer and speaker are some of the output devices. The output which is displayed on the monitor is called **soft copy**. When this soft copy is printed on paper, it is called the **hard copy**.

Monitor



Printer

Speaker

Some other examples of output devices are:

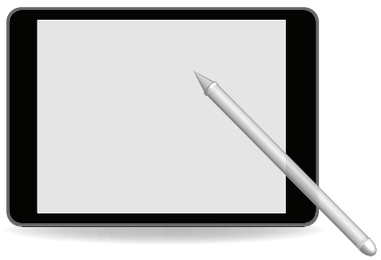
Plotter

It is a printer used to print large-size papers. They are usually used for flex printing.

Plotter

Touch Screen

It is a computer screen that can be operated by touching on it. We can give the input by touching the screen with our fingers without using any pointing device. Some of the devices that have touch screen are tablets, laptops, cell phones and ATMs. It is used as both an input and output device.



Tablet

NEWS FEED

CM

The computer monitor was invented in 1897 by **Karl Ferdinand Braun**.

STORAGE

Storage means to store or retain the data after processing for further use. The data can be stored either temporarily or permanently. The device used to store the data is called a **storage device**. Hard disks, pen drives and CDs are some of the storage devices.

Pen Drive

Hard Disk

CD

ACTIVITY TIME

PL

Find the names of 10 computer devices. The names are hidden horizontally, vertically and diagonally.

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

REFRESH

- A computer is used to do various tasks in different places such as at home, hospitals, in schools, offices, etc.
- A computer can work accurately and with faster speed.
- A computer can store a large amount of information and can do many things simultaneously.
- A computer works on the Input-Process-Output (IPO) cycle.
- The device that is used to send input to a computer is called an input device.
- CPU is a processing device.
- CPU has three parts—Arithmetic and Logic Unit, Main Storage, Control Unit.
- The device on which the output is displayed is called the output device.

BROWSE

A **Choose the correct option.**

1. The information that we send to a computer is _____.

   a. input ☐ b. output ☐ c. process ☐

2. ALU stands for _____.

   a. Arithmetic and Logic Unit ☐

   b. Arithmetic and Log Unit ☐

   c. Analytical and Logic Unit ☐

3. These are the three parts of CPU _____.

   a. ALU, MU, CU ☐ b. AUL, MU, UC ☐ c. ALU, UM, CU ☐

4. The output when printed on a paper is called _____.

a. soft copy ☐ b. hard copy ☐ c. copy ☐

5. Touch screen is _____.

a. input device ☐ b. output device ☐ c. both a and b ☐

B Fill in the blanks with the words given below.

Processing	Plotter	three	Light Pen	process

1. A CPU has _____ parts.
2. IPO stands for Input-_____-Output.
3. _____ is a pen used on a special pad.
4. _____ means the conversion of data entered by the user to produce meaningful information.
5. _____ is a printer used to print large size page.

C Write T for true statements and F for false statements.

1. A computer works slower than a human. ☐
2. A computer gives consistent results for the same set of input. ☐
3. Input is the result we get after processing. ☐

4. Touch screen is only an input device.

5. A storage device is used to store data.

D Answer in one word or two words.

1. It is the part of the CPU that does the arithmetic calculation.

2. It is the part of the CPU that stores all the information.

3. It is the part of the CPU that controls the transfer of data.

4. It is an input device used for playing games.

5. It is the output we see on the monitor.

E Answer the following questions.

1. Write five features of computers.

2. What are the input devices? Give two examples.

3. What are the output devices? Give two examples.

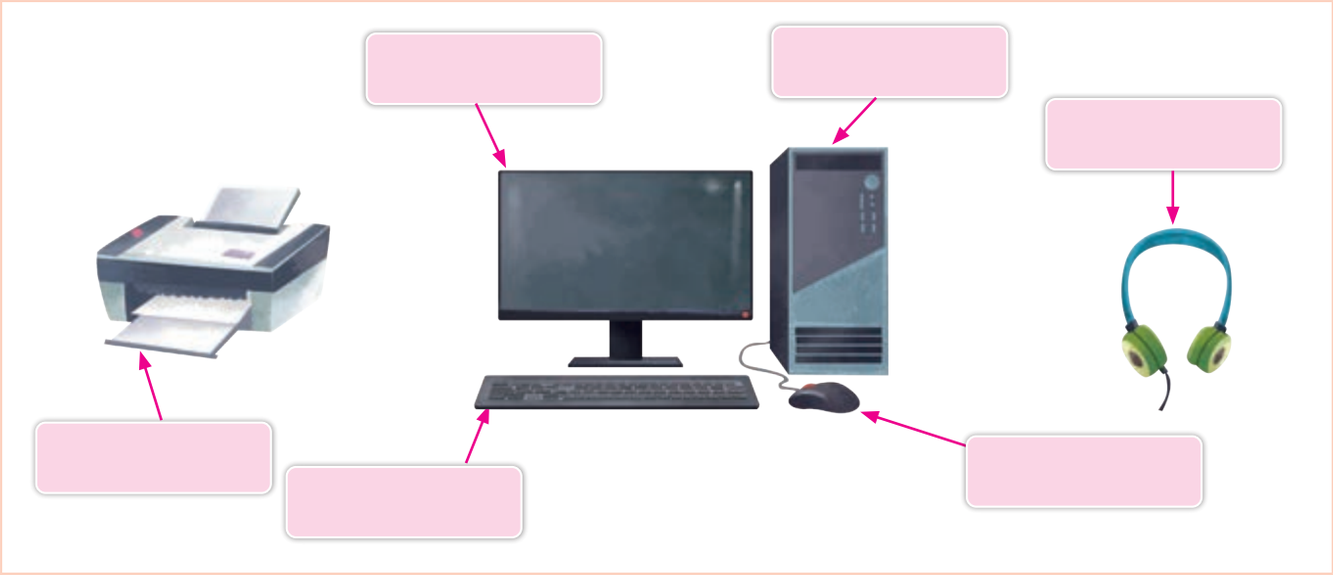
4. Give an example of the Input-Process-Output cycle.

5. What is ALU?

ACTIVITY TIME

CT

Name the parts of the computer. Also, label each computer part as input or output.



LET'S EXPLORE

TE EL

Write a thank you letter to your teacher. Go to the computer lab and type it on a computer. Print it and give it to your teacher.

In this process, identify:

- what is the input?
- what is the process?
- what is the output?
- which is soft copy?
- which is hard copy?

Also, identify the input devices, processing devices and the output devices.

FOR THE TEACHER

- Recapitulate the features and uses of computers.
- Explain the working of a computer.
- Show the students the various types of Input. Output and Storage devices.

Chapter 2

Computer Software

LEARNING OBJECTIVES

Scan QR Code to watch a video

In this chapter, students will learn about:

- Hardware—Input, processing, output and storage devices
- Software—System and Application software

SIGN IN

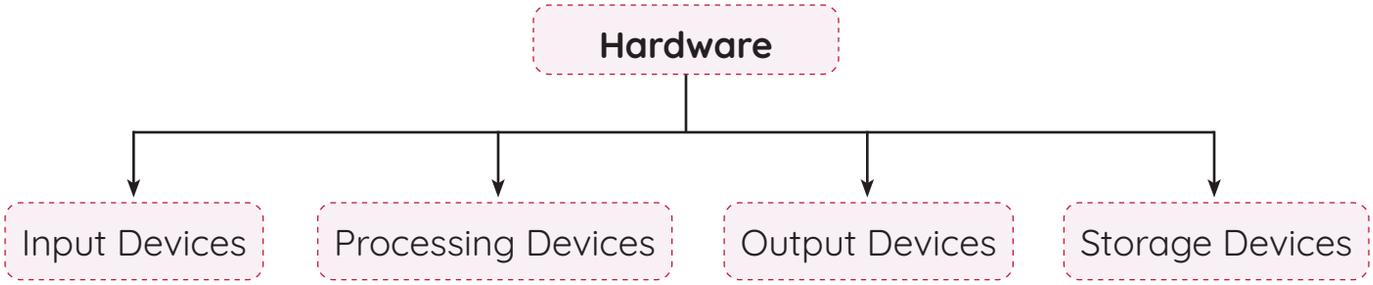
CT

Observe the pictures. Circle the objects that you can touch.

A computer system has different components that work together. These components can be grouped into two categories—Hardware and Software.

HARDWARE

Computer hardware is the part of a computer system that we can touch and feel such as a mouse and keyboard. It refers to the physical parts of a computer system. All the input, processing, output and storage devices are hardware.



Input Devices:

Keyboard | Mouse | Scanner

Processing Device:

CPU box | CPU

Output Devices:

Printer | Speaker | Monitor | Headphone

Storage Devices:

Hard Drive

DVD

Pen Drive

SOFTWARE

A computer needs instruction to work. The instruction that tells a computer what to do is called software or program. It is the part of the computer that cannot be touched or felt.

The input that we give to the computer is processed to get the output through software. Thus, software is a set of instructions given to the computer to do a specific task.

How does software work?

The data or the information that we put through the input devices is then processed in the CPU. The processing of input in the CPU is done by software. After processing, the output is displayed on the monitor.

Let us look at an example to understand the difference between hardware and software.

When we watch a video on a phone, computer or television, there are two things that we need. One is the device, i.e., phone, computer or television which is physically present and we can touch it. Another is the video that will be playing on these devices, which we cannot touch. Here, the devices are the hardware and the video playing in these devices is the software.

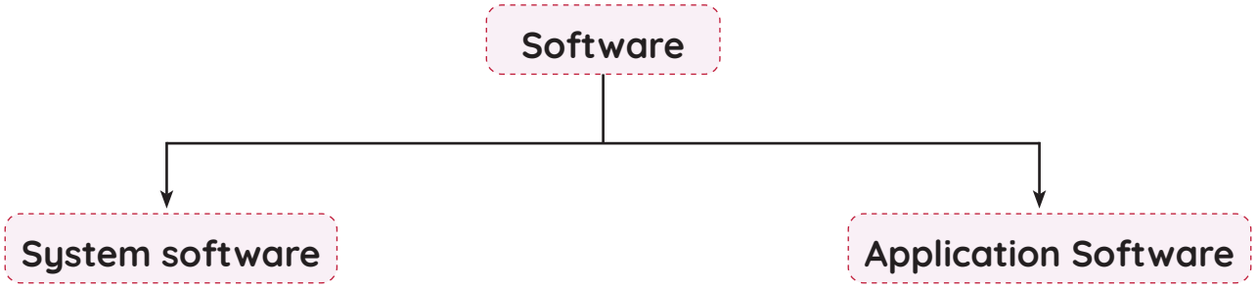
Watching a video on a television

CM

NEWS FEED

Tom Kilburn, a computer scientist, developed the first software in **1948**.

Computer software is of two types— System software and Application Software.



System software

System software is like a manager of a computer system. It controls and manages the overall activities of a computer system. Its main function is to prepare the computer to work and run application software.

System software is an important part of a computer system. A computer system would not work without system software. It makes the computer run. When we start the computer, the system software also starts with it.

An example of system software is an **operating system**. The most popular operating system is **Microsoft Windows**. It is also called Windows and Windows OS. There are different versions of Windows—Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10 and Windows 11. Windows 11 is the latest version which was released in October 2021.

Windows 7

Windows 10

Windows 11

There are other types of operating systems such as Linux and Mac OS.

Linux

Mac OS

NEWS FEED

Computer Usage Company (CUC) is the world's first computer software company, founded in March 1955.

Application Software

The software that helps us to perform a specific task is called the application software. Some of the popular application software are Microsoft Word, Microsoft PowerPoint, Paint and Microsoft Media Player. Each of this application software can perform only the task that it is specifically designed for.

Let us look at the examples below to understand the function of some application software.

Microsoft Word

- Microsoft word or MS Word is an application to create documents. It is used to type letters, essays, articles, etc.
- In this application, we cannot play a movie or a song in it.
- There is different software designed to play movies and music.

MS Word

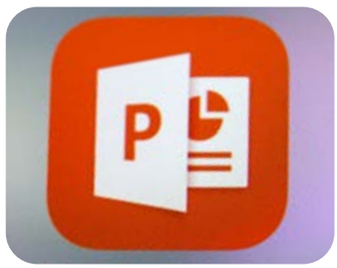
Windows Media Player

- Windows Media Player is one of the software developed to play movies and music.
- When we want to watch a movie on a computer, we have to open this software.

Windows Media Player

Microsoft PowerPoint

- Microsoft PowerPoint or MS PowerPoint is an application to create presentation.



Microsoft PowerPoint

Paint

Paint is an application or program to draw and colour a picture.

Paint

ACTIVITY TIME

CT

Write the software under the correct column.

Microsoft Word Windows 10 Microsoft PowerPoint
Linux Windows Media Player Paint Mac OS

System Software	Application Software

REFRESH

- The components of a computer system can be grouped into two categories—Hardware and Software.
- Hardware are the physical parts that can be touched and felt.
- All the input, processing, output and storage devices are hardware.
- Software is a set of instructions given to the computer to do a specific task.
- Computer software is of two types—System software and Application Software.

BROWSE

A **Choose the correct option.**

1. It is a hardware.
   a. Pen Drive ☐ b. Windows ☐ c. Paint ☐
2. It is a hardware which is an output device.
   a. CPU ☐ b. Mouse ☐ c. Monitor ☐
3. It is an example of system software.
   a. Windows 7 ☐ b. Window 10 ☐ c. Both a and b ☐
4. It is an example of an application software.
   a. MS Word ☐ b. Windows 10 ☐ c. Windows 7 ☐
5. It is an operating system.
   a. Windows ☐ b. MS PowerPoint ☐ c. Windows 10 ☐

B **Fill in the blanks with the words given below.**

application	Software	system	Hardware	two

1. The components of a computer system can be grouped into ☐ categories.
2. ☐ are the physical parts that can be touched and feel.
3. ☐ is a set of instructions given to the computer to do a specific task.
4. The ☐ software controls and manages the overall activities of a computer system.
5. The ☐ software is designed to do specific tasks.

C Write T for true statements and F for false statements.

1. A computer system has only one part.
2. The components of a computer can be grouped into two categories.
3. We cannot touch the hardware.
4. We can touch the software.
5. Application software is designed to do a specific task.

D Answer in one word or two words.

1. A hardware used as an input device.
2. A hardware used as a storage device.
3. A software used to make presentation.
4. A software used to watch movies.
5. A software used to type letter and document.

E Answer the following questions.

1. What is hardware?
2. Write the name of six computer hardware.
3. What is software?
4. How many types of software are there? Write the names.
5. Write the differences between application software and system software.

ACTIVITY TIME

CT CM

Write the name of the software.

1. 

2. 

3. 

4. 

5. 

6. 

LET'S EXPLORE

TE EL

Visit your computer lab and make a list of five software that are there in the computer. Then, with the help of your teacher open any two applications.

Hints:

- Think about the programs used for drawing.
- Think about how you listen to music.

FOR THE TEACHER

- Discuss the different types of hardware—input, processing, output and storage.
- Explain the types of software to the students.
- Show the students different types of application software such as Paint, Windows Media Player, and Microsoft Word.

Chapter 3

Introduction to Windows 10

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- Windows 10
- Features of Windows 10
- Desktop—Icons, Taskbar, Desktop background
- How to change desktop background?
- Task View
- Control Button
- Shut down Windows 10

SIGN IN

CT CR

Match the places with the person who is the coordinator of these places.

1.

2.

3.

4.

a.

Hotel Manager

b.

Principal

c.

Superintendent of Police

d.

Hospital Chief executive officer (CEO)

Operating System is one of the most important software in a computer system. It manages and controls all the functions of a computer and makes it run. A computer system cannot work without it. Some of the popular operating systems are Windows 10, Mac and Linux.

In this chapter, we will learn about Windows 10.

WINDOWS 10

Windows is an operating system developed by Microsoft, which is a leading software company. Windows has many versions. Windows 7, Windows Vista, and Windows XP are some of the old versions of Windows. These older versions of Windows run only on desktop and laptop computers. Windows 10 is a newer version of Windows. It can be used as an operating system for desktops, laptops and mobile devices. It is more user-friendly. It was released on 29 July 2015.

The latest version of Windows is Windows 11, released on 5 October 2021.

NEWS FEED

CM

Microsoft was founded by **Bill Gates** and **Paul Allen** on **April 4, 1975**.

FEATURES OF WINDOWS 10

Windows 10 is an advanced and popular operating system. It has amazing features. These are some of its features:

- Windows 10 has a **Graphic User Interface (GUI)**. This makes it user-friendly as the work can be done with just a simple click of a mouse. GUI is picture-oriented and you do not have to remember all the commands.
- On Windows 10, several programs can be run at the same time.

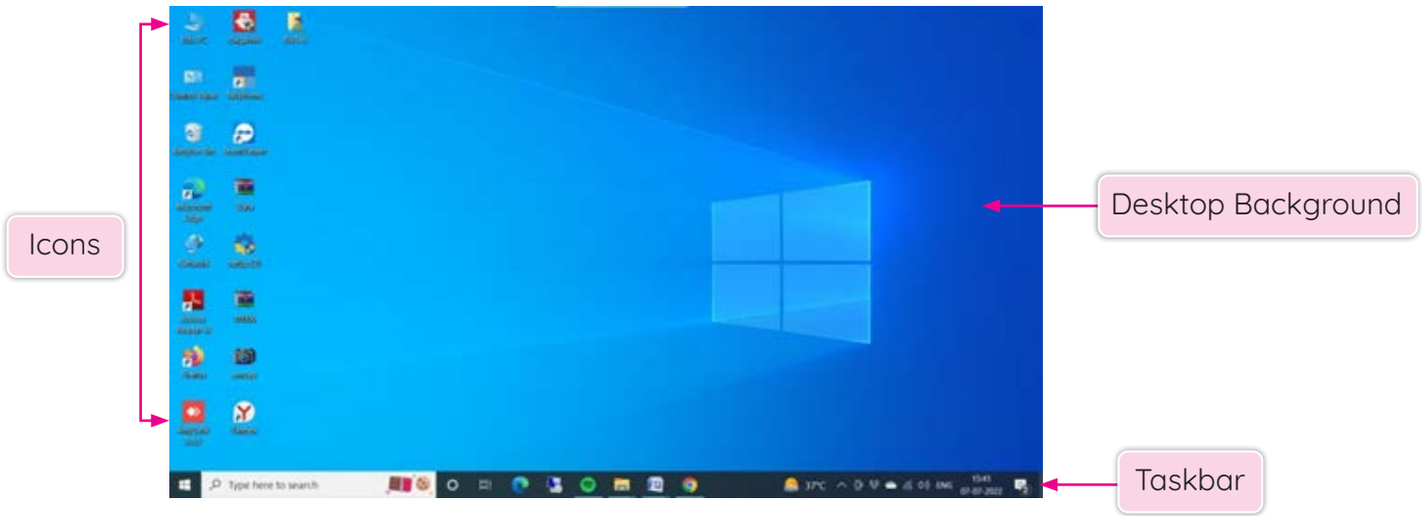
- It has introduced Cortana, a voice-controlled digital assistant. This makes it easier to use our devices as it can be operated with our voice.
- It is easy to use.

Cortana

DESKTOP—ICONS, TASKBAR, DESKTOP BACKGROUND

Windows start automatically when we start a computer. The screen that appears first when Windows start is the desktop.

A desktop is an area on a computer screen where small labelled pictures or symbols are present. It is the main screen of an operating system. A desktop has three components—Icons, Taskbar and Desktop Background.



NEWS FEED

CM

The first version of Windows, **Windows 1.0** was released in November 1985 by Microsoft.

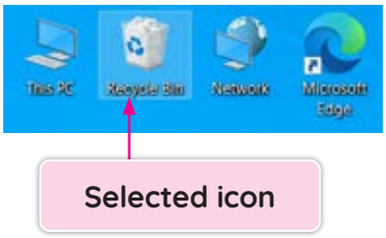
ICONS

An icon is a small picture on the desktop that represents an application or a file. These are some common icons present on a desktop.

To open or access an icon, we have to double-click on it.

Selecting and deselecting an icon

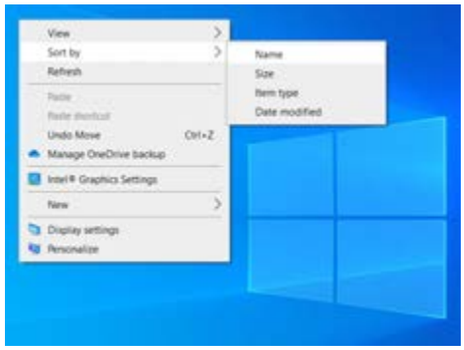
- To select, click on the icon you want to select. It will be highlighted.
- To deselect, click away from the icon. It will be displayed without the highlight.



Sorting the icons

Sorting the icons means arranging the icons in a proper sequence on the desktop.

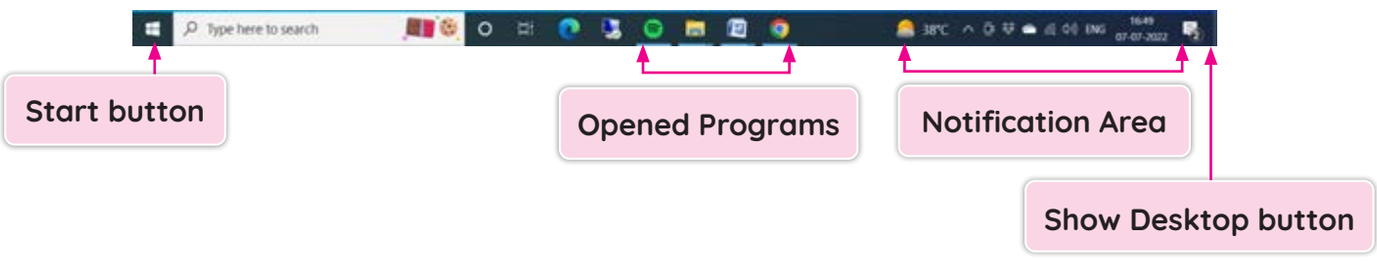
Follow the given steps to sort the icons:



- Right-click on the blank area of the desktop. A shortcut menu will appear. Click on the **Sort by** option.
- Click on the option you want to arrange. For example, if you click on the Name sub-option, the icons will arrange in alphabetical order.

