

Snapshot



A Book on Computer Science



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PREFACE

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

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

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

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

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

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

—Author



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Integrated with NCF 2022

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

DIGITAL AID

Student's Assist



Audio and Video eBook

♦ Features of a computer



Teacher's Assist

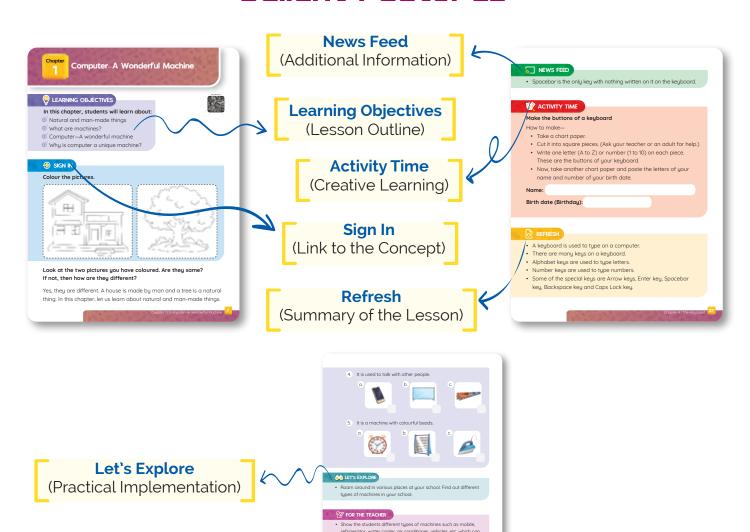


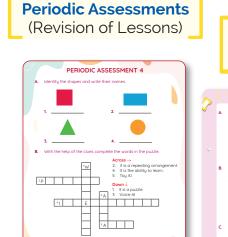
Test Paper Generator

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

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Salient Features







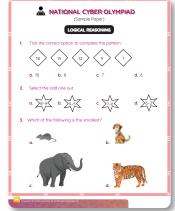


Project (Application of Knowledge)



National Cyber Olympiad

(Preparation for Cyber Competition)



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LEARNING OBJECTIVES

In this chapter, students will learn about:

- O Data and information
- Memory
- Measuring memory
- Types of memory
- Storage devices









Identify the pictures. Write the name of one item that you can store in each of them.

Name

a.



b.



C.



d.



Item that can be stored

Chapter 1 | Computers—Memory and Storage Devices

We remember what we have learnt about computers in the previous classes. We recall, retrieve and use this information when we need it. This information is stored in our brain as memory. We store whatever we experience in our memory. For example, we remember what we ate for breakfast today. This is because the information about what we ate is stored in our brain as memory.

Similarly, the computer also stores whatever instructions we put in its memory. Let us learn about computer memory in this chapter.

DATA AND INFORMATION

Data is a collection of facts such as letters, numbers, images, etc. A single letter of the alphabet can also be data. Data is unorganised and incomplete. Data is processed by the CPU and after processing it is organised, complete and becomes meaningful. This processed data is called **information**. Information is a group of data that is organised and has a specific meaning.

Let us look at an example to help us understand what are data and information.

Suppose you are hungry and there are only raw vegetables. But how will you eat these raw vegetables? We need to cook these vegetables so that we can eat them. Here, the raw vegetables are the data and the food cooked from these raw vegetables is the information. The raw vegetables become something that we can eat after processing, that is, cooking.

MEMORY

The **memory** of a computer is the storage space in the computer. It is used to store data, instructions and information.

MEASURING MEMORY

Memory unit is the amount of data and information that can be stored in a storage device. The basic unit for measuring the memory of a computer is **byte**. A byte is equal to eight bits. Computer memory is also measured in Kilobyte, megabyte, gigabyte, terabyte and so on.

Let us look at different memory sizes.