TASKBAR

A taskbar is the long horizontal bar located at the bottom of the desktop. It has various components. It has the Start Button, Opened Programs or applications and Notification Area.



- The **Start button** is on the extreme left. It is used to open the **Start menu**.

- The middle section of the taskbar shows the **opened applications** or programs.
- The right side of the taskbar is the **Notification Area.** It shows the date, time and other icons that provide information about network connection, charge level of the battery, volume, updates, etc.

- The **Show Desktop button** is on the extreme right. Clicking this button minimizes all the opened windows and displays the desktop.

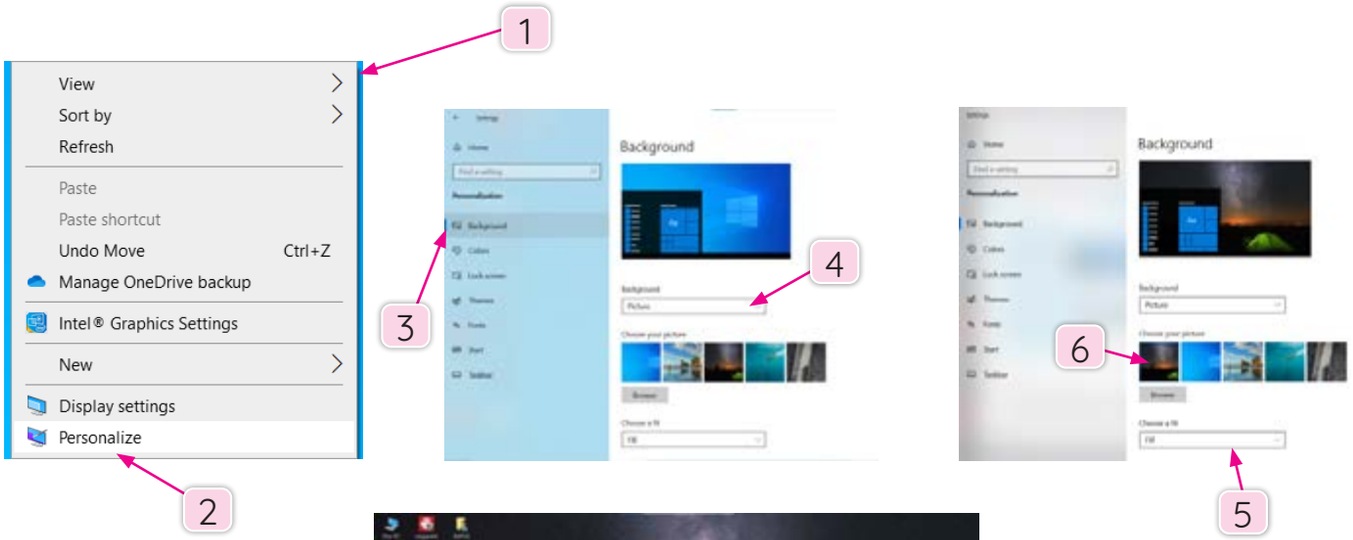
DESKTOP BACKGROUND

Desktop background is the image used as a image that appears at the back of a computer screen. We can change the desktop background according to our choice. Do you want to keep your picture as a desktop background?

How to change the desktop background?

Follow these steps to change the desktop background:

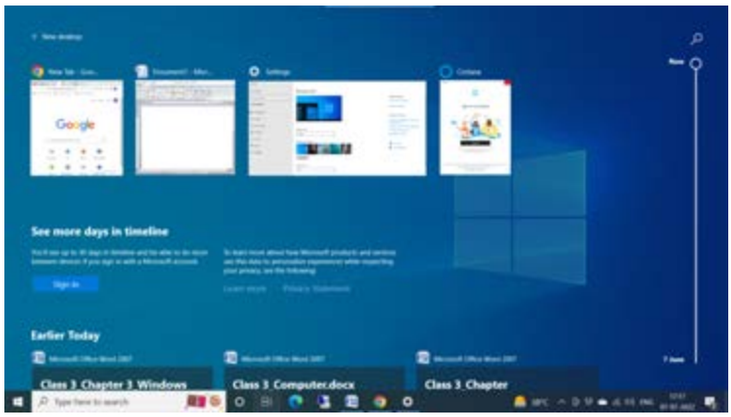
1. Right-click on the blank area of the desktop. A shortcut menu will appear.
2. Click on the **Personalise** option.
3. Click on the **Background** option on the left panel.
4. Choose the option you want from the **Background** section.
5. Choose how you want the picture to fit on the screen from **Choose a fit** section.
6. Choose the picture you want and click on it. This will automatically change the background. A preview of the desktop appears in the window.



Changed Desktop Background

TASK VIEW

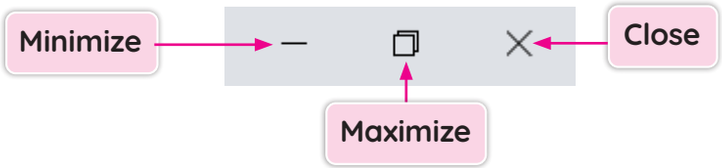
In Task View, we can see all the open windows. It allows us to switch between them. It also helps us to select any window to open quickly. To open Task view, click on the **Task View** button located on the **Taskbar**.



Task View

CONTROL BUTTONS

In the upper-right corner of every open window of an application, there are three control buttons. These buttons are used to minimize, maximize and close the window.



Minimize: When we click on the minimize button, the window will hide in the Taskbar.

Maximize: When we click on the maximize button, the window will be of full-screen size. When the window is in full-screen size, the maximize button changes to the **Restore Down** button. Clicking on this will restore the window to its last size.

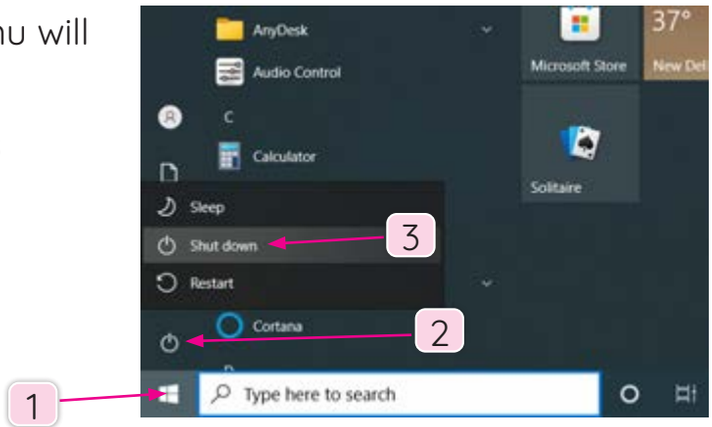
Close: When we click on this button, the application will close.

STEPS TO SHUT DOWN WINDOWS 10

Windows should be shut down properly before switching off the computer.

Follow the steps given below to shut down the window:

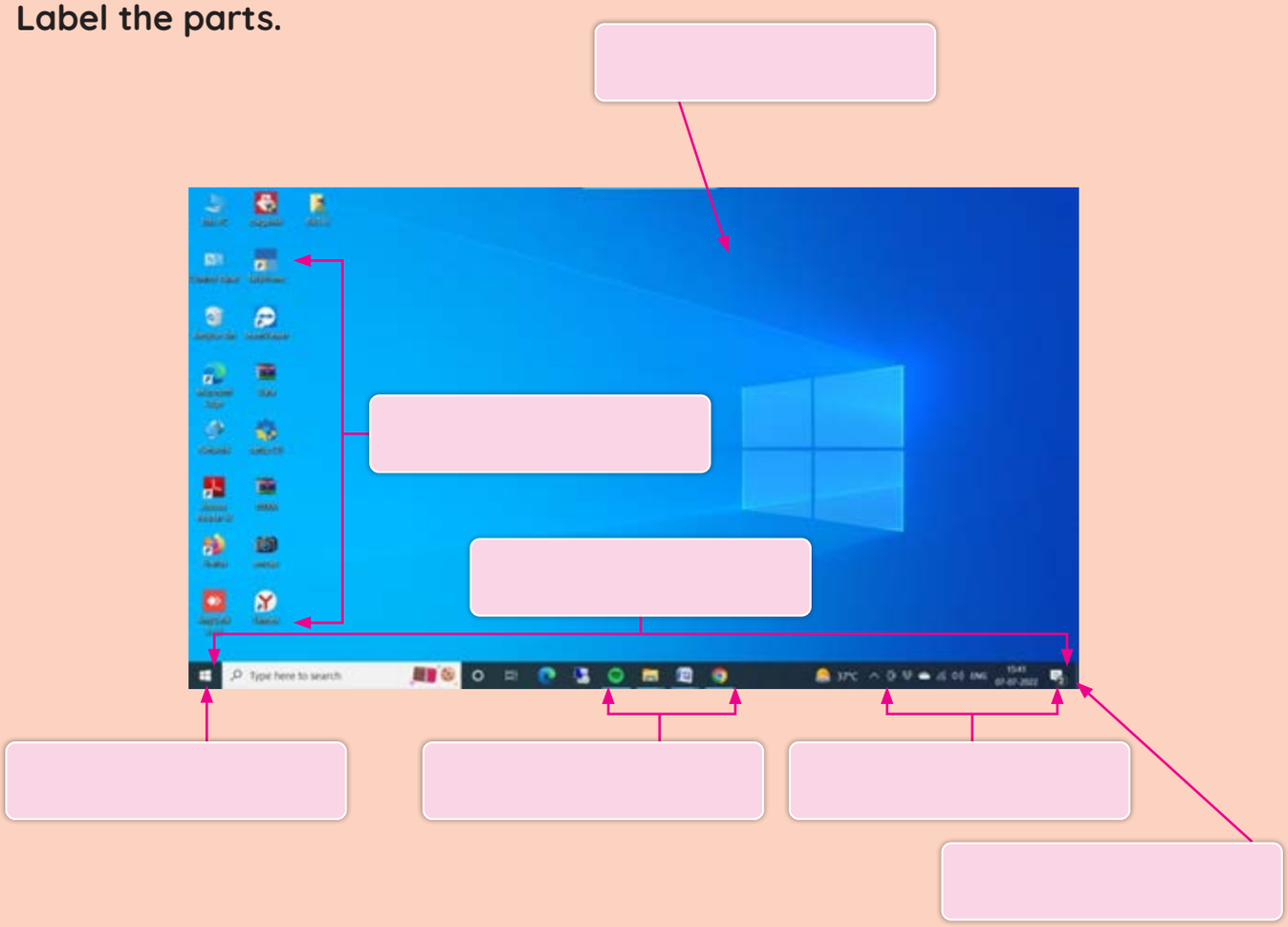
1. Click on **Start** button. The start menu will appear.
2. Click on **Power** button that appears above the **Start** button.
3. Click on **Shut down** button.



ACTIVITY TIME

CT

Label the parts.



REFRESH

- Windows is an operating system developed by Microsoft.
- Windows 10 is an advanced version of Windows, 29 July 2015.
- Windows 10 has a Graphic User Interface (GUI).
- A desktop is an area on a computer screen where small labelled pictures or symbols are present.
- An icon is a small picture on the desktop that represents an application or a file.
- A taskbar is the long horizontal bar located at the bottom of the desktop.
- A desktop background is the image that appears at the back of a computer screen.
- There are three control buttons in every open window—Minimize, Maximize, Close.

BROWSE

A **Choose the correct option.**

1. It manages and controls the operation of a computer.

   a. Operating System ☐ b. Application software ☐ c. Microsoft Word ☐

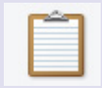
2. It is an Operating System.

   a. Windows ☐ b. Words ☐ c. Paint ☐

3. It is the visual-assistant of Windows 10.

   a. Siri ☐ b. Alexa ☐ c. Cortana ☐

4. It is an icon.

a.  b.  c. 

5. It is a part of Taskbar.

a. Control Buttons b. Notification Area c. Desktop background

B Fill in the blanks with the words given below.

GUI | Desktop | left | Windows 11 | icon

1. _____ is the latest version of Windows.
2. Windows has a _____.
3. _____ is the main screen of the Windows.
4. An _____ is a small picture on the desktop that represents an application or a file.
5. Taskbar is present on the _____ side of Notification area.

C Write T for true statements and F for false statements.

1. Windows 10 is the latest version of Windows.
2. Windows is an operating system.
3. A desktop has three components.

4. A taskbar is the long horizontal bar located at the top of the desktop.

5. There are two control buttons in every open window.

D Answer in one word or two words.

1. The area where the content of our work is displayed.

2. The part of the taskbar that displays the clock.

3. The small pictures on the desktop.

4. It is the image that appears at the back of a computer screen.

5. When we click on this, we can see all the open windows.

E Answer the following questions.

1. What is Windows 10?

2. What is an icon? How do you select it?

3. Where is Taskbar located? Name its components.

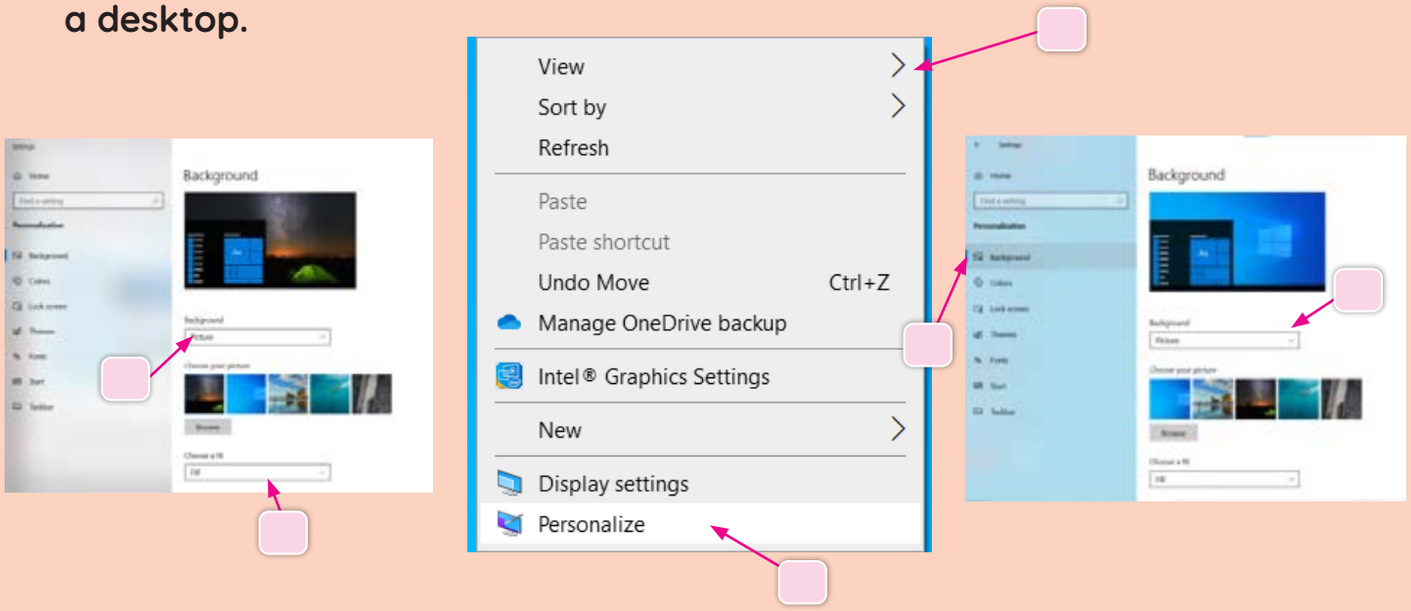
4. What is meant by desktop background?

5. Write the steps to shut down Windows 10 properly.

ACTIVITY TIME

CT

Number the boxes in the correct sequence to change the background of a desktop.



LET'S EXPLORE

TE EL

Go to the computer lab do these activities. (You can take help of your teacher.)

- Sort the icon according to name.
- Choose a picture and set the picture as desktop background.

FOR THE TEACHER

- Explain the features and different versions of Windows.
- Show the what icons are.
- Show them how to change the background of desktop.
- Show them how to shut down Windows.

PERIODIC ASSESSMENT 1

A. Identify the following images and write their names.

1. _____

2. _____

3. _____

4. _____

B. Fill in the blanks using the words given below.

DESKTOP HARDWARE ICON APPLICATION THREE

1. A computer has _____ parts.
2. _____ are the physical parts that can be touched and felt.
3. The _____ software is designed to do specific task.
4. _____ is the main screen of Windows.
5. An _____ is a small picture on the desktop that represents an application or a file.

Chapter 4

Introduction to Microsoft Word 2016

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- MS Word—An Introduction
- Uses of MS Word
- Start MS Word 2016
- Components of MS Word 2016
- Create a new document
- Type text in a document
- Save a document
- Open a saved document
- Print a document
- Exit MS Word

SIGN IN

CR CT

What do we need to write? Name three items that you use to write.

1.
2.
3.

Can we make changes if we make a mistake while writing?

Yes ☐ No ☐

If yes, what do you use to make the correction?

We use computers to type text. What do we need to type text on a computer? We need an application software or a program. Software on which we can create, edit and print documents is called **Word Processor** software. One of the most common word processor software is **Microsoft Word (MS Word)** or simply **Word**. Microsoft word has many versions such as Word 2007, Word 2010, Word 2016, etc. In this chapter, we will learn about Word 2016.

MS WORD—AN INTRODUCTION

MS Word is an application software that we use to type text on a computer. It was developed by Microsoft. The Word allows us to type text on a computer. Word 2016 is one of the advanced versions of Word that has many features which make it easy to use.

USES OF MS WORD

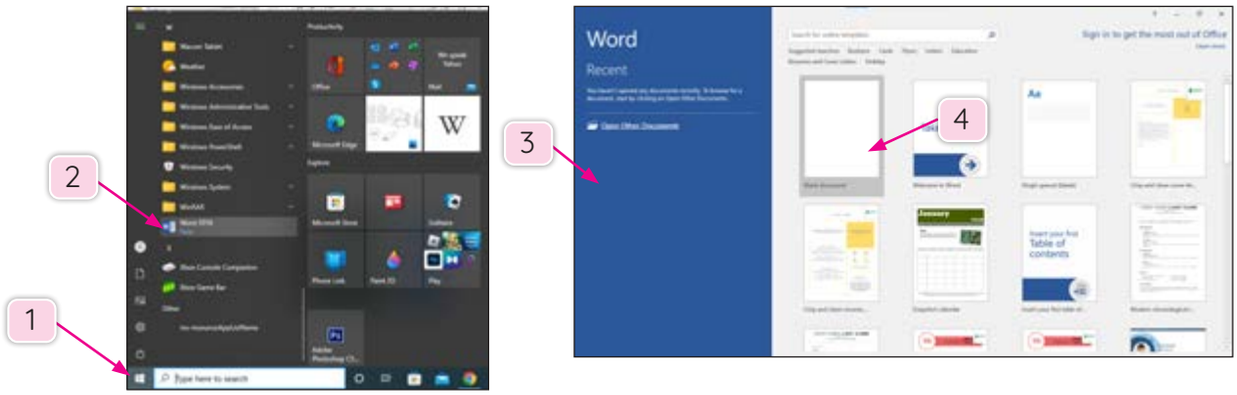
Word is a very useful application and we can do many things using it. Some of the things we can do using Word are:

- To type text and create documents such as notes, letters, assignments, stories, etc.
- To make changes in the document while typing or after the typing.
- To make a document interactive with different features and tools such as colours, styles and effects.
- To detect grammatical and spelling errors.
- To add text, copy and move if required.
- To save the document for future use.
- To print a document or a part of it.

START MS WORD 2016

Follow these steps to start Word 2016:

1. Click on the **Start** button.
2. Scroll through the list of programs and click on **Word**. A new window will appear.
3. Click on **New**.
4. Then click on **Blank document**. The Word window appears.



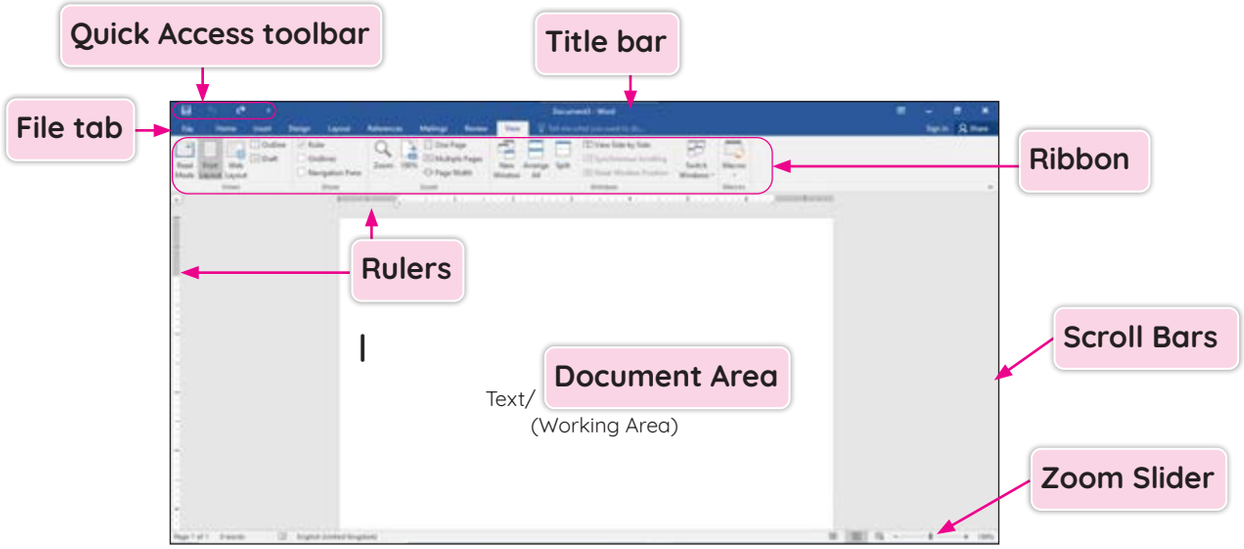
NEWS FEED

CM

Richard Brodie and **Charles Simonyi** developed Microsoft Word in **1983**.

COMPONENTS OF MS WORD 2016

A Word window has many parts. Let us look at these parts in detail.



Document Window

A document window is the area of the screen that displays the content of the document or the work being done.

Title Bar

The title bar displays the name of the document and the program. It is on the top of the window. Every document has a temporary name. This name can be changed when we save the document. On the right corner of the title bar, the three control buttons **Minimize**, **Maximize**/**Restore** and **Close** are displayed.

Quick Access Toolbar

It is present on the left corner of the title bar. It contains buttons such as **Save**, **Undo** and **Redo** which are the most frequently used commands. There is a button, **Customize Quick Access**, that allows us to select other buttons that can appear on the Quick Access Toolbar.

Ribbon

The Ribbon is located below the Title bar. It contains several tabs, groups and commands.

File Tab

The File tab is located in the left corner below the Quick Access Toolbar. It contains different options such as **New**, **Open**, **Save**, **Save As**, **Print**, **Share**, **Close**, etc.

Text or Document Area

The text or document area is the working area. It is the area where text is typed, edited and deleted.

Cursor

A cursor is the vertical blinking line that we see in the text area. It indicates the position of the types of characters.

Ruler

There are two rulers in the Word window—horizontal and vertical. The Horizontal ruler measures the width of the document page. The vertical ruler measures the height of the work area.

Scroll Bars

There are two scroll bars in the Word window—horizontal and vertical. The horizontal scroll bar is used to navigate the text left or right. It is located at the bottom of the window. The vertical scroll bar is used to navigate the text up and down. It is located on the right side of the window.

Status Bar

The status bar displays the page number, number of words and language. It is located at the bottom, below the vertical scroll bar.

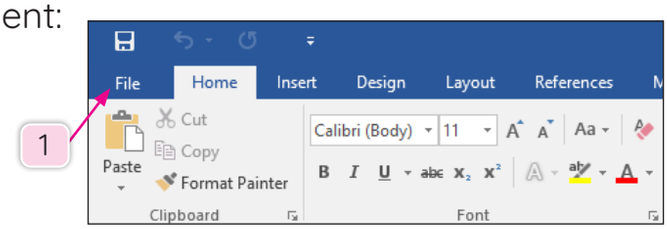
Zoom Slider

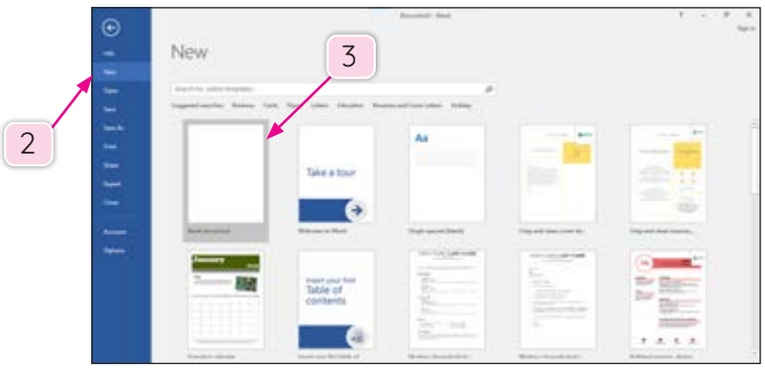
A zoom slider is used to enlarge or reduce the size of the document window. It is located on the right side of the status bar.

CREATE A NEW DOCUMENT

Follow these steps to create a new document:

1. Click on the **File** tab.
2. Click on the **New** option.
3. Click on the **Blank document** option.





QUICK BYTE

You can also open a new document using the shortcut keys **Ctrl + N**.

TYPE TEXT IN A DOCUMENT

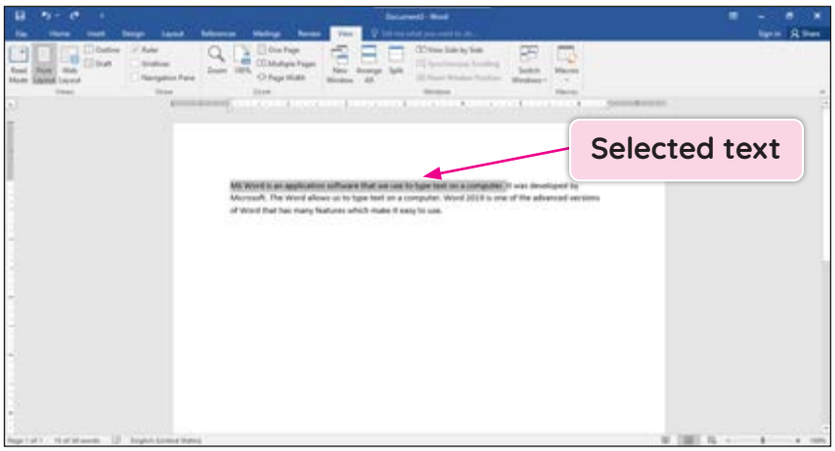
The text that we type will display on the text or document area. We can enter the text by using the keyboard. The cursor that is displayed in the text area shows the position from where we can start typing. As we keep typing, the cursor also shifts automatically. This feature of Word is called **Word Wrap**. While typing the text, we use **Spacebar** to give space between words, **Enter** to start a new paragraph, and **Delete** and **Backspace** to delete text.

SELECT TEXT IN A DOCUMENT

We can make changes to the text already entered such as copying, moving or deleting. To make these changes, first, we need to select the text.

Follow these steps to select text:

1. Place the **cursor** before the text to be selected.
2. Hold the left mouse button and drag it over the text to be selected.
3. Now, release the mouse. The **selected text** will be highlighted.



NEWS FEED

CM

One page in Microsoft Word has 29 lines by default.

COPY TEXT IN A DOCUMENT

We can duplicate a text using copy and paste option. We can copy and paste text from the same document as well as from other documents. One advantage of this feature is that it helps in reducing time and effort in typing the same thing repeatedly.

Follow these steps to copy and paste text:

1. Select the text to be copied.
2. Click on the **Copy** Copy button in the **Clipboard** group on the **Home** tab.
3. Now, place the cursor on the place you want to paste.
4. Click on the **Paste** Paste button in the **Clipboard** group on the **Home** tab.
5. The copied text appears in the new place.

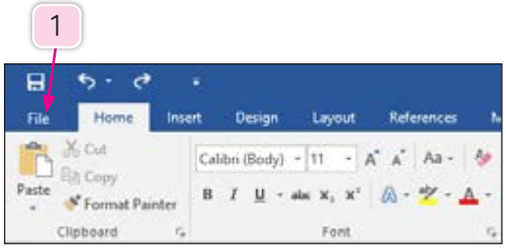
QUICK BYTE

CM

You can also copy text using the short cut **Ctrl + C**.

You can also paste text using the short cut **Ctrl + V**.

SAVE A DOCUMENT



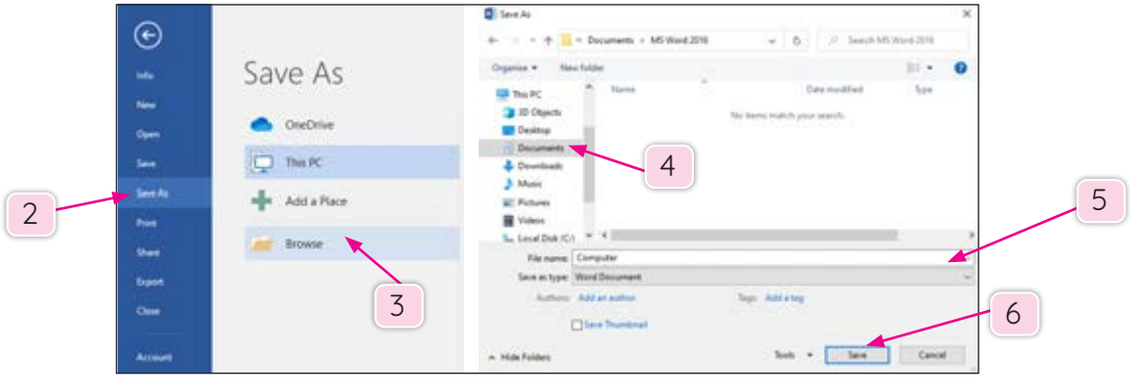
To use a document in future, we need to save it.

Follow these steps to create a new document:

1. Click on the **File** tab.
2. Click on the **Save** or **Save As** option.
3. Select **This PC** option and click on the **Browse** option.
4. Select the location, say in the example it is **Documents**.
5. Type the name for the file in the File name box.
6. Click on the **Save** button.

   Or

   Click on the Save button to save a document.



QUICK BYTE

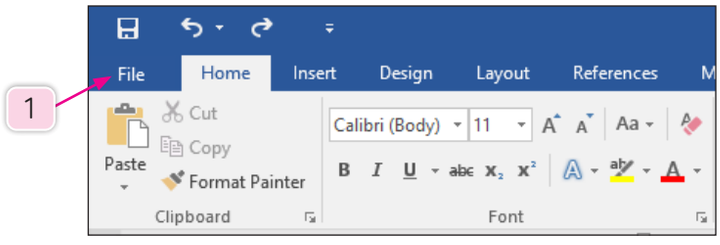
CM

You can also save a document using the short cut **Ctrl + S**.

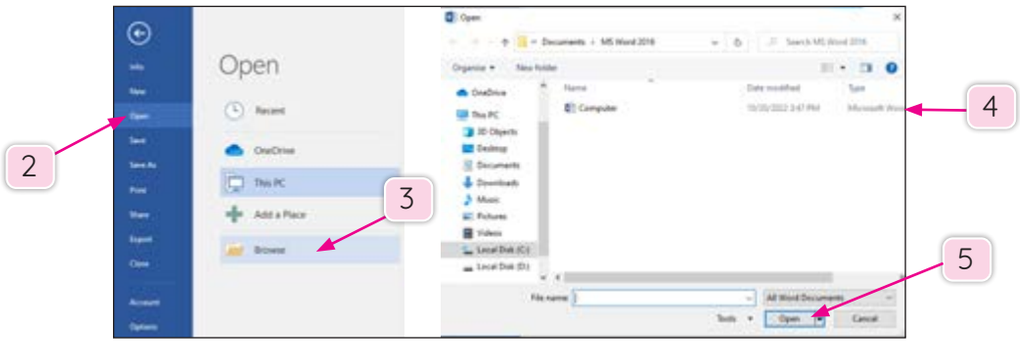
OPEN A SAVED DOCUMENT

We can open a saved document if we want to make any changes or just read it.

Follow these steps to open a save document.



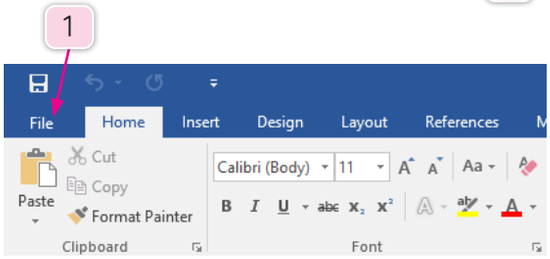
1. Click on the **File** tab.
2. Select the **Open** option
3. Select **This PC** option or the location where the file is saved.
4. Select the file to be opened
5. Click on the **Open** button.

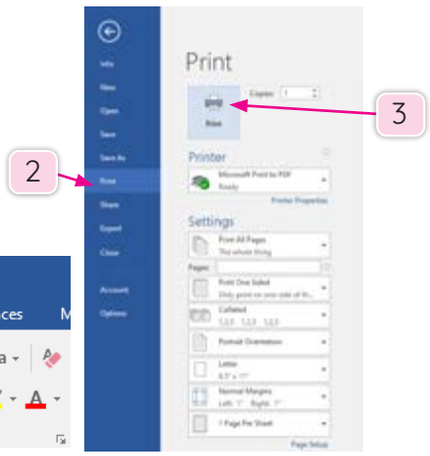


PRINT A DOCUMENT

Follow these steps to take a printout of the document you have created:

1. Click on the **File** tab.
2. Click on the **Print** option.
3. Click on the **Print** button.





QUICK BYTE

CM

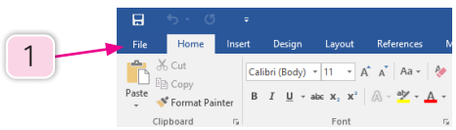
You can also print a document using the short cut **Ctrl + P**.

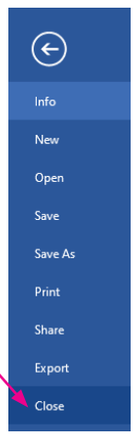
CLOSE A DOCUMENT

Follow these steps to close a document after the work is finished:

1. Click on the **File** tab.
2. Click on the **Close** option.

   Or
3. Click on the **Close** button on the right corner of the **Title bar** to close the document.

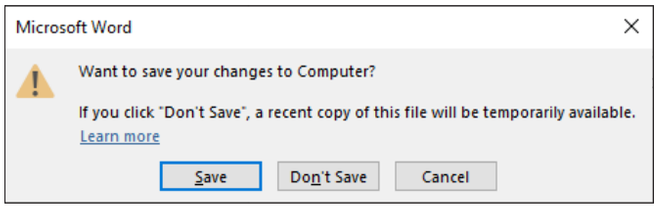




We have to save a document before closing to use it in future. If the document is not saved or the changes are not saved, then Word will prompt to save it before closing.

A dialog box with three options will appear:

- Click on **Save** to save the file or save the changes.
- Click on **Don't Save** to close the document without saving any changes.
- Click on **Cancel** if you do not want to close the document.



ACTIVITY TIME

CT CR

Match the functions with the shortcut commands.

1.	To open a new document	a.	Ctrl + O
2.	To save a document	b.	Ctrl + C
3.	To print a document	c.	Ctrl + N
4.	To copy text	d.	Ctrl + S
5.	To open a saved document	e.	Ctrl + P

REFRESH

- A software on which we can create, edit and print documents is called Word Processor software.
- MS Word is an application software that we use to type text on a computer.
- MS Word is used to create, edit and print a text document.
- The components of MS Word are Application Window, Document Window, Title bar, Quick Access Toolbar, Ribbon, File tab, Text or Document area, Cursor, Ruler, Scroll bars, Status bar and Zoom Slider.
- Document window displays the text that is entered.
- A new document can be opened by clicking the New option of the File tab.

- A document can be saved by clicking the Save option of the File tab.
- A saved document can be opened by clicking the Open of the File tab.
- A document can be closed by clicking the Close option of the File tab.

BROWSE

A **Choose the correct option.**

1. It is a program that helps us to create documents such as letters.

   a. Word Processor ☐ b. Operating system ☐ c. Paint ☐

2. It is an application software.

   a. MS Windows 10 ☐ b. MS Windows 7 ☐

   c. MS Word ☐

3. It is the area where the content of the document is displayed.

   a. Title Bar ☐ b. Document window ☐ c. Ribbon ☐

4. It displays the page number and number of words in the document.

   a. Scroll bars ☐ b. Zoom slider ☐ c. Status bar ☐

5. It is used to enlarge or reduce the size of the document window.

   a. Status bar ☐ b. Ruler ☐ c. Zoom slider ☐

B **Fill in the blanks with the words given below.**

Close button	Print	create	Save	two

1. MS Word is used to _____ documents.

2. There are _____ scroll bars in MS Word.

3. Click on _____ option to save a document..

4. Click on _____ option to print a document.

5. Click on _____ to close a document.

C Write T for true statements and F for false statements.

1. Title bar is located at the bottom of the window. _____

2. Quick Access Toolbar contains the three control buttons. _____

3. The Spacebar is used to give space between words. _____

4. To copy text means to make a duplicate copy of the text. _____

5. We cannot make changes in a saved word file. _____

D Answer in one word or two words.

1. It contains several tabs, groups and commands. _____

2. It displays the name of the document and the program. _____

3. It measures the height and width of the document page. _____

4. It indicates the position of the text or characters. _____

5. It is the area where text is typed. _____

E Answer the following questions.

1. Write five uses of MS Word.
2. Name the six components of the MS Word window.
3. What is document window?
4. How would you create a new document?
5. Write the steps to save a document.

ACTIVITY TIME

CT CM

In your notebooks, write two sentences about MS Word.

LET'S EXPLORE

TE EL CM

In the computer lab, do this task with the help of your teacher—Create a Word document.

- Open Word.
- Type 10 sentences about yourself.
- Save the document and name it.

FOR THE TEACHER

- Explain the uses of MS Word.
- Show the students how to open MS Word program.
- Explain the different components of Word window.
- Show them how to minimize, maximize and close a document.
- Show them the essential shortcuts to operate.

Chapter 5

Introduction to Internet

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- What is Internet?
- Uses of the Internet
- Terms related to the Internet
- Opening a web page
- Advantages and disadvantages of the Internet
- Online safety

SIGN IN

CT CM

What do you use the computer for? Tick the pictures.






In the previous classes, we have learnt that we use computers to draw, write, watch movies, listen to music, play games, etc. We can do much more on the computer with the help of the Internet.

We can play online games, send messages instantly, and watch live coverage of an event that is happening somewhere far. We can even talk to family members and friends online even if they live in different places. Let us learn about the Internet.

INTERNET

We see many things around us that are interconnected to form a network such as a network of roads, electricity wires, etc. A **computer network** is formed when two or more computers are connected to communicate, share resources and exchange files.

Internet is a worldwide network that connects millions of computers. The networks are formed either through connected cable, telephone wires or wireless media. With the help of the Internet, millions of computers around the world are connected. Through the Internet, we can communicate and share all kinds of information. The Internet is also known as the 'net'.

USES OF INTERNET

The Internet has become an important part of our lives. Using the Internet, we can do our work comfortably. The Internet is used for education, entertainment, online shopping, banking, searching for information etc. When an activity takes place over the Internet, it is said to be online.

These are some of the uses of the Internet:

Communication

One of the important benefits of the Internet is communication. It helps us stay connected with our friends and families in different places all over the world. Through the Internet, we can also connect with new people. There are many ways through which we communicate with each other.

Sharing Information

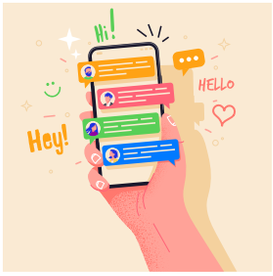
The Internet is an important tool to share and get information. On the Internet, we can search for information on any topic. It provides us with the facility to keep us updated on various topics such as education, sports, music, politics, etc.

The Internet is one of the effective tools for teaching. Both teachers and students can use the Internet as a source to gather information and gain knowledge on various topics.

Email

Email means electronic mail. It is the electronic equivalent of letters. We exchange messages from one computer or electronic device to another computer through the Internet. It allows us to exchange messages instantly. Through email, we can share documents, pictures and videos.

Chatting



Chatting is personal communication through the Internet. When we chat, we exchange text messages instantly. There are many apps through which we chat. WhatsApp is an example of apps through which we chat.

Social Networking

Social networking or social media is another way through which we communicate and stay connected with other people. We can also make new friends through it. We also get news and updates on current events through social media.

Entertainment

Through the Internet, we get access to many entertainment sites. We can watch movies, television shows and listen to music on any Internet enabled device. We can also watch

a live event even if we are not present in the place. We can also play online video games.

Online shopping

These days we do not have to go to market to buy things. Through Internet, we can buy various items such as clothes, toys, books, food, etc. without going to the stores or market. This is called online shopping. This also allows us to buy things from different places all over the world.

Online Banking

Online banking means carrying out all the banking tasks through the Internet on our computer or phone. It allows us to do tasks such as transferring money and paying bills without visiting the bank.

Video Conference

Video conferencing is a live video-based meeting. It allows people in different locations to communicate face-to-face through the Internet.

DEVICES REQUIRED TO CONNECT TO THE INTERNET

- A modem
- A telephone or a cable line
- A computer
- A company providing internet connection

Modem

Telephone

Computer

TERMS RELATED TO THE INTERNET

Website

A website is a collection of webpages and related content that provide information. It has many pages like a book. Look at the given picture.

This is the website of a school. This website has various information about the school. When we click on a topic we want to know about, say admission, the page related to it will open up.

Wikipedia is one of the most visited websites in the world.

Clicking on these topics will open pages related to them.

A website

Wikipedia website

Webpage

A webpage is part of a website. It is a digital page that contains information about a single topic. The contents of a webpage may consist of text, images, audio, video or links to other pages.

Homepage

A homepage is the main page of a website. It contains links to other pages.

Web Browser

We need a web browser to view a website or a webpage. A web browser is an application software that allows us to open websites. Google Chrome, Internet Explorer, Microsoft Edge, Mozilla Firefox, Safari and Opera are some of the web browsers.

Web browser

NEWS FEED

CM

In June 2022, google.com was the most popular website in the world.

VISITING A WEBSITE

To visit a website means to open a website and go through its contents. To open a website, we need to enter its URL in the address bar located on top of every web browser. A URL of a website is the address of the website. A URL looks like this:

https://www.google.com/

WWW means World Wide Web which is the largest collection of information on the Internet.