8 Bits	=	1 Byte
1024 Bytes	=	1 Kilobyte (KB)
1024 Kilobytes (KB)	=	1 Megabyte (MB)
1024 Megabytes (MB)	=	1 Gigabyte (GB)
1024 Gigabytes (GB)	=	1 Terabyte (TB)
1024 Terabytes (TB)	=	1 Petabyte (PB)
1024 Petabytes (PB)	=	1 Exabyte (EB)
1024 Exabytes (EB)	=	1 Zettabyte (ZB)
1024 Zettabytes (ZB)	=	1 Yottabyte (YB)

Chapter 1 I Computers—Memory and Storage Devices

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The term byte was coined by Werner Buchholz in June 1956.

TYPES OF MEMORY

Computer memory is of two types:

- Primary Memory
- Secondary Memory

Primary memory

Primary Memory is also called **Internal** or **Main Memory**. It is a memory that is already there in the computer and is directly accessed by the CPU. It stores the instructions and data we put on the computer while it is powered. Once the computer is switched OFF, the data stored in the memory will be erased.

Primary memory is of two types:

- Random Access Memory (RAM)
- Read Only Memory (ROM)

Random Access Memory (RAM)

It is a temporary memory. It stores all the data and instructions temporarily. RAM is also called **Volatile Memory.** This is because the information in this memory is deleted when the computer is switched OFF.



RAM

Read Only Memory (ROM)

ROM is a permanent memory. The data and information stored in this memory will not be erased even if the computer is switched OFF. ROM is also called **Non-Volatile Memory**.



Secondary Memory

Secondary memory is permanent and it is not directly accessed by the CPU. This type of memory is stored in secondary memory devices. These devices are also called **secondary storage devices**. They are categorised into three types:

- Magnetic Disk
- Optical Disc
- Flash Drive

Chapter 11 Computers—Memory and Storage Devices

STORAGE DEVICES

We need storage space to store our things such as cupboards for our clothes. Similarly, computers also need a storage device to store a large amount of data and instructions. As mentioned above, storage devices can be divided into three categories—magnetic disc, optical disc, and flash drive.

Magnetic Disk

It is a device that is covered with a magnetic coating. You can store and erase data in a magnetic disk any number of times.

Hard Disk

- The hard disk has one or more magnetic disks which are known as **Platters**. It is permanently fixed inside a CPU box. It is used to store a large amount of data and programs.
- Hard disks are available in different storage capacities.
- External hard disks are also available which can be used to store data. These are external storage devices and are connected to a computer through a USB port.



Hard Disk



An external hard disk connected to a laptop



СМ

Punch Cards were the earliest recorded digital storage device.

Chapter 1 I Computers—Memory and Storage Devices

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Optical Disc

An **optical disc** is an electronic data storage medium that uses optical technology and techniques to read and write data.

CD

The full form of the CD is **Compact Disc**. A CD can store up to 700 Megabytes (MB) of data. A CD is used to store and view audio, video, and other data. It is an external storage device and a CD drive is required to read the information stored in it.



CD

DVD

DVD stands for **Digital Versatile Disc**. A disk can hold more data than a CD. The storage capacity of DVDs ranges from 4.7 GB to 17 GB. A DVD is mostly used for storing and viewing data.



DVD

Blu-Ray Disc

The storage capacity of a Blu-Ray disc is up to 128 GB. It is mainly used to hold high-quality images, sounds, and videos. The storage capacity of a Blu-Ray Disc is higher than that of a DVD.



Blu-Ray Disk

Flash Drive

It is a small portable storage device that has a **USB (Universal Serial Bus)** connector. Pen Drive and Memory card are examples of flash drives.

Pen Drive

It is a small hard drive and can be plugged into a computer with a USB drive. A pen drive can store up to 1 Terabyte (TB) of data. It is often used for transferring data from one computer to another.



Pen Drive

Memory Card

It is a storage device for mobile phones, cameras, etc. It is mainly used for storing and transferring data. A memory card is very small in size and a card reader is required to read the data stored on it.