NEWS FEED

CM

World Wide Web was invented by a computer scientist named Tim Burners-Lee in 1989.

ADVANTAGES AND DISADVANTAGES OF THE INTERNET

We have learnt that Internet has many uses. It has made our life easy and comfortable. It has influenced our lives in many ways. The Internet can also cause problems if it is misused. Let us look at the advantages and disadvantages of the Internet.

Advantages

- **Information:** The Internet has information on every subject. This is one of the most significant advantages of the Internet.
- **Communication:** Communication has become faster and easier because of the Internet. We can talk to people who are in different places instantly. The Internet offers different communication methods such as email, voice message, video chat or video conferencing, etc.
- **Accessibility:** The Internet is accessible all the time if you have a computer that is connected to the Internet. It never closes. So, we can access the information on the Internet whenever we need it.

Disadvantages

A child being stopped from using Internet

- **Addictive:** The Internet can be addictive. We spend so much time on the Internet. For some people, it can become an addiction. Therefore, we should try to reduce our time spent on the Internet.
- **Lack of Social skills:** These days people have reduced interaction with other people as they spend most of their time alone using the Internet. This has made us lose our communication and social skills.
- **Misuse:** The information that we find on the Internet can be misused. Instead of using it for doing a useful thing, it can be used as a distraction. Children spend so much time on entertainment such as playing games and watching videos which can affect their studies.
- **Reliability:** All the information available on the Internet is not reliable or genuine. It could be fake. We should always cross-check and find a reliable and trusted source.

ONLINE SAFETY

Online safety refers to taking precautions to stay safe online. Some of the precautions that we can take to be safe online are:

- Do not share personal information such as full name, home address, birth date, school name or phone number.
- Should be careful while meeting online friends. We should not agree to meet an online friend alone.
- Set up a strong password. It is important to have a strong password and should not forget to log out of your account if using a public computer such as in a library.
- Do not share your password with anyone.

ACTIVITY TIME

CT CR

Match the picture with the correct activity.

1. 

2. 

3. 

4. 

5. 

a. Online shopping

b. Online banking

c. Chatting

d. Video conferencing

e. Social networking

REFRESH

- Internet is a worldwide network that connects millions of computers.
- The Internet is used for education, entertainment, online shopping, banking, searching for information, etc.
- A modem, telephone or cable line, a computer and a company providing Internet connections are required to connect to the Internet.
- A website is a collection of webpages and related content.
- A webpage is a digital page that contains information about a single topic.
- A homepage is the main page of a website.
- A web browser is application software that allows us to open websites.

BROWSE

A **Choose the correct option.**

1. WWW stands for _____.

   a. World Wide Web ☐ b. Wide World Web ☐ c. Web World Wide ☐

2. Video conferencing is a live _____ meeting.

   a. video-based ☐ b. audio-based ☐ c. picture-based ☐

3. These are required to connect to the Internet.

   a. A modem and a computer ☐ b. telephone or cable line ☐

   c. both a and b ☐

4. A website has _____ pages.

   a. one ☐ b. two ☐ c. many ☐

5. It is a web browser.

   a. Google Chrome ☐ b. Siri ☐ c. Alexa ☐

B **Fill in the blanks with the words given below.**

website Online Chatting electronic webpage

1. Email means _____ mail.

2. _____ is personal communication through the Internet.

3. A _____ consists of text, images, audio, video or links to other pages.

4. A _____ contains links to other pages.

5. _____ safety refers to taking precautions to stay safe online.

C Write T for true statements and F for false statements.

1. Communication has become slower and more difficult because of the Internet. _____

2. A website has a single page. _____

3. A website is a part of a webpage. _____

4. Homepage is the first page of a website. _____

5. All the information available on the Internet is not reliable or genuine. _____

D Answer the following questions in one word or two words.

1. It is also known as the net. _____

2. It contains many digital pages. _____

3. It is a program to access websites. _____

4. It is the first page of any website. _____

5. It is like an address of a website. _____

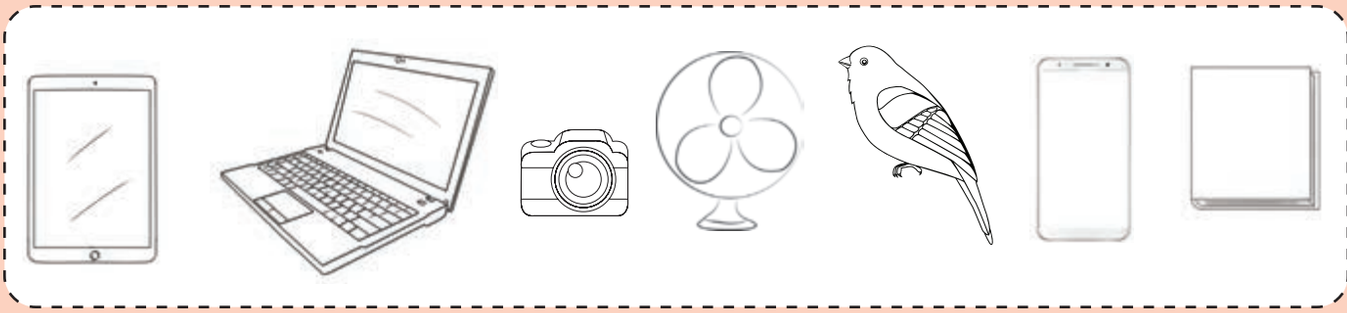
E Answer the following questions.

1. Write six uses of Internet.
2. What is the difference between a website and a webpage?
3. Write two advantages and two disadvantages of Internet.
4. What is online safety? How can you stay safe online? Write two points.

ACTIVITY TIME

CT CR

Look at the pictures. Which of these are digital devices? Colour them.



LET'S EXPLORE

TE EL

In in the computer lab, do these activities:

- Who is your favourite sport person? Collect information about the person using the Internet.
- Note the webpages that you visit.
- Ask your teacher to help you to open your school website. Then click and open the various webpages that are there on your school website.

FOR THE TEACHER

- Explain what is Internet and the uses in details.
- Tell the students about the disadvantages and advantages of the Internet.
- Explain to them how to be safe on the Internet.

PERIODIC ASSESSMENT 2

A. Identify the following web browsers and write their names.

1. _____

2. _____

3. _____

4. _____

B. Fill in the blanks using the words given below.

CHATTING SAVE TWO ELECTRONIC CLOSE BUTTON

1. Click on _____ option to save a document in MS Word.
2. There are _____ scroll bars in MS Word.
3. Email means _____ mail.
4. Click on _____ to close a document in MS Word.
5. _____ is personal communication through the Internet.

TEST PAPER 1

A. Choose the correct option.

1. IPO stands for _____.

   a. Input-Process-Output ☐ b. Install-Process-Output ☐ c. Insert-Process-Output ☐

2. We cannot touch a _____.

   a. hardware ☐ b. software ☐ c. paper ☐

3. Windows is an _____ system.

   a. processing ☐ b. executing ☐ c. operating ☐

4. _____ is the area where text is typed in MS Word.

   a. Drawing area ☐ b. Document area ☐ c. Title bar ☐

5. _____ is like an address of a website.

   a. Homepage ☐ b. Webpage ☐ c. URL ☐

B. Write (T) for true statement and (F) for false statement.

1. Soft copy is an input when printed on paper. ☐
2. Computer components can be grouped into two categories. ☐
3. Desktop background is a part of the taskbar. ☐
4. MS Word is a system software. ☐
5. WWW stands for Web World Wide. ☐

C. Answer the following questions.

1. What is application software? Explain with the help of examples.
2. Define the parts of the CPU.
3. Why do we select text in MS Word? And how?
4. Name any four devices required to connect to the Internet.
5. What is a desktop? Name the main components of a desktop.

Chapter 6

More Features of Paint

Scan QR Code to watch a video

LEARNING OBJECTIVES

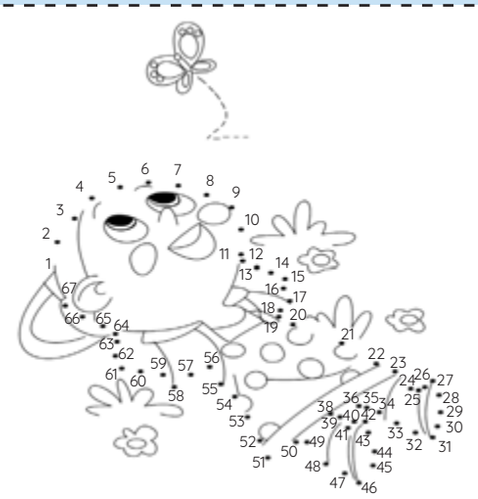
In this chapter, students will learn about:

- Paint window
- Select a picture
- Resize a picture
- Skew a picture
- Flip a picture
- Rotate a picture
- Zoom a picture
- Crop a picture
- Copy and paste a picture
- Save a picture
- Open an existing picture

SIGN IN

CR

Connect the dots to complete the picture and colour it.

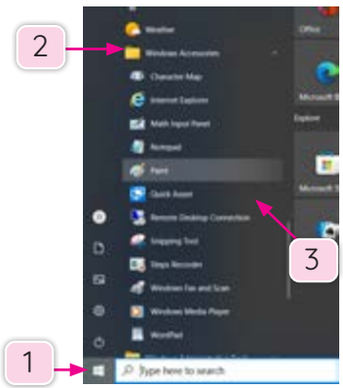


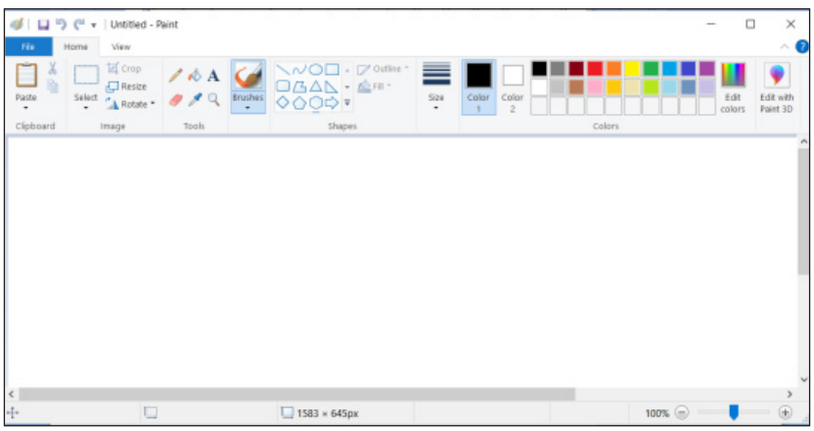
We have learnt in the previous classes how to draw and colour pictures using Paint. Paint also has other features which allow us to make changes to an existing picture. Let us learn about these features in this chapter.

PAINT WINDOW

Follow these steps to open Paint window:

1. Click on the **Start** button.
2. Scroll the list of programs and click on **Window Accessories**. A new window will appear.
3. Click on **Paint**.The Paint window appears.





Paint window

A Paint window has many components such as Tools, Shapes, Colors, etc. These components help us to draw and colour beautiful pictures. Let us recall some of these components you have learnt in the previous class.

TOOLS

Pencil Tool : It is used for freehand drawing.

Fill with color Tool : It is used to fill colours.

Text Tool : It is used to enter text.

Eraser Tool : It is used to remove or erase text or shapes.

SHAPES

Line Shape : It is used to draw lines.

Curve Shape : It is used to draw curved lines.

Oval Shape : It is used to draw ovals or circles.

Rectangle Shape : It is used to draw rectangles or squares.

Rounded Rectangle Shape : It is used to draw rounded rectangles or squares.

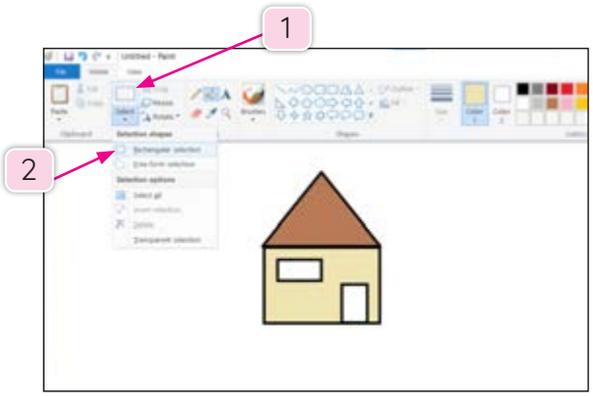
Polygon Shape : It is used to draw closed figures.

MODIFY A PICTURE

After a picture is drawn, we can modify the picture. Paint has many features that allow us to modify a picture, i.e., copy, delete or move whole or part of the picture. We can also resize, rotate, crop or select a picture or a part of it. These options are available in **Clipboard** and **Image** group on the **Home** tab. Let us learn more of these features of Paint in detail.

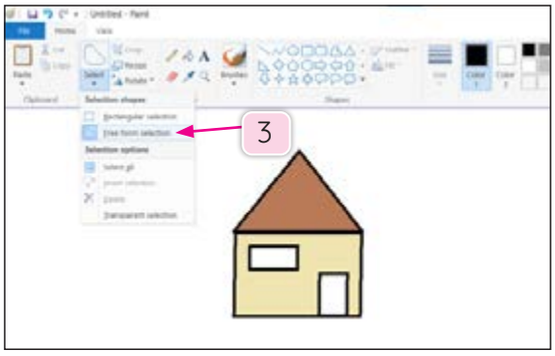
SELECT A PICTURE

We can select and change any part of a picture. The **Select** tool present in the **Image** group on the **Home** tab is used to select any part of the picture.



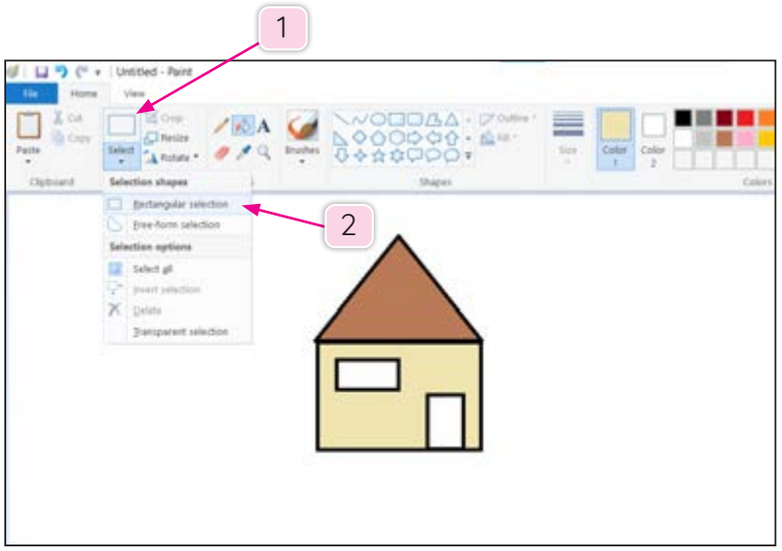
Follow these steps to a part of a picture:

1. Click on the **Select** tool. It will provide two types of selection tools.
2. Click on the **Rectangular Selection** tool to select the picture in a rectangular shape. To select a picture, place the pointer just outside the area to be selected. Then, click and drag the pointer over the area to be selected. Release the mouse when the area to be selected is complete.
3. Click on the **Free-form selection** tool to select a part of a picture in an irregular shape.



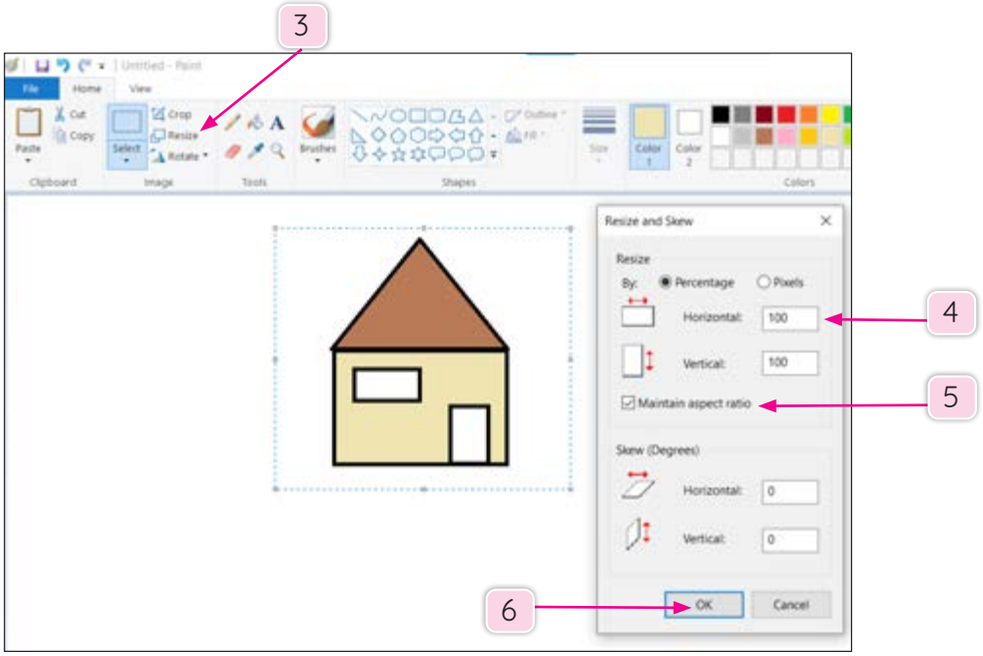
RESIZE A PICTURE

To resize a picture means to change the size of the picture. The size can be increased or decreased. A picture can be resized by using Resize command.



Follow these steps to resize a picture:

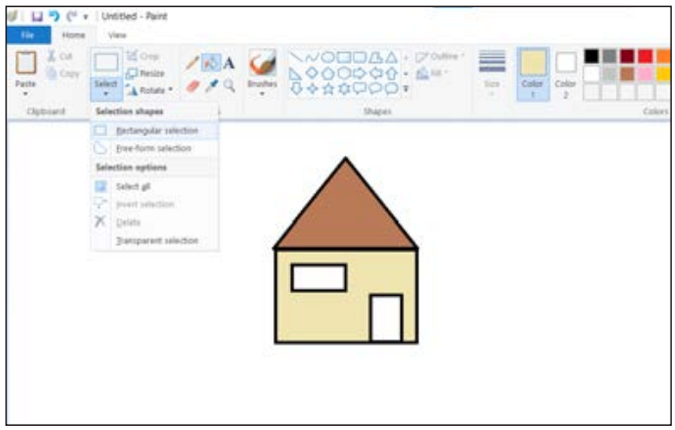
1. Click on the **Select** tool to select the picture.
2. Click on the **Rectangular Selection**. Drag the mouse over the picture to select it.
3. Click on **Resize**. Resize and skew box appears.
4. In the **Resize** section, enter the **Horizontal** value and **Vertical** value.
5. Select the **Maintain aspect ratio.**
6. Click **OK**.



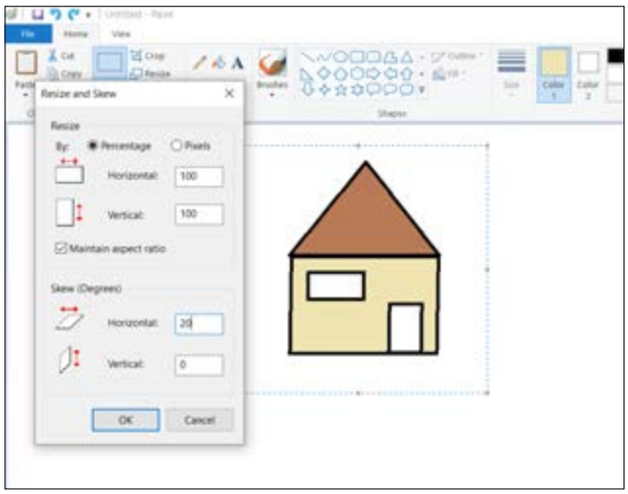
SKEW A PICTURE

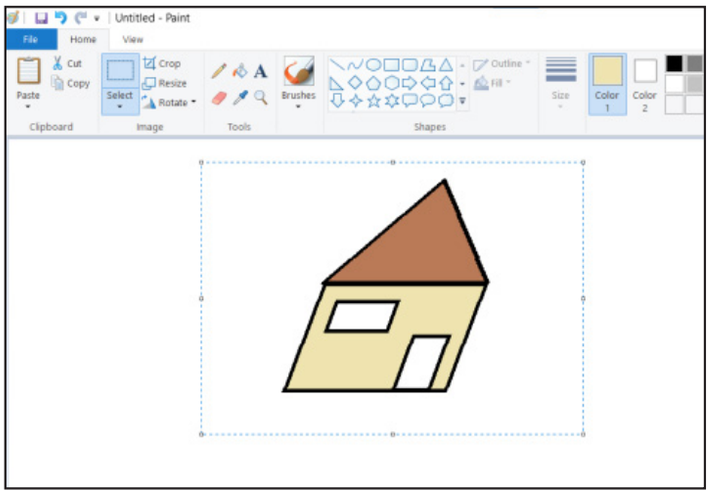
To skew a picture means to turn the picture at an angle. A picture can be skewed by stretching from one end and keeping the other end fixed.

Follow these steps to skew a picture:



1. Click on the **Select** tool to select the picture.
2. Click on the **Rectangular Selection**. Drag the mouse over the picture to select it.
3. Click on **Resize**. Resize and skew box appears.
4. In the **Skew** section, enter the value either in the **Horizontal** or **Vertical** boxes.
5. Click **OK**.



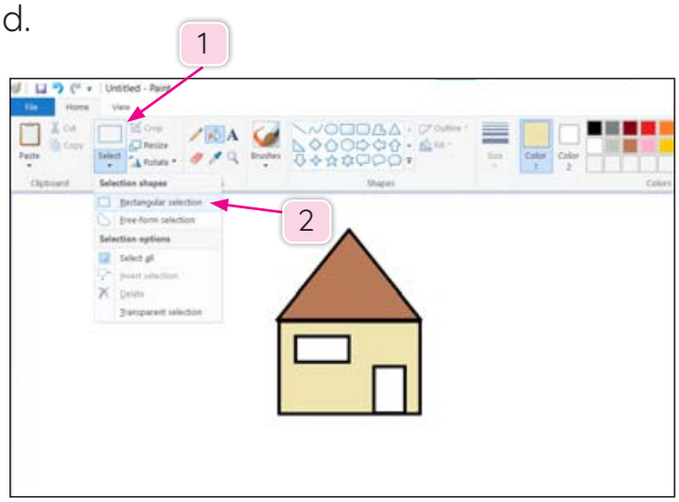


The skewed picture

ROTATE A PICTURE

To rotate a picture means to turn or change the angle of the picture. We can rotate a picture by using the rotate command.

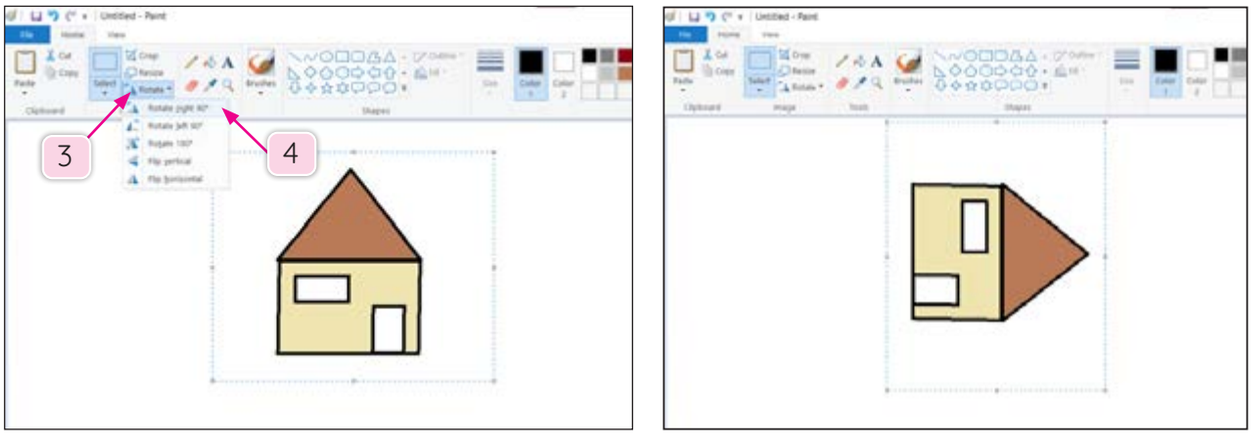
Follow these steps to rotate a picture:



1. Click on the **Select** tool to select the picture.
2. Click on the **Rectangular Selection**. Drag the mouse over the picture to select it.
3. Click on **Rotate**. There will be three options to rotate.

4. Click on the rotation direction and the angle you want to rotate the picture. Here, it is clicked on **Rotate right 90.**

   The picture will be rotated by 90 to the right.

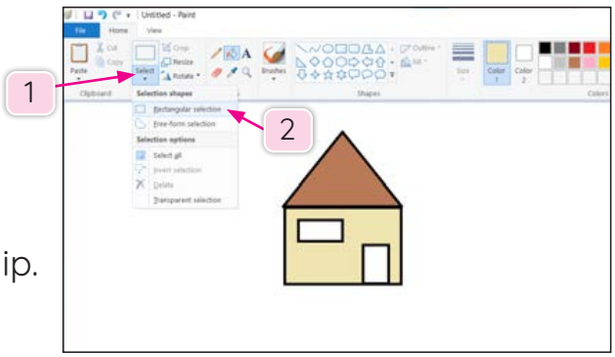


The rotated picture

FLIP A PICTURE

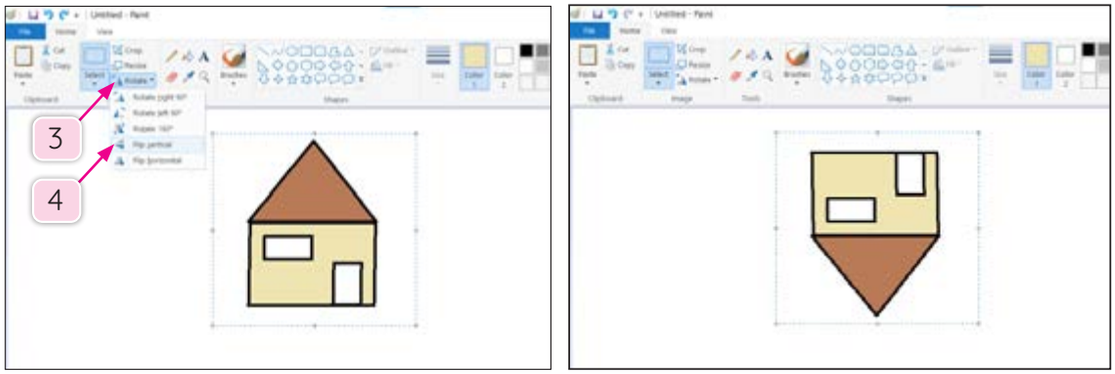
To flip a picture means to turn or rotate a picture horizontally or vertically.

Follow these steps to flip a picture:



1. Click on the **Select** tool.
2. Click on the **Rectangular Selection**. Drag the mouse over the picture to select it.
3. Click on **Rotate**. There will be two options to flip.
4. Click on the direction of flip you want to flip the picture. Here, it is clicked on **Flip vertically**.

   The picture will be flipped vertically.



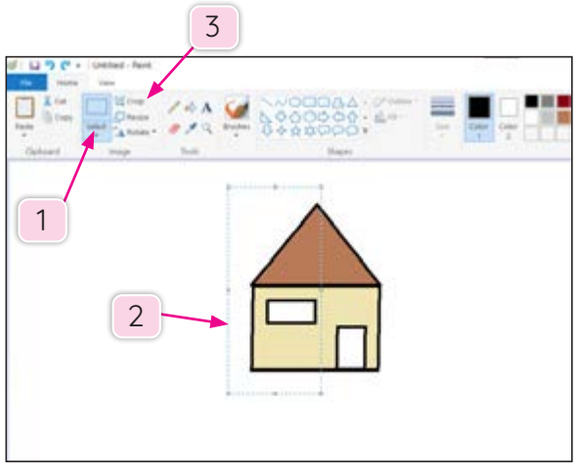
The flipped picture

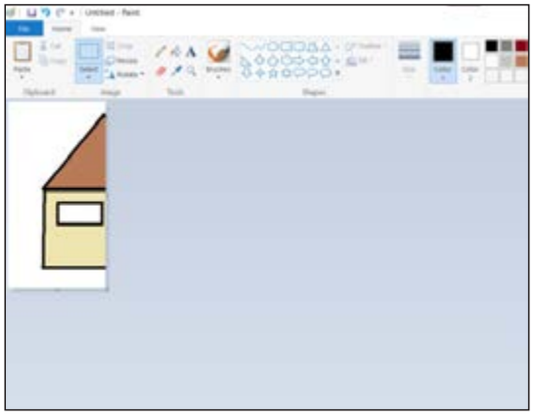
CROP A PICTURE

To crop a picture means to delete or remove everything outside the selected portion. Only the selected section of the picture will be available after cropping.

Follow these steps to crop a picture:

1. Click on the **Select** tool.
2. Drag the mouse over the picture to select it.
3. Click on **Crop**. Only the selected part of the picture remains in the drawing area.





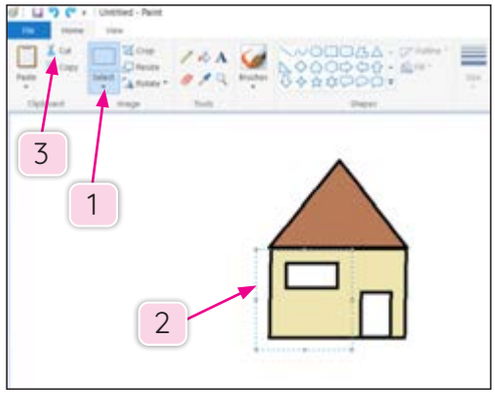
The cropped picture

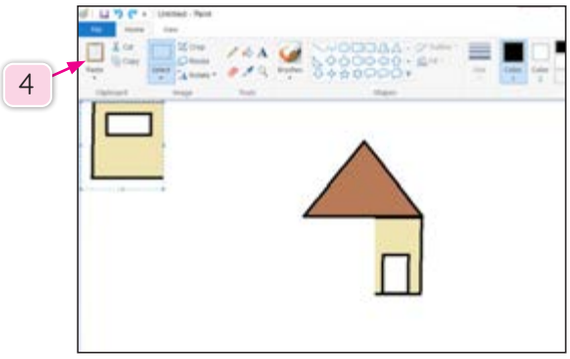
CUT AND PASTE

To cut and paste means to cut a picture or a part of it and paste it to a different place.

Follow these steps to cut and paste a picture:

1. Click on the **Select** tool.
2. Drag the mouse over the part of the picture you want to select.
3. Click on **Cut.** The selected part of the picture will disappear from the drawing area.
4. Now, click on **Paste**. The cut part of the picture will appear in the drawing area.





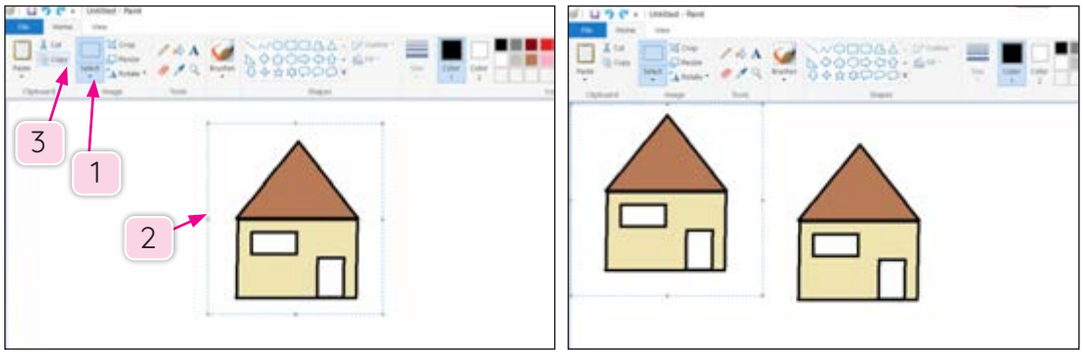
Cut and paste part of the image

COPY AND PASTE

To copy and paste means to make a duplicate copy of the picture.

Follow these steps to copy and paste a picture:

1. Click on the **Select** tool.
2. Drag the mouse over the picture to select it.
3. Click on **Copy.**
4. Now, click on **Paste**. A duplicate picture will appear on the top left corner of the drawing area.



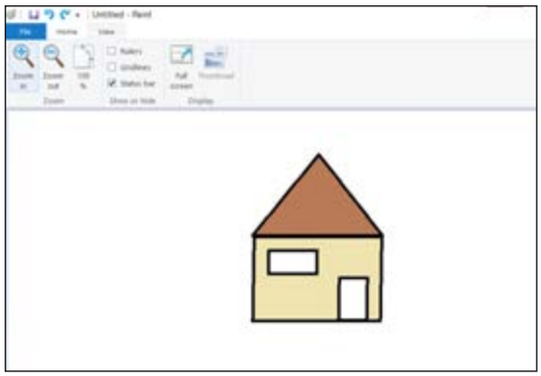
The duplicate picture

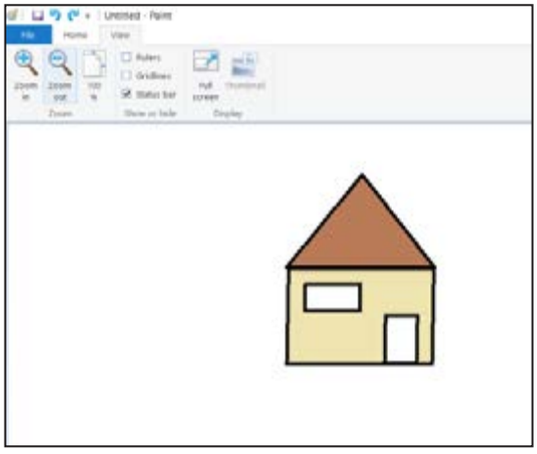
ZOOM A PICTURE

To zoom in and zoom out means to make the view size bigger or smaller on the screen.

Follow these steps to zoom a picture:

1. Click on the **View** tab.
2. Click on **Zoom in** to increase the view size. The picture will appear larger and nearer.
3. Click on **Zoom out** to decrease the view size. The picture will appear smaller and further away.



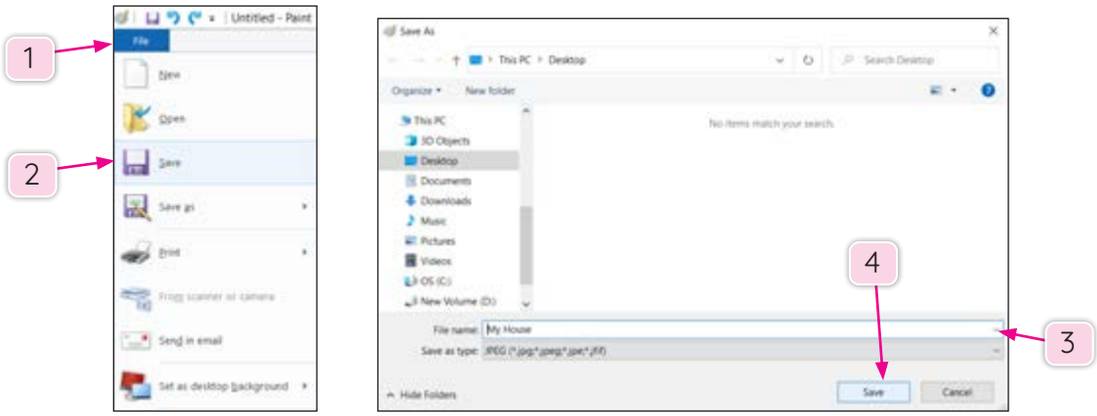


SAVE A PICTURE

To save a picture means to keep it for further use. If we save a picture, we can use it again or make changes to it.

Follow these steps to save a picture:

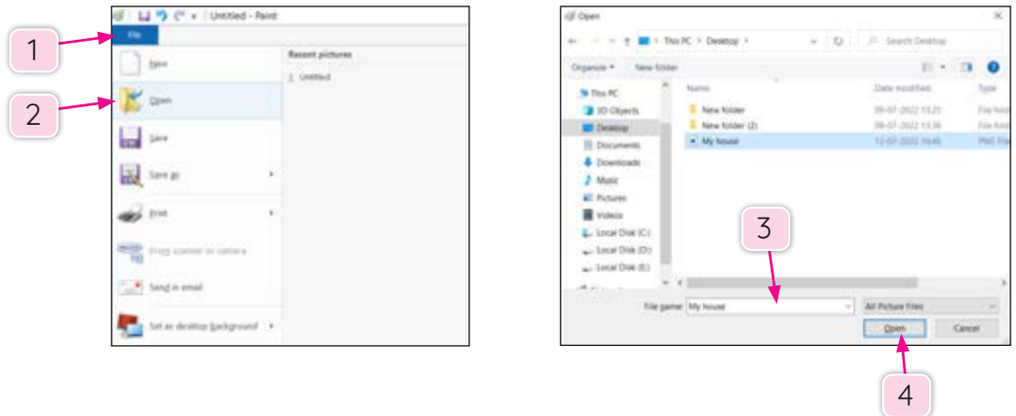
1. Click on the **File** tab.
2. Click on **Save or Save As** option. The **Save As** box will appear.
3. Type the name you want for the picture in the **File name** box.
4. Click on **Save**.



OPEN AN EXISTING PICTURE

Follow these steps to open an existing picture:

1. Click on the **File** tab.
2. Click on the **Open** option.
3. Type or select the name of the picture you want to open in the **File name** box.
4. Click on **Open**. The picture will open.

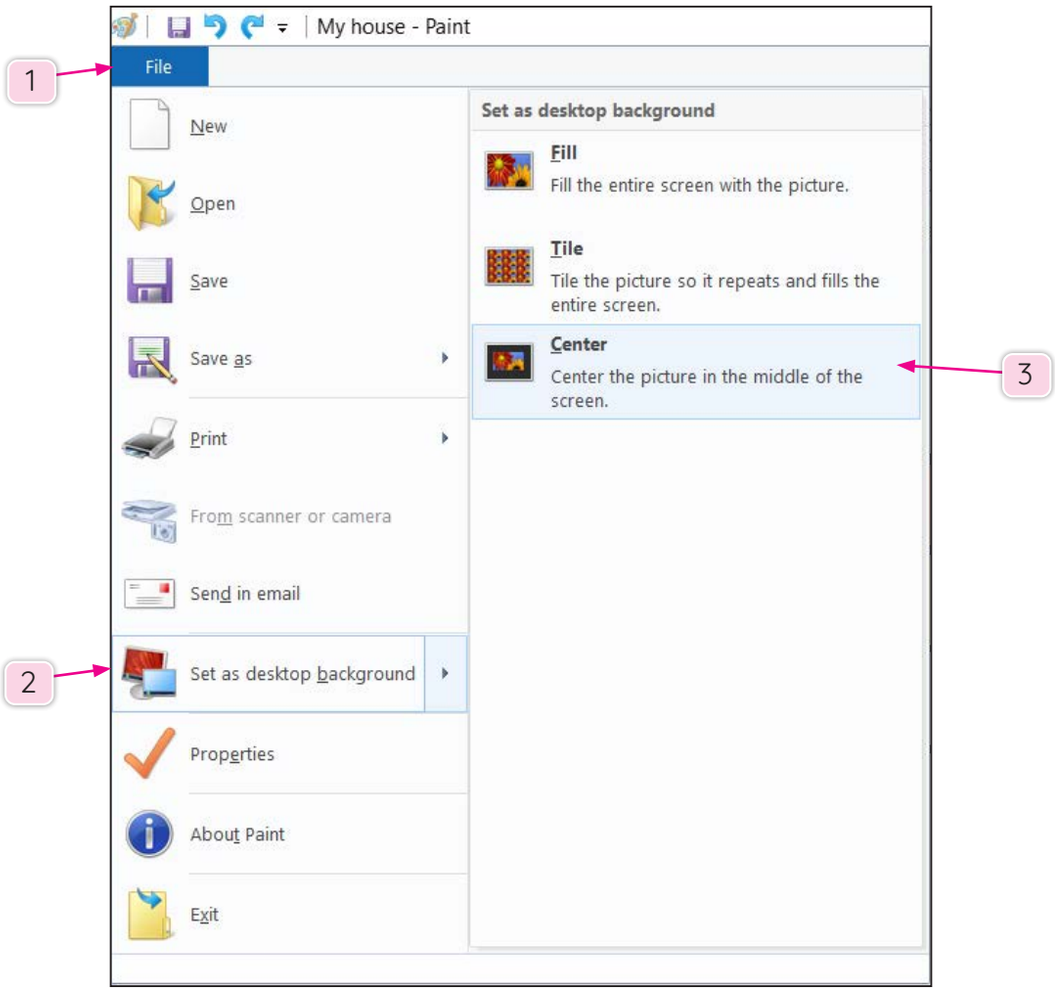


TO SET A PICTURE AS THE DESKTOP BACKGROUND

The picture you have created can be set as your desktop background.

Follow these steps to set the picture created as a desktop background.

1. Click on the **File** tab.
2. Click on the **Set as desktop background** option. Three options will appear on the right side.
3. Select and click on any of the three options.



NEWS FEED

CM

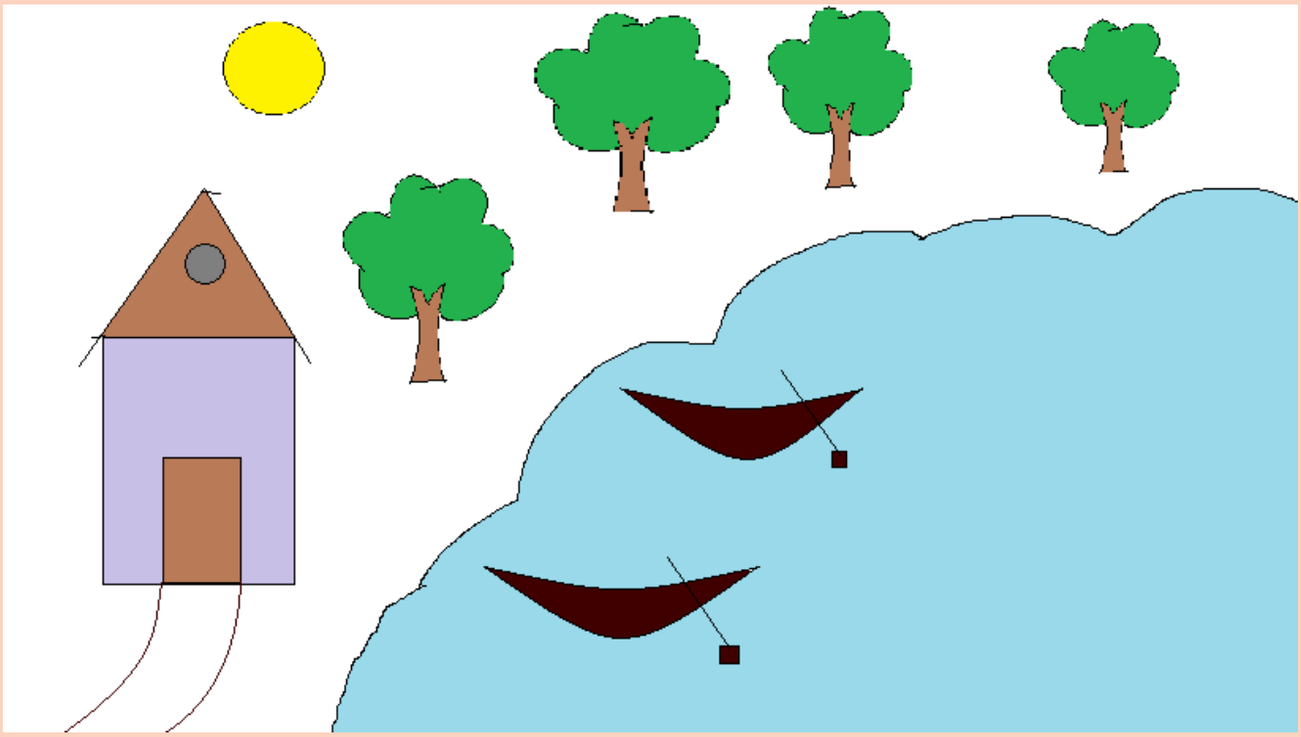
The first version of MS Paint, named 'Windows Paint', was developed by Dan McCabe in the year 1985.