Memory card



A memory card in a card slot





Identify the storage devices.

1.



2.



3.



4.



5.



6.



REFRESH

- The computer stores whatever instructions we put in its memory.
- Data is a collection of facts such as letters, numbers, images, etc.
- Information is a group of data that is organised and has a specific meaning.
- The memory of a computer is the storage space in the computer.
- The basic unit for measuring the memory of a computer is byte.
- Computer memory is of two types—Primary and Secondary.
- Storage devices can be divided into three categories—Magnetic disc, Optical disc, and Flash drive.

BROWSE



Choose the correct option.

- 1. RAM stands for
 - a. Random Access Memory
- b. Random Align Memory
- c. Random Aside Memory

12

Chapter 11 Computers—Memory and Storage Devices

	2.	The Secondary Memory is categorised into					
		a. four types b. two types c. three types					
	3.	is a magnetic disk.					
		a. Hard Disk b. Compact Disc c. Digital Versatile Disc					
	4.	The storage capacity of a Blu-ray disc is up to					
		a. 120 GB b. 128 GB c. 115 GB					
	5.	1 GB has					
		a. 1024 MB b. 1024 GB c. 1024 TB					
В	Fill in	the blanks with the words given below.					
	Red	ad memory eight platters store					
	1.	A byte is equal to bits.					
	2.	The full form of ROM is Only Memory.					
	3.	The hard disk has one or more magnetic disks known as					
	4.	A CD is used to and view audio, video, and other data.					
	5.	A card is a storage device for mobile phones,					
		cameras, etc.					
G	Write	T for True Statements and F for False Statements.					
	1.	ROM stands for Read Only Memory.					
	2.	Hard Disk is an internal storage device.					
	3.	The storage capacity of a Blu-Ray Disc is not higher than that of a DVD.					
	4.	DVD stands for Digital Versatile Disc.					
	5.	You cannot store and erase data in a magnetic disk.					

Chapter 1 I Computers—Memory and Storage Devices

- D Answer the following questions in one word or two words.
 - 1. How many gigabytes make 1 terabyte?
 - 2. What is the other name for primary memory?
 - 3. Write one example of data.
 - 4. What is the basic unit for measuring the memory of a computer?
 - 5. Who coined the term byte?
 - 6. Write an example of a secondary storage device.
- E Answer the following questions.
 - 1. Differentiate between primary memory and secondary memory?
 - 2. What is the difference between RAM and ROM?
 - 3. What is a memory card?
 - 4. What is a storage device? Give two examples.
 - 5. What is an optical device? Explain its three types.

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Match the following.











b. Storage device for mobile phones and cameras





c. Storage capacity range from 4.7 GB to 17 GB





d. Storage capacity of up to 700 Megabytes





e. Storage capacity up to 1 TB

66 LET'S EXPLORE







- Go to your computer lab and make a list of storage devices used to store data.
- On a chart paper, paste pictures of five storage devices and write their functions and storage capacities.

FOR THE TEACHER

- Explain the concept of memory.
- Explain the relationship between different measuring units of computer memory.
- Show them the different storage devices.

Chapter 2

More on Windows 10



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Windows 10—Desktop
- Start menu
- This PC icon
- Taskbar
- Managing files and folders







ᢒ SIGN IN

Identify and circle the icons you see on the computer screen. Say the name of any two.























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hanter 2 | Mare on Windows 10

An **operating system** makes sure that the computer system is working smoothly. Windows is an operating system based on **GUI (Graphical User Interface)** provided by Microsoft. It has many versions such as Windows XP, Windows 7 and Windows 10. Windows 10 is the most popular version. Let us learn about Windows 10.