ACTIVITY TIME

CT CR CM

Look at the picture and write the name the command(s) used to draw each object in Paint. Use the help box to find the right command.

Rectangle, line and curve	Curve and pencil
Rectangle, line and oval	Oval



1. House
2. Sun
3. Trees
4. Boats

REFRESH

- Paint is aprogram used for drawing and colouring.
- Paint has many features that help us to modify a picture.
- Resize means to change the size of a picture.
- Skew means to turn or place the picture at an angle.
- Rotate means to turn or change the angle of a picture.
- Flip means to turn or rotate a picture horizontally or vertically.
- Crop means to delete or remove everything outside the selected portion.
- Cut and paste mean to cut a picture or a part of it and paste it to a different place.

BROWSE

A **Choose the correct option.**

1. To select a picture, click on _____.

   a. Select ☐ b. Paste ☐ c. Copy ☐

2. To resize a picture, click on _____.

   a. Rotate ☐ b. Resize ☐ c. Crop ☐

3. To flip a picture, click on _____.

   a. Crop ☐ b. Rotate ☐ c. Resize ☐

4. To cut a picture or a part of it, click on _____.

   a. Paste ☐ b. Copy ☐ c. Cut ☐

5. To zoom a picture, click on _____.

a. File ☐ b. Home ☐ c. View ☐

B Fill in the blanks with the words given below.

open Cut Paint name file Skew paste

1. _____ is a program used for drawing and colouring.
2. _____ means to turn or place the picture at an angle.
3. The _____ of a file is typed in the File name box.
4. _____ and _____ means to cut a picture or a part of it and paste it to a different place.
5. To open a picture, click on _____ option in the _____ tab.

C Write T for true statements and F for false statements.

1. To start Paint, the first step is to click on the Start button. ☐
2. Select tool provides two types of selection. ☐
3. Resize means to change the angle of a picture. ☐
4. Only the selected section of a picture is available after cropping. ☐
5. Zoom out makes the picture appear smaller. ☐

D Answer in one word or two words.

1. It is used to enter text.
2. It is used to select irregular part of a picture.
3. It is used to make the picture appear larger and nearer.
4. It is used to draw circles.
5. It is used to skew a picture.

E Answer the following questions.

1. How do you modify a picture?
2. Write the steps to rotate a picture.
3. Write the steps to crop a picture.
4. How do you save a picture?
5. Write the steps to set a picture as desktop background.

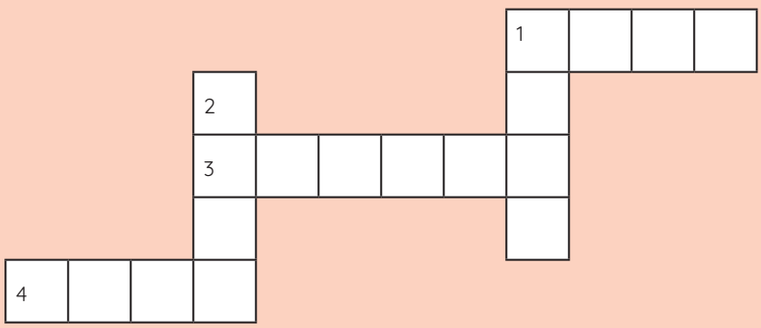
ACTIVITY TIME

PL

Read the clues and complete the crossword puzzle.

Across →

1. To keep it for further use
3. To turn or change the angle of a picture
4. to turn and rotate a picture horizontally or vertically



Down ↓

1. to turn a picture at an angle
2. to delete or remove selected portion of a picture

LET'S EXPLORE

TE EL CR

Do this activity in the computer lab.

Open Paint and draw the picture given here.

Now, modify the picture.

- Resize the picture. Make it smaller.
- Skew the picture.
- Flip the picture vertically.
- Rotate 180°.

FOR THE TEACHER

- Explain different parts of the Paint screen and their functions.
- Explain how to open and choose tools for drawing, making changes, saving, etc.
- Explain the different between Cut and Copy, Rotate and Flip command.

Chapter 7

Introduction to Logo

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- MSW Logo—An Introduction
- Starting Logo
- Logo terms
- Parts of MSW Logo window
- Logo Commands
- Exiting Logo

SIGN IN

CT CR

Match the following.

1. 

2. 

3. 

4. 

a. The girl is going left

b. The boy is going right

c. The girl is going forward

d. The boy is going backward

A computer is a machine that needs instructions and data to function. The instruction given to the computer is processed and the required output is produced. The set of instructions given to the computer to perform a task is called a **program**. The process of writing instruction or commands for the computer is called **programming**.

Just like humans need language to communicate, computers also need a language that they can understand. There are many programming languages that are used to give instructions to the computer. The logo is one such language. Let us learn about Logo in this chapter.

MSW LOGO—AN INTRODUCTION

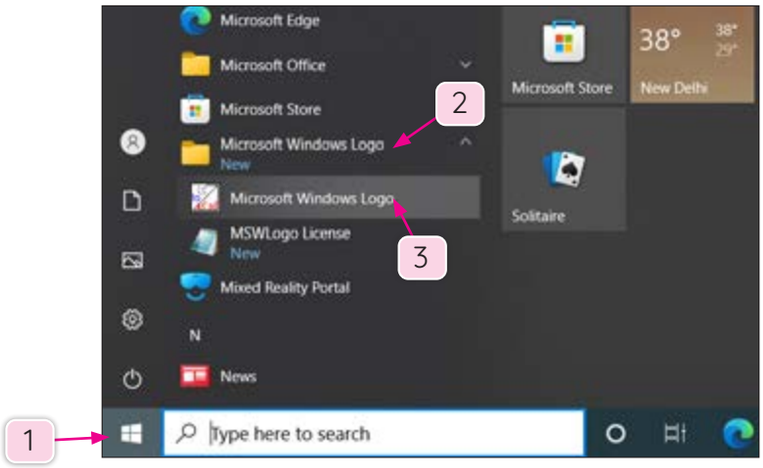
MSW Logo commonly known as **LOGO** stands for **Logic Oriented Graphic Oriented.** It is one of the simplest and easiest computer languages. It is designed to teach programming to children. We can use Logo to draw pictures, type text and do calculations.

Logo was designed by Seymour Papert in 1967.

STARTING LOGO

To open MSW Logo, follow these steps:

1. Click on the **Start** button. Then, scroll through the alphabetical list of programs to find Microsoft Windows Logo.
2. Click on the **Microsoft Windows Logo** folder.
3. Click on **Microsoft Windows Logo**. The MSW Logo window will appear.

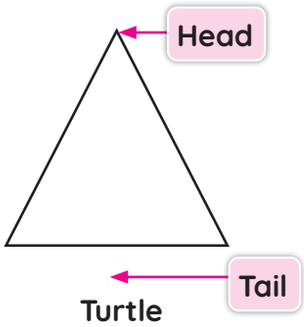


LOGO TERMS

Turtle

Turtle is a small triangle that is seen at the centre of the Logo screen. It is used as a pen to draw figures on the screen.

The turtle has two parts.



- **Head:** The pointed top of the turtle
- **Tail:** The base at the bottom of the turtle

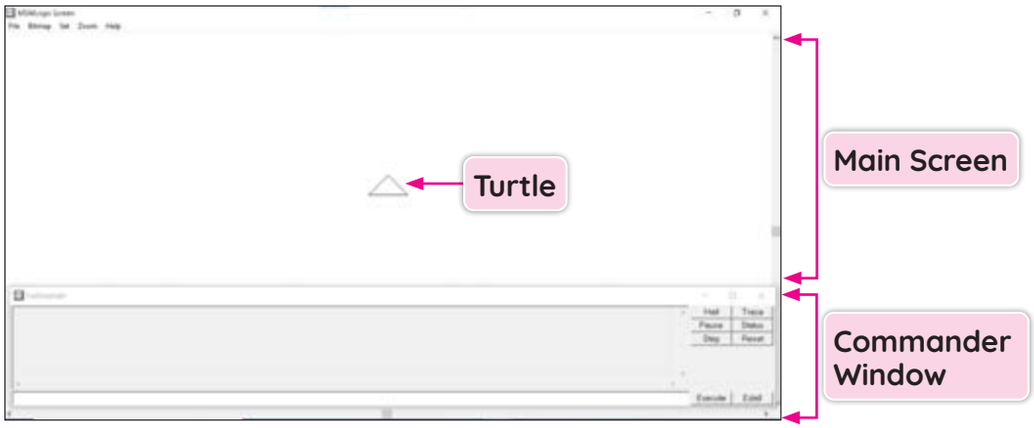
We can draw figures by moving the turtle. It moves on the screen according to the commands and leaves behind a line. This line draws a figure like a pen does. The central position where the turtle lives is called the **home of the turtle**. The turtle can move in two directions: Forward and Backward.

Primitives

The logo commands are called **primitives**. The primitives instruct the turtle what to draw on the screen. Commands are run by pressing the **Enter** key or clicking the **Execute** button.

PARTS OF MSWLOGO WINDOW

The MSW logo window has two main parts: Main screen and Commander Window.



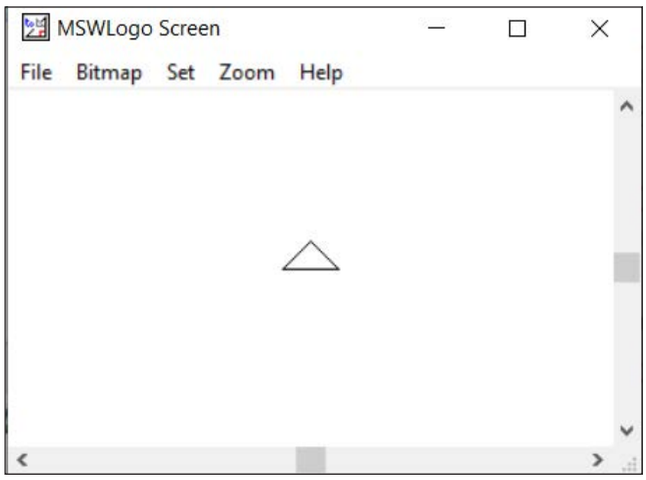
MSW Logo Window

Main Screen

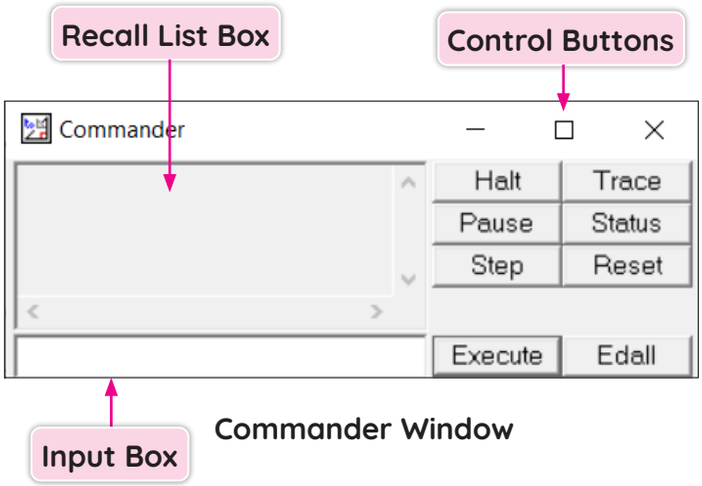
The main screen is the blank area in the middle of the window. This is the work area where we see the picture we draw.

Commander Window

The area under the main screen is the commander window. This is used for typing commands. It is divided into three sections.



Main Screen



Commander Window

1. **Input Box**

   This is the white bar where we enter all the commands. We can run the commands by pressing the **Enter** key or by clicking the **Execute** button.

2. **Recall List Box**

   This is the grey area that shows all the commands that are entered into the Input box. It also displays the messages related to the results of these commands.

3. **Control Button**

   The command window has eight buttons. Each button has a specific task. These are some of the buttons:

   - **Execute:** To run or execute the commands.
   - **Reset:** To clear the main screen.
   - **Halt:** To stop the command from getting executed.
   - **Status:** To display a status window of the current settings.

LOGO COMMANDS

Forward Command

Forward command moves the turtle forward in the direction in which it is pointing, i.e., in the direction of its head. The short form of Forward command is **FD**.

The Forward command is given as:

1. Type **FD**.

2. Press the **Spacebar** key.
3. Type the number of steps.
4. Click **Execute** button or press the **Enter** key.

Let us look at this example.

In Fig. 1, the command entered is

FD <space>30

In Fig. 2, the command is displayed as **FD 30** on the **Command Input Box** and the turtle moves 30 steps ahead on the screen.

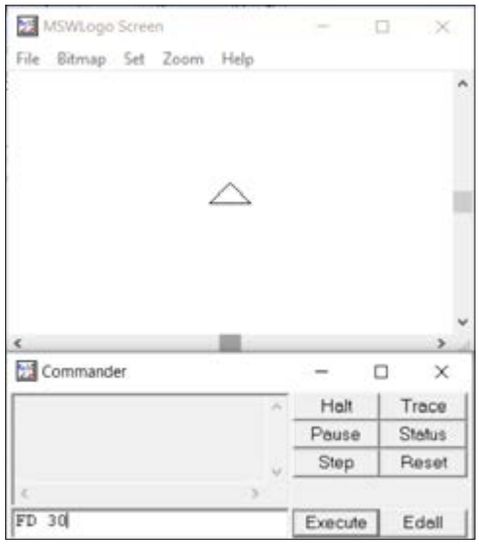


Fig. 1 Giving command

Back Command

Back command moves the turtle forward in the direction opposite to which it is pointing, i.e., in the direction of its tail. The short form of Back command is **BK**.

The Forward command is given as:

1. Type **BK**.
2. Press the **Spacebar** key.
3. Type the number of steps.
4. Click **Execute** button or press the **Enter** key.

In Fig. 3, the command given is

BK <space> 30

The command is displayed as **BK 30** on the **Command Input Box** and the turtle moves 30 steps back on the screen.

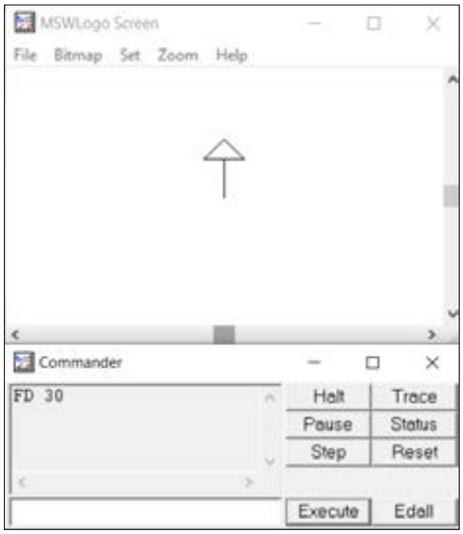


Fig. 2 The turtle moving forward

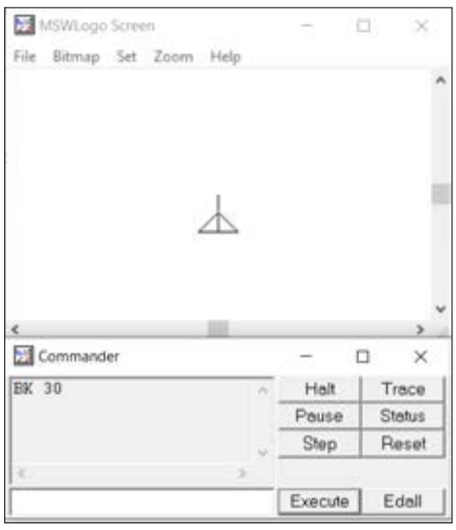


Fig. 3 The turtle moving backwards

Right Command

Right command turns the head of the turtle towards the right side, i.e., in the clockwise direction. It rotates without changing its position.

It needs to know the angle at which it will rotate. The short form of Right command is **RT.**

The right command is given as:

1. Type **RT 90** (90 is the angle at which the turtle will rotate.)
2. Click **Execute** or press **Enter**. The head of the turtle turns by 90 turns to the right.

In Fig. 4, the command is

RT <space> 90

Fig. 4

Left Command

Left command turns the head of the turtle towards the left side, i.e., in the anti-clockwise direction. The short form of Left command is **LT.**

The right command is given as:

1. Type **LT 90** (90 is the angle at which the turtle will rotate.)
2. Click **Execute** or press **Enter**. The head of the turtle turns by 90 turns to the right.

In Fig. 5, the command is

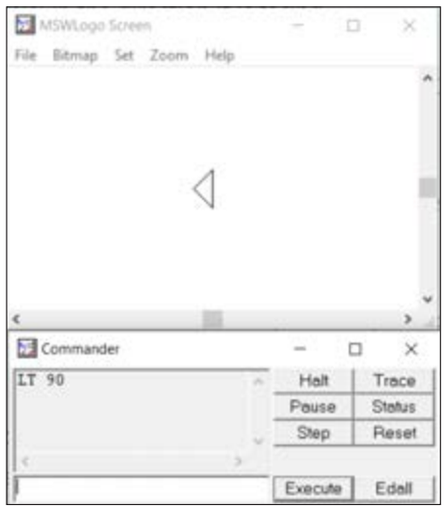


Fig. 5

LT <space> 90

Clearscreen Command

Clearscreen command cleans the picture on the screen. It brings the turtle back to the starting point, i.e., the center of the screen. The short form of Clearscreen is CS. The Clearscreen command is given as: **CS**

As we can see in Fig. 7, the turtle is back at the center and the picture formed earlier is deleted.

NEWS FEED

CM

Robot Turtles is a fun board game which uses the basics of Logo.

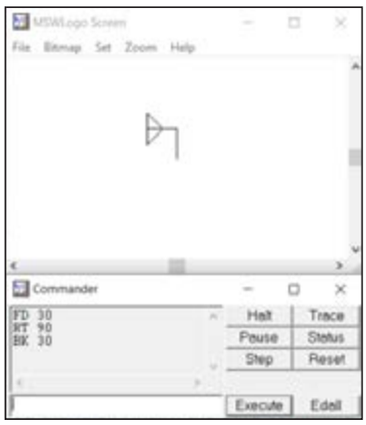


Fig. 6

Fig. 7

Cleartext Command

Cleartext command clears all the text in the Recall list box and the command in the Input box. The short form of Cleartext is CT. The command is given as: **CT**

We can see in Fig. 10 that the text has been cleared from the Recall list and the Input box without deleting the picture formed in Fig. 8.

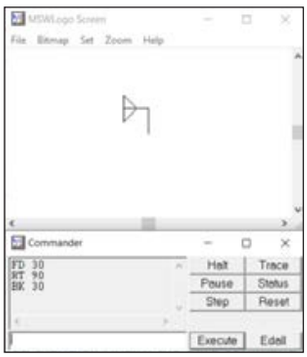


Fig. 8

Fig. 9

Fig. 10

Hide turtle Command

Hide turtle command hides the turtle. It helps us to see the drawing more clearly without the turtle. The short form of Hide turtle command is HT. The command is given as: **HT**

In Fig. 11, the turtle is not visible. We can see only the drawing on the screen.

Fig. 11

Show turtle Command

Show turtle command makes the turtle reappear after disappearing from the command HT. The short form of Show turtle command is ST. The command is given as: **ST**

In Fig. 12, the turtle reappears.

Fig. 12

Home Command

Home command brings the turtle back to the center of the screen, i.e., the home position. The turtle draws a line when it comes back from its current position. The command is given as: **Home**

We can see in Fig. 13 that the turtle comes back to the center drawing from its current position drawing a line.

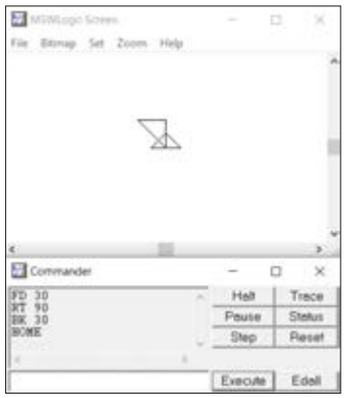


Fig. 13

PRINT COMMAND

Print Command displays messages in the Commander window. It is used to print a text on the screen. The short form of Print command is **PR.** The message should be enclosed in **square brackets [ ].** The Print command is given as:

PRINT <space> [your message] <Click Execute or pres Enter>

Or

PR <space> [your message] <Click Execute or pres Enter>

In Fig. 14, the commands are:

PRINT [Hello everyone!]

PR [Hello everyone!]

The messages are displayed as:

Hello everyone!

Hello everyone!

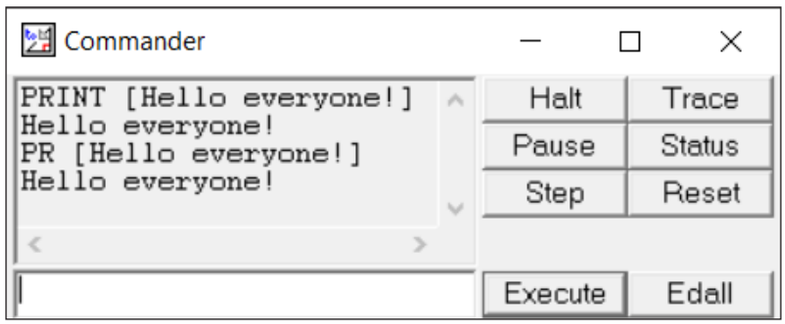


Fig. 14

EXITING MSW LOGO

We can close MSW Logo in two ways.

Method 1

Follow these steps to exit MSW Logo:

1. Click on **File** Menu.
2. Click on **Exit**. The window will close.

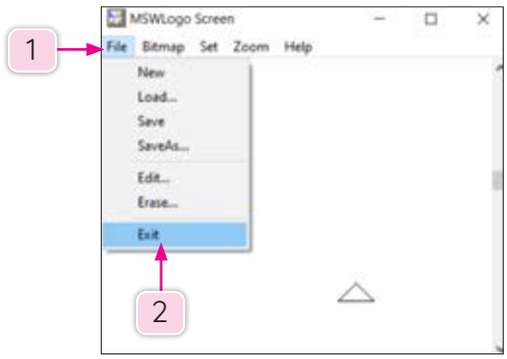


Fig. 15

Method 2

Follow these steps to exit MSW Logo:

1. Type **Bye** in the Input Box.
2. Click **Execute**. The window will close.

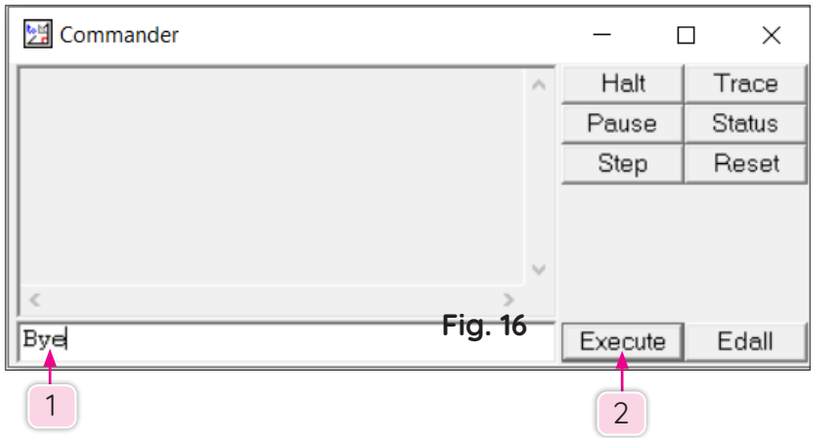


Fig. 16

CM

NEWS FEED

There are online sites that help children to learn Logo with a web browser such as Turtle Academy.

CT CR

ACTIVITY TIME

Match the drawing instruction with the correct Logo command.

1.	To show the turtle	a.	HT
2.	To move the turtle forward	b.	CT
3.	To hide the turtle.	c.	BK
4.	To move the turtle in the backward direction.	d.	ST
5.	To clear text.	e.	FD

REFRESH

- LOGO is a computer language which stands for Logic Oriented Graphic Oriented.
- Logo is used to draw pictures, do calculations and print the text.
- The turtle is a small triangle that obeys Logo command.
- The turtle has two parts—Head and Tail.
- The instructions given to the turtle are called primitives.
- The Logo window is divided into two parts—Main Screen and Commander Window.
- The main screen is the blank area in the middle of the window.
- The area under the main screen where we enter commands is the commander window.
- Commander window is divided into three sections—Input box, Recall List Box and Control buttons.

BROWSE

A **Choose the correct option.**

1. LOGO stands for _____.

   a. Logical Oriented Graphic Oriented ☐

   b. Logical Oriented Graphical Oriented ☐

   c. Logic Oriented Graphic Oriented ☐

2. The Turtle is in the shape of a _____.

   a. Triangle ☐ b. Rectangle ☐ c. Oval ☐

3. BK command moves the turtle _____.

a. Back ☐ b. Forward ☐ c. Left ☐

4. This is the position of the turtle for the command LT 90.

a.  ☐ b.  ☐ c.  ☐

5. The Logo command to move the turtle forward by 90 steps is

a. FD 90 ☐ b. BK 90 ☐ c. RT 90 ☐

B Fill in the blanks with the words given below.

execute	CT	HT	Commander	RT	LT

1. _____ window is used for typing commands.

2. We click on _____ to run a command.

3. _____ and _____ commands turn the turtle in different direction.

4. _____ command clears the text in recall list box area.

5. _____ hides the turtle.

C Write T for true statements and F for false statements.

1. The turtle has three parts. ☐

2. The Logo window is divided into two parts. ☐

3. Main screen of logo window is the area where the turtle lives.

4. All the Logo commands require a number with them.

5. CS command is used to clear the screen.

D Answer in one word or two words.

1. This command moves the turtle forward.

2. This command moves the turtle towards the left side.

3. This command moves the turtle towards the right side.

4. This command takes the turtle home.

5. This command displays messages in the Commander window.

E Answer the following questions.

1. What is a turtle? Name its parts.

2. Define the parts of a Logo window.

3. What are primitives? Name six Logo commands.

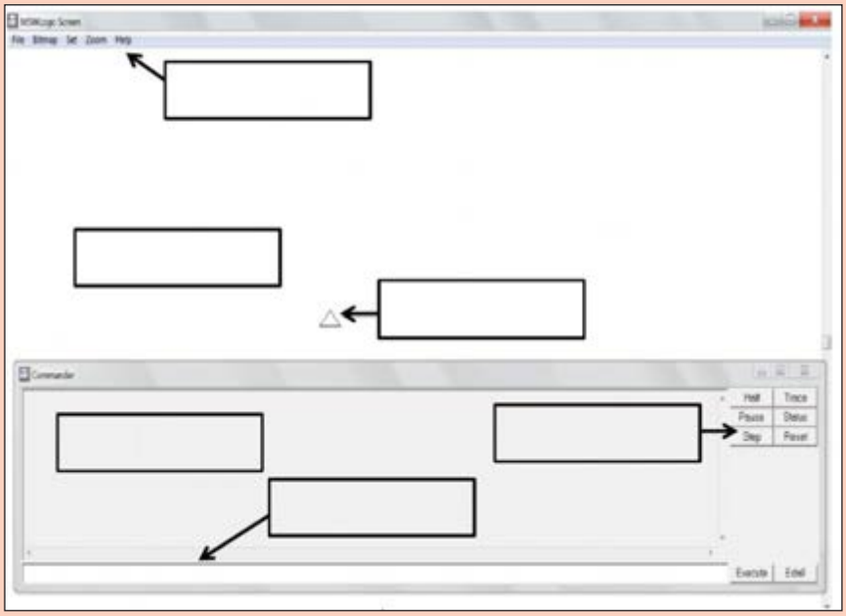
4. What is the difference between Left command and Right command?

5. What is Show turtle Command? How do you give this command?

ACTIVITY TIME

CT CM

Label the different parts of Logo Screen.

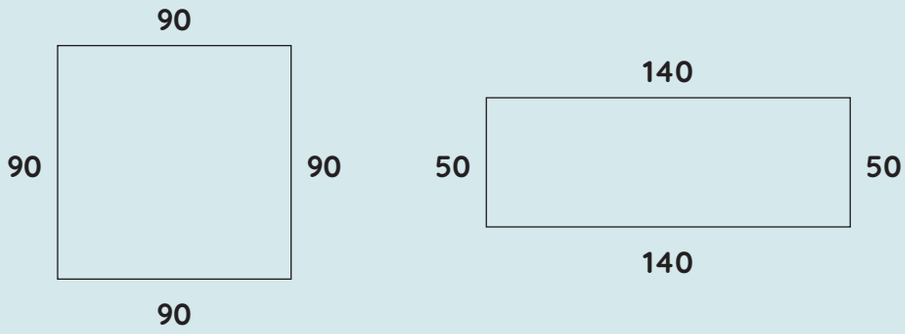


LET'S EXPLORE

CT EL

Go to the computer lab and do these activities.

Using Logo command, draw the following figures.



FOR THE TEACHER

- Explain in details how to give the Logo command.
- Show them how make simple shapes using logo command.

PERIODIC ASSESSMENT 3

A. Identify the following MS Paint tools and write their names.

1. _____

2. _____

3. _____

4. _____

B. Fill in the blanks using the words given below.

COMMANDER SKEW PAINT HT EXECUTE

1. _____ means to turn or place the pictures at an angle.
2. We click on _____ to run a command.
3. _____ command hides the turtle.
4. _____ is a program used for drawing and coloring.
5. _____ window is used for typing commands.

Chapter 8

Introduction to File Management

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- What is a file?
- Create a file
- Save a file
- Folder
- Create a folder
- Open a file or folder
- Rename a file or folder

SIGN IN

CT CR

Look at the pictures. Drag and keep them at the proper place.

All the things have different places to keep. What happens when we do not keep our things in a proper place? It will create chaos and will be difficult to find when we need them. We organize and keep things in such a way that we can easily and quickly find them when we need them.

We have learnt that computers can store large amounts of information. We can also quickly find this information when we need them. Have you wondered how a computer stores this information? In a computer, any information is saved or stored in the form of a file.

WHAT IS A FILE?

A file is a storage container on a computer that stores data, information or commands. It can be a document, image or software.

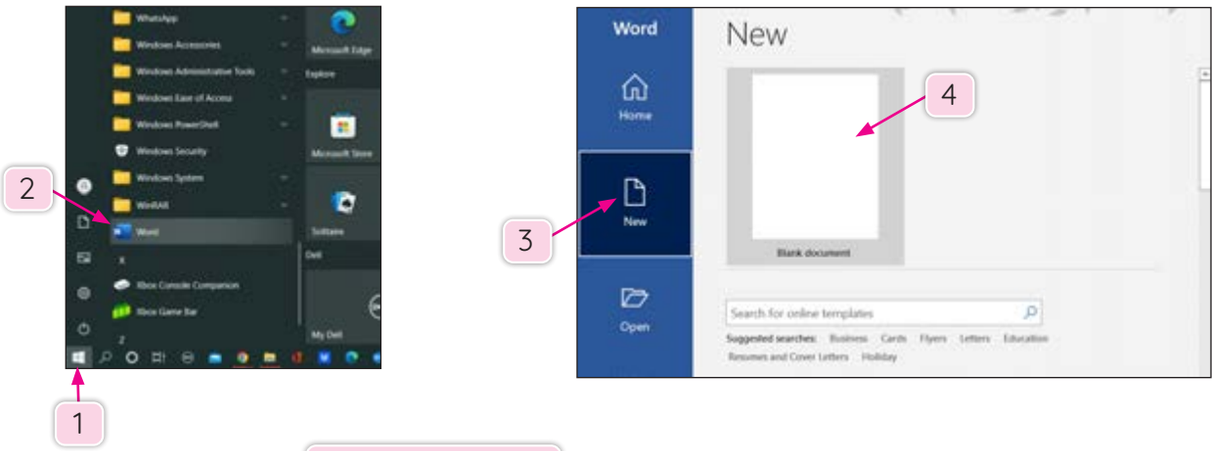
A file is given a specific name. This name helps us to find it easily when we want to access it later on. It also gives an idea about the content of the file. Related files can be stored together and put in a folder. It is important to name and organize the files on a computer. This will make it easy for us to find the information we want.

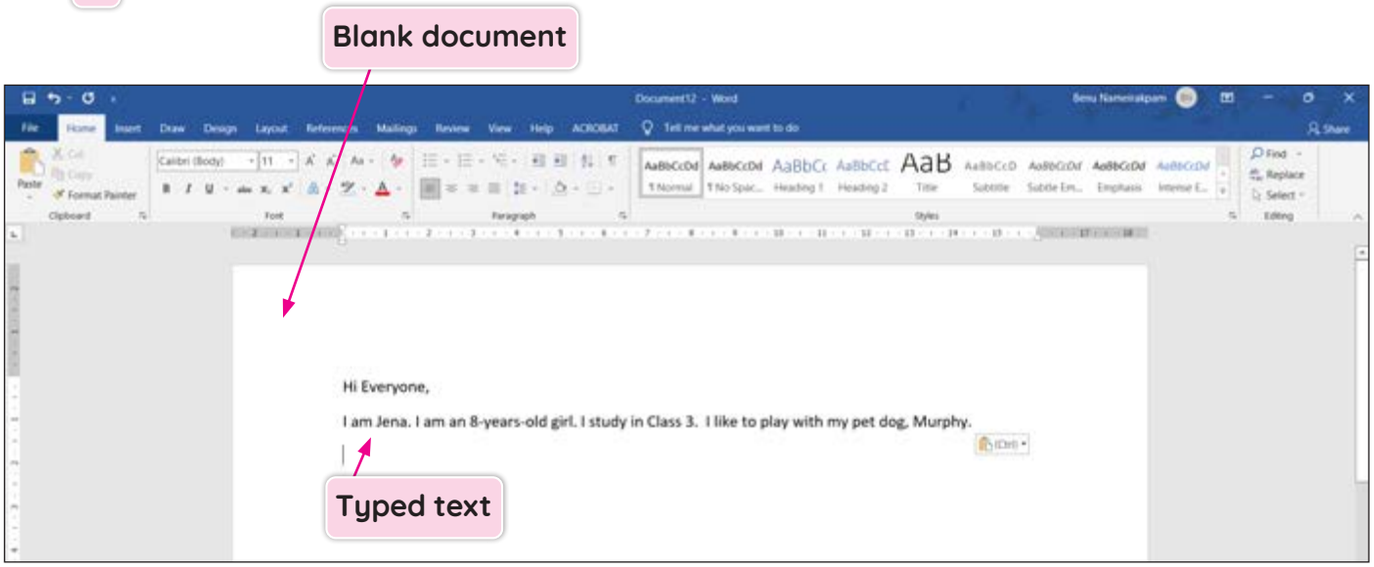
CREATE A FILE

A file is created commonly using application software such as Microsoft Word, Paint, etc. Let us create a file in Microsoft Word.

Follow these steps to create a file in Microsoft Word:

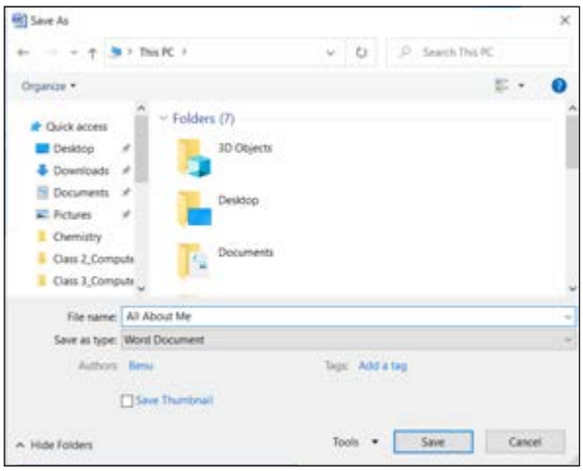
1. Click on the **Start** button. Then, scroll through the list of programs and select **Microsoft Office.**
2. Now, click on **Word**. A new window will appear.
3. Click on **New**.
4. Then click on **Blank document**. A new blank page is displayed on the screen.
5. Type text such as anything about yourself on the blank page.





SAVE A FILE

A file needs to be saved. If we do not save a file before we close the application, we will lose the information or text entered. Saving a file also enables to make changes when it is required.



To save a file, follow these steps:

1. Click on **File.**
2. Click on the **Save** option.
3. The **Save As** dialogue box appears.
4. Choose the **location**, click on any drive on the left side of the window.
5. Type the name of the file in the **File name** text box.
6. Click on the **Save** button.

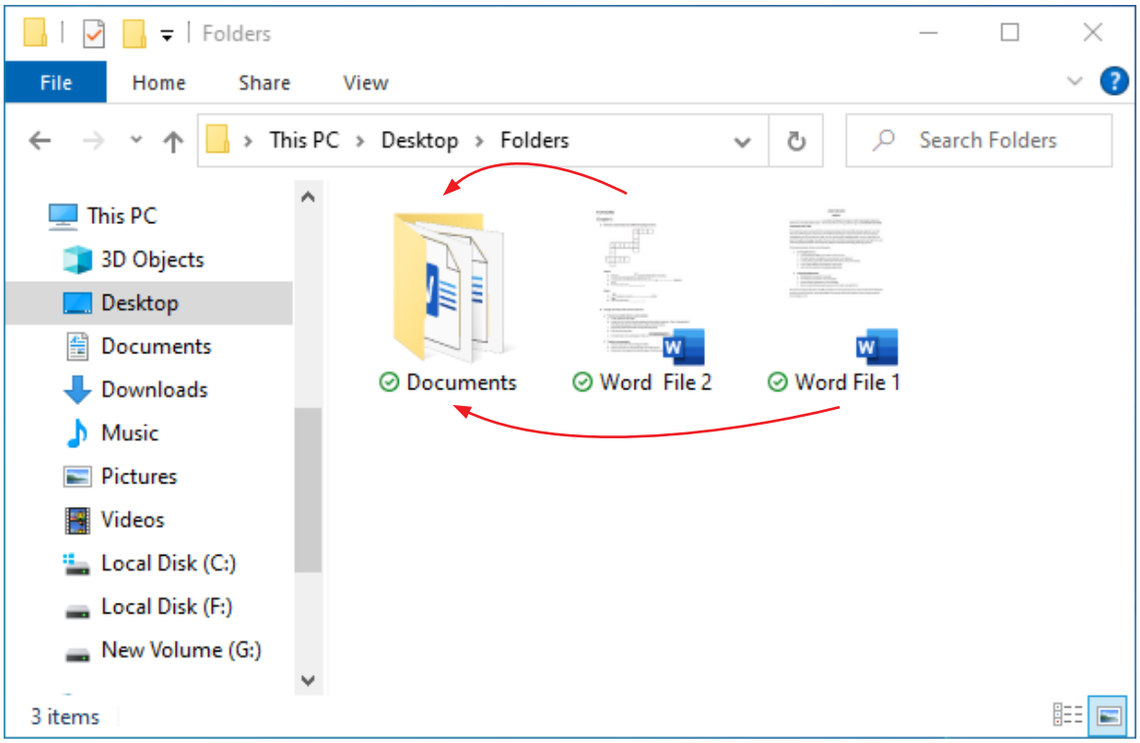
FOLDER

A folder is a storage location. It helps in organizing a large number of files present in a computer. It contains related files. It can also contain folders. A folder inside a folder is called a sub-folder.

The icon for a file is similar to that of the program that opens the file. The icon for a folder looks like a physical folder.

A file

A folder



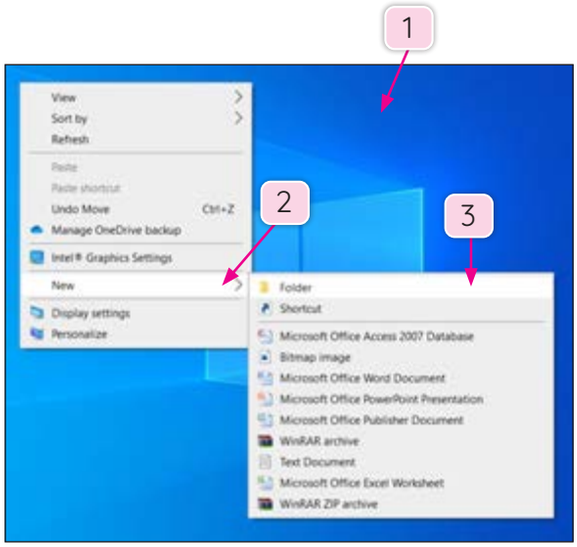
A folder has a specific name. Two folders of the same name cannot be stored together at the same location. If the location is different, two folders can have the same name.

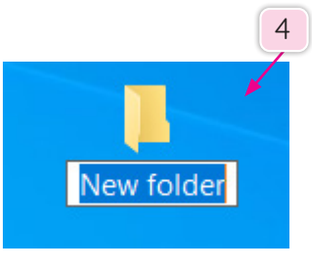
CREATE A FOLDER

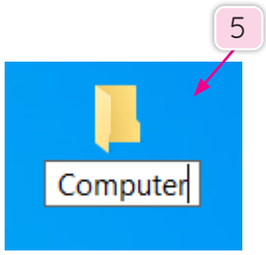
On the desktop

Follow these steps to create a folder on the desktop:

1. **Right-click** on the blank area of the desktop. A list of options appears.
2. Keep the pointer on the **New** option. A list of sub-options appears.
3. Click on the **Folder** option. A new folder icon will be displayed on the desktop. It has its default name '**New folder**' highlighted.
4. Name the folder. Type the name at the cursor position and press enter.
5. A new folder is created.





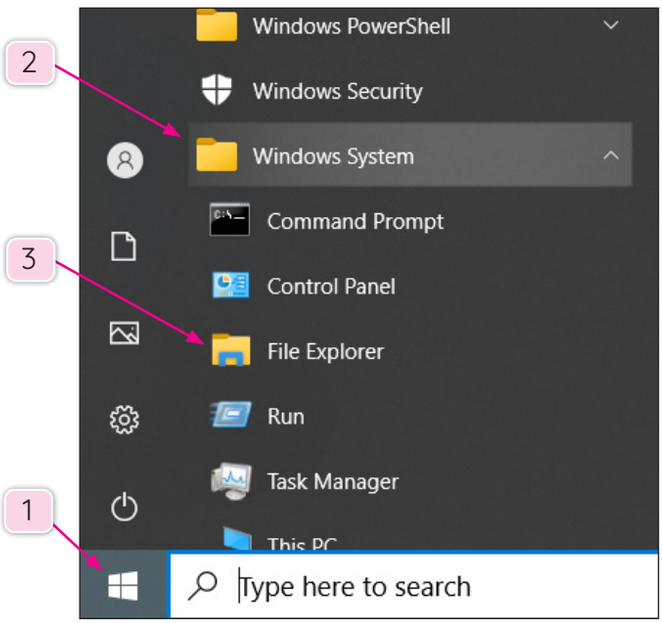


On a drive

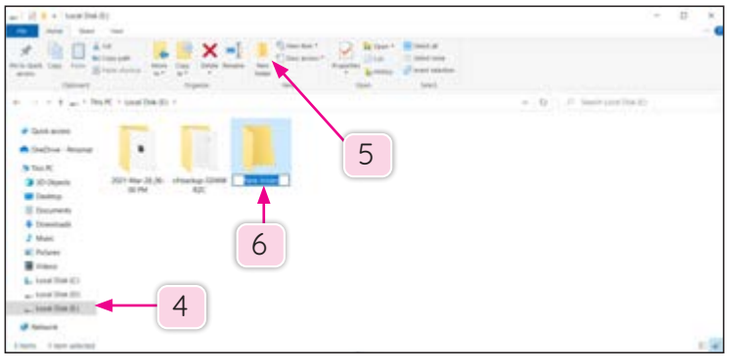
We can create a folder inside a drive using Windows Explorer.

Follow these steps to create a drive on a drive:

1. Click on the **Start** button.
2. Scroll and click on **Windows System**
3. Click on **File Explorer**.
4. Select a drive where you want to create a folder.



5. Click on the **New Folder** button on the **Home** tab. (Or right-click on a blank area of the window. Then, point to new and then click on **New folder**.)
6. A new folder with its default name will appear. Name the folder.



NEWS FEED

CM

Files and folders are stored in storage devices.

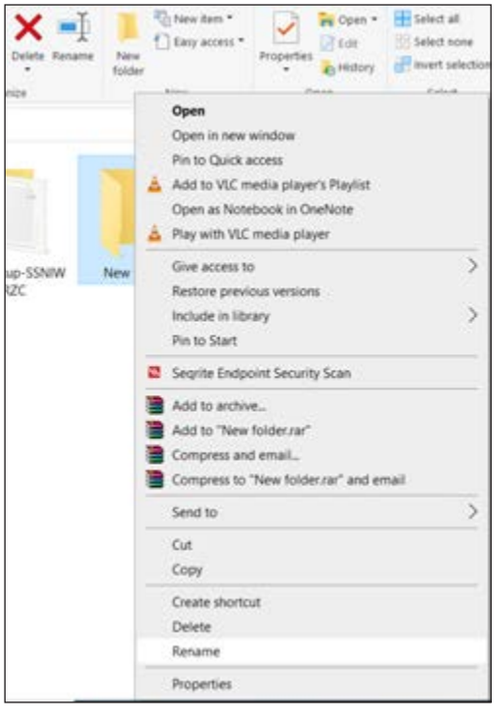
OPEN A FILE OR FOLDER

Follow these steps to open a file or a folder:

1. For a file or folder on the **Desktop**, move the pointer to the file or folder and double-click on it.
2. For a file in other **locations**, double-click on the **Computer** icon to open **Windows Explorer**.
3. Then, select the drive from the left panel and double-click on the required folder.

RENAME A FILE OR FOLDER

We can change the name of an existing file or a folder. To rename means changing the name of an existing file or folder.



To rename a file or a folder, follow these steps:

1. **Right-click** on the file or folder you want to rename.
2. Click on the **Rename** option from the Shortcut menu.
3. The file or folder name will be highlighted.
4. Type the new name for the file/folder on the textbox.

NEWS FEED

CM

Extensions in the file names tell us what the file contains. For example, docx and doc file extensions are used for Word document.

ACTIVITY TIME

CT CM

Use the help box and write the correct names.

File name extension	Folder	File

1. 

2. docx or doc

3. 

REFRESH

- Any information is saved or stored in the form of a file on a computer.
- A file is a storage container on a computer that stores data, information or commands.
- A file is created commonly using application software such as Microsoft Word, Paint, etc.
- A folder helps in organizing a large number of files present on a computer.
- Every file has a specific name.
- Two folders of the same name cannot be stored at the same location.
- Existing files and folders can be renamed.

BROWSE

A **Choose the correct answer.**

1. In a computer, information is stored in the form of _____.

   a. File ☐ b. software ☐ c. MS Word ☐

2. It is a storage container on a computer that stores data, information or commands.

   a. Files ☐ b. Folder ☐ c. File and folder ☐

3. It is a collection of related files.

   a. Files ☐ b. Folder ☐ c. File and folder ☐

4. A file can be created using this program.

   a. MS Word ☐ b. Paint ☐ c. Both a and b ☐

5. We get the Rename option from the shortcut menu when we _____ on a folder.

   a. Click ☐ b. Right-click ☐ c. Double-click ☐

B **Fill in the blanks with the words given below.**

file	Renaming	open	name	Microsoft Word

1. A _____ can also be stored inside a folder.
2. Every folder has a specific _____.
3. To create a Word file, we have to click on Start button and then select _____.

4. _____ means to change the name of a file.

5. Double-click on a folder to _____ it.

C Write T for true statements and F for false statements.

1. Two folders of the same name can be stored at the same location. _____
2. Existing file can be renamed. _____
3. A folder can contain only files. _____
4. Right-click on a file gives the Rename option. _____
5. A folder can be stored in a file. _____

D Answer in one word or two words.

1. A storage container that stores data. _____
2. Place to type the new name while renaming a file. _____
3. Double-click on this icon to open Windows Explorer. _____
4. Default name of a new folder. _____
5. A folder within a folder. _____

E Answer the following questions.

1. What is the difference between a file and a folder?
2. How do you create a new folder on the desktop?
3. How do you create a new folder inside a drive using Windows Explorer?
4. How do you open a file or a folder?
5. How do you rename a folder?

ACTIVITY TIME

PL

Find the following words related to file and folder in the word search.

Create	Folder	Rename	Document
Location	Storage	File	Organizing

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

LET'S EXPLORE

TE EL

Do the activity in the computer lab. Ask for help if you do not remember the steps.

1. Create a Word document file. Save the file.
2. Now create a folder. Name it.
3. Next, rename both the folder and the file.

FOR THE TEACHER

- Make the students understand the concept of organizing things giving real-life examples such as how we keep our clothes, books and shoes separately.
- Show them how books are catalogued and organized in libraries to make them understand the concept of file and folder.

Chapter 9

More on AI

Scan QR Code to watch a video

LEARNING OBJECTIVES

In this chapter, students will learn about:

- Smartphone
- Smartwatch
- Smart TV
- Smart Locks
- Smart Speaker
- Chabot
- Self-driving Car

SIGN IN

CT CM CR

There are robots that can do different things. What kind of work will you make the robot do if you have a chance to build it? Choose from the statements given below.

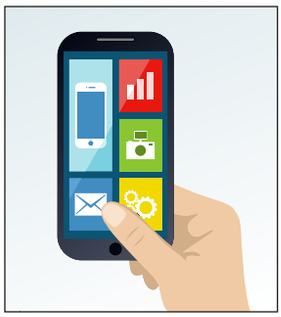
1. Do your assignments
2. Study for you
3. Clean your room
4. Help your parents doing chores
5. Go to park with you
6. Play with you
7. Make food for you
8. Go to school with you
9. Carry your books

What else do you want the robot to do? Tell your friends.

Artificial Intelligence (AI) is the method by which a computer is able to think, understand and learn from the data. Artificial machines are built to remember the behaviour of a person or how the surrounding is and adapt their responses to this information.

We are surrounded by AI. It is used in many fields such as manufacturing, transportation, education, etc. We have learnt in the previous class some of the uses of AI in our daily life. Let us learn more about AI devices.

SMARTPHONE



Smartphone has become an important part of our lives. It has many features and applications that help us to do many activities in our life easily and faster. Many of these applications are integrated with AI.

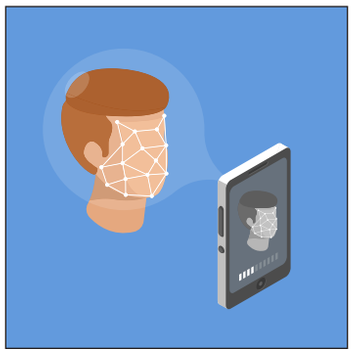
Navigation

AI helps us to travel in a more convenient way. We can use Google or Apple maps on our phones and type in our destination. It not only tells us the directions but also the optimal route and traffic updates. We do not have to rely on a hard copy of a map for directions.

NEWS FEED CM

Google Maps was first launched for desktop on February 8, 2005.

Facial recognition



Facial recognition application has become very common in most phones. It is used to unlock phones on some smartphones. It a software that analyses our facial features and checks if it matches the data it has. If it matches, the phone unlocks.

NEWS FEED

Apple introduced the facial recognition system, Face ID, in 2017.

Virtual Assistant

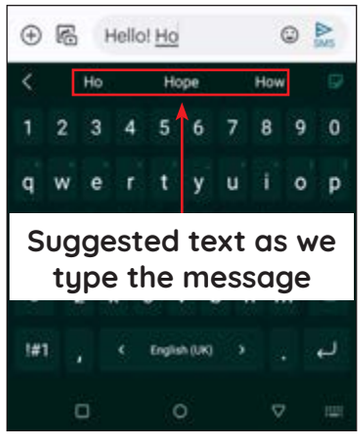
Most smartphones have AI-enabled virtual assistants such as Siri, Cortona, Google Assistant and Alexa. Through these virtual assistants, we can operate our phones through voice commands.

Google Assistant

Siri

Smart Input

Have you ever wondered how a phone or a computer auto-corrects a misspelt word? This is because of AI. When we type text, AI predicts words and phrases. It gives suggestions more relevant to the context. It helps us to complete the typing with a simple swipe across the screen. This has made typing text easy and comfortable.



SMARTWATCH

A smartwatch is like a small phone or a computer that is worn on the wrist. Like any other normal watch, it tells us the time. It also has many features that make it a smartwatch. It is usually connected to a smartphone and gets notifications on incoming calls and messages. A smartwatch is operated through a touch screen. Most smartwatches come with apps that monitor heart rate and count the number of steps a person has taken in a day.

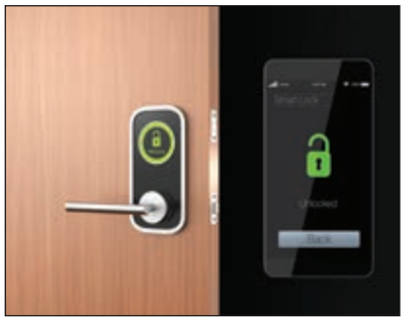
SMART TV

A smart TV is a TV that can be connected to the Internet and allows us to access online content through the TV. It can be operated through a virtual assistant which makes it easy and convenient to use.

A smart TV

SMARTS LOCKS

A smart lock uses AI technology to lock a house. It is connected to a smartphone and it can detect if someone tries to break the lock. It uses a digital key instead of a physical key to lock the door.



SMART SPEAKER

A smart speaker is a wireless speaker with an integrated virtual assistant that can respond to voice commands. The virtual assistant offers interactive actions and hand-free activation. Smart speakers are usually connected by Wi-Fi. These speakers can be controlled from a distance using our voice. These can be used for entertainment answering questions, searching the web and many other things. These speakers not only play music but can tell us about news updates, weather, and create a shopping list.

The first smart speaker is **Amazon Echo**. It was released in 2014. The voice assistant integrated with Echo is Amazon's virtual assistant **Alexa**. We can activate this speaker by calling 'Alexa'.

Amazon Echo

CHATBOT

A chatbot is a software that stimulates and processes human conversation. It interacts with the human through text messages on chat. They communicate with humans like a real person.

Chat between a man and chatbot

SELF-DRIVING CARS

A self-driving car can drive by itself. It is also known as a driverless car. A self-driving car can travel without the driver controlling all the movement of the car. It can understand the surroundings and can navigate without the help of a human driver.

A self-driving car

ACTIVITY TIME

CT CR

Match the pictures with the correct functions.

1. 

2. 

3. 

4. 

a. Voice assistant

b. Facial recognition

c. Navigation

d. Smart input

REFRESH

- AI is used in many fields such as manufacturing, transportation, education, etc.
- A smartphone has many features and applications that help us to do many activities in our life easily and faster.
- AI helps us to travel in a more convenient way.
- Facial recognition application is used to unlock some smartphones.
- Some of the devices that use AI technology are smart locks, smart speakers, smart TVs, smartphones, smartwatches, etc.

BROWSE

A **Choose the correct answer.**

1. It is the first smart speaker.

   a. Amazon Alexa ☐ b. Amazon Echo ☐ c. Amazon ☐

2. Self-driving car is also known as ☐ car.

   a. driverless ☐ b. Drivers ☐ c. Non-driver ☐

3. It is like a small phone or a computer that is worn on the wrist.

   a. Smartwatch ☐ b. Smart Lock ☐ c. Smart Tv ☐

4. It can lock a door without a physical key.

   a. Smartphones ☐ b. Smartwatch ☐ c. Smart Locks ☐

5. A TV that can be connected to the Internet.

   a. Smart TV ☐ b. Smart Lock ☐ c. Smartphone ☐

B **Fill in the blanks with the words given below.**

chatbot | Amazon Echo | digital | online | touch screen

1. A ☐ interacts with the humans like a real person.

2. A smartwatch is operated through a ☐.

3. We can access ☐ content on a smart TV when connected to the Internet.

4. A Smart lock uses _____ key to lock a door.

5. The first smart speaker is _____.

C Write T for true statements and F for false statements.

1. A smart speaker can understand human language. _____
2. Google Maps is AI based navigation assistant. _____
3. A smartwatch cannot be connected to a smartphone. _____
4. A smart TV can be connected to the Internet. _____
5. A smart lock uses a physical key to lock a door. _____

D Answer the following questions in one word or two words.

1. It tells you which way to go. _____
2. A feature that recognizes our face. _____
3. A feature that understands our speech. _____
4. A speaker that can operates through our voice. _____
5. A car that drives without a man. _____

E Answer the following questions.

1. Give two examples of uses of AI at home.

2. How does AI help us in navigation?

3. What is smart input?

4. What are smart speakers?

5. How does a self-driving car operate?

ACTIVITY TIME

SEL CM

Make a list of devices you have used that are based on AI.

Then, discuss these questions with your friends:

- How these applications have helped you?
- How would you feel if these devices were not there?
- What would you do if these devices were not there?
- What would you want these devices to do?

LET'S EXPLORE

TE EL CR

In the computer lab, collect pictures of AI devices using the internet. Print the pictures and make a collage.

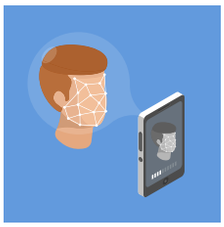
FOR THE TEACHER

- Recapitulate the AI discussed in the previous classes.
- Explain how AI enabled devices help us in our everyday life with examples.
- Ask the students to list some AI enabled devices and what do they use these devices for.

PERIODIC ASSESSMENT 4

A. Identify the following images and write their names.

1. _____



2. _____

3. _____

4. _____

B. Fill in the blanks using the words given below.

MICROSOFT OFFICE NAME DIGITAL TOUCH SCREEN OPEN

1. Every folder has a specific _____.
2. A smart lock uses _____ key key to lock a door.
3. Double-click on a folder to _____ it.
4. A smartwatch is operated through a _____.
5. To create a Word file, we have to click on Start button and then _____.

TEST PAPER 2

A. Choose the correct option.

1. _____ selection is used to select irregular parts of a picture.

   a. Rectangular ☐ **b.** Free-form ☐ **c.** Circular ☐

2. In MSW LOGO, the turtle has _____ parts.

   a. two ☐ **b.** three ☐ **c.** four ☐

3. Folder inside a folder is called _____.

   a. sub-folder ☐ **b.** file ☐ **c.** new folder ☐

4. _____ TVs can be connected to the Internet.

   a. Smart ☐ **b.** Antique ☐ **c.** Driverless ☐

5. In MSW LOGO, _____ button clears the main screen.

   a. execute ☐ **b.** halt ☐ **c.** reset ☐

B. Write (T) for true statement and (F) for false statement.

1. Paint cannot modify pictures. ☐
2. BK command moves the turtle forward. ☐
3. Every folder has a specific name. ☐
4. Chatbot is used for face-recognition. ☐
5. AI made travel more convenient. ☐

C. Answer the following questions.

1. What is meant by flip a picture and how can you use it in Paint?
2. What is commander window of MSW LOGO?
3. How can you create a file in Microsoft Word?
4. How does AI help in navigation?
5. Name any five tools of Paint with their uses.

PROJECT

A. Type the given document in MS Word.

Dear Anjali,

I am throwing a party for my birthday on 6th January. Venue for the party is my home. Some other friends are also invited to the party. You are also invited for that.

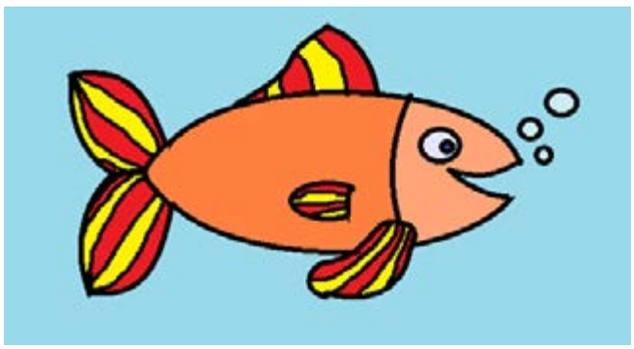
Kindly, join us for my birthday party.

With love

Varsha

1. Write your friend's name in place of Anjali and your name in place of Varsha.
2. Save it as a file with the file name "Invitation".

B. Draw the given image in MS Paint.



1. Add more fish by using copy and paste commands.
2. Change the sizes of the fish.
3. Turn some fish at an angle by using skew command.
4. Change the direction of some fish.

NATIONAL CYBER OLYMPIAD

LOGICAL REASONING

1. Select the option which completes the given pattern.

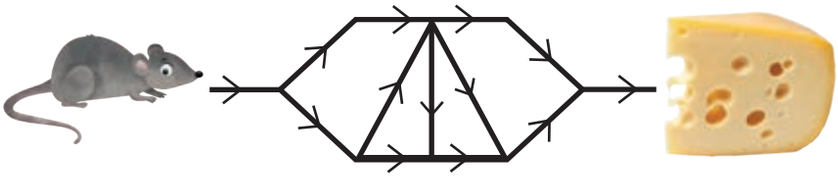
a. 

b. 

c. 

d. 

2. In how many different ways the rat can reach the cheese?



a. 6 **b.** 7 **c.** 8 **d.** 9

3. If 'Star' is called 'Sun', 'Sun' is called 'Moon', 'Moon' is called 'Earth' and 'Earth' is called 'Comet', then man lives on _____.

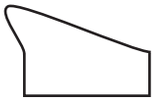
a. Earth **b.** Comet **c.** Earth **d.** Star

COMPUTERS AND INFORMATION TECHNOLOGY

4. Select the shape that is available in MS Paint.

a. 

b. 

c. 

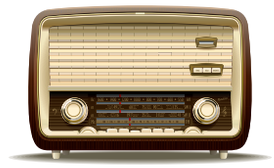
d. 

5. Which of the following is the image of a modern computer?

a. 

b. 

c. 

d. 

6. Select the incorrect match of brushes and their names in MS Paint of Windows 10.

a.  Brush **b.**  Airbrush **c.**  Marker **d.**  Oil brush

7. Select the odd one out.

a. MS Word **b.** Tux Paint **c.** Google Chrome **d.** Monitor

8. Select the incorrect statement about Windows 10.

a. Windows 10 has a Graphic User Interface (GUI).

b. It has introduced Cortana.

c. It was launched in 2010.

d. It is an operating system.

9. The shortcut key for copy is _____.

a.  **b.**  **c.**  **d.** 

10. Which of the following is not a search engine?

a. Google Chrome **b.** Mozilla Firefox

c. MS Paint **d.** Microsoft Edge

11. The Arithmetic and Logic Unit controls the _____ in the computer.

a. Performance of all arithmetic and logical operations

b. Flow of electricity within the computer

c. Storage of data in computer

d. Transfer of data and instructions

12. MS Word is a software that is used for _____.

a. writing documents

b. drawing purposes

c. calculations

d. searching

13. Choose the odd device out.

a. 

b. 

c. 

d. 

ACHIEVERS SECTION

14. Ashmita wants to create a folder, so that she can store her school pictures at a single location on the desktop. But she does not know the correct sequence of steps required to follow to create a folder. Help her by rearranging the given steps in the correct sequence.

1. Change highlighted text to “School Pictures” and press Enter.

2. Right-click on the blank space of the desktop. A list will appear.

3. A new folder is created.

4. Click on New option, another list will appear.

a. → 3 → 2 → 5 → 1 → 4

b. 2 → 4 → 5 → 1 → 3

c. 2 → 5 → 1 → 4 → 3

d. 2 → 1 → 4 → 5 → 3

15. Identify the following.

1. It is a search engine.

2. It is Microsoft software.

a. 

b. 

c. 

d.