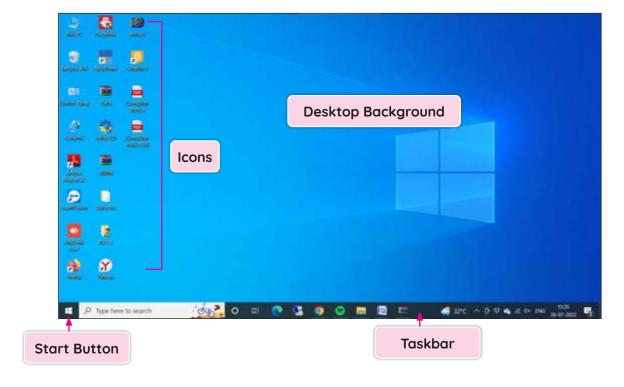
WINDOWS 10—DESKTOP

When we turn on a computer, it starts booting, and the Windows 10 welcome screen appears. After some time, the **desktop** will appear which is the final screen. It is the main interface between the user and the computer. A desktop has many components such as the Start menu, Taskbar, Background and Icons.





Windows 10 is running in 192 countries-that is almost every country on Earth.



Start Menu

Start menu is the location in Windows to find installed programs, files or folders. We can open the **Start menu** by clicking on the **Start** button . The **Start** menu has two panes. The **left pane** shows an alphabetical list of all the programs installed on the computer. The **right pane** contains tiles.

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Live Tiles

Live tiles are the shortcuts of applications found in a grid on the right pane. Information such as news, emails and weather are displayed on these titles. These tiles also display some games. We can make, resize, add or remove these tiles.

Resizing a Tile

Resizing a tile means changing the size of tiles. We can choose small, medium, wide or large size depending on the application.

Follow these steps to resize a tile:

- 1. Click on the **Start** button.
- 2. Select the **tile** you want to resize and right-click on it.
- **3.** Select the **resize** option.
- **4.** Select the **size**. The tile will be resized.



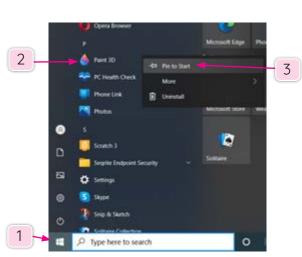
Left pane

Adding a Tile

We can add more tiles to the existing tiles.

Follow these steps to add a tile:

- 1. Click on the **Start** button
- Scroll to the name of the application or program. Right-click on the app you want to add to the Start menu.
- **3.** Click on **Pin to Start**. The selected app will appear on the tile.



Right pane

Live

Tiles

Chapter 2 | More on Windows 10

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Removing a Tile

We can remove the tile of an app.

Follow these steps to remove a tile:

- 1. Right-click on the **tile** you want to remove.
- 2. Click on **Unpin from Start**. The tile will be removed.

ICONS

Icons are the small images or symbols that appear on the desktop. They represent programs, files and folders. They are the shortcut of the programs installed

on the computer such as This PC and Recycle Bin. We can click on these icons to open the programs.

.

D

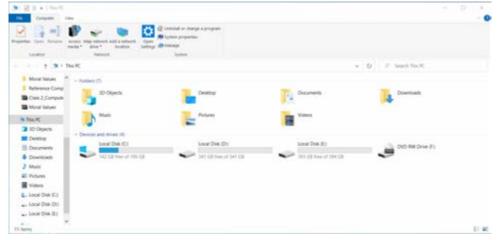
This PC Icon Clicking on This PC icon opens a window that shows all the files and folders

saved on the computer. This window is also known as **File Explorer**. In this window, we can create, delete, rename, copy, move, or search files or folders.



山 💿 🛂 🧿 😂

This PC icon



File Explorer window

Recycle Bin

We can find all the deleted folders and files in the **Recycle Bin**. If a file is deleted by mistake, we can restore it to its original place.

To open the Recycle Bin window, double-click on the Recycle Bin icon on the desktop. The items in this folder can be permanently deleted or restored to their original places.



Recycle Bin icon

Delete Permanently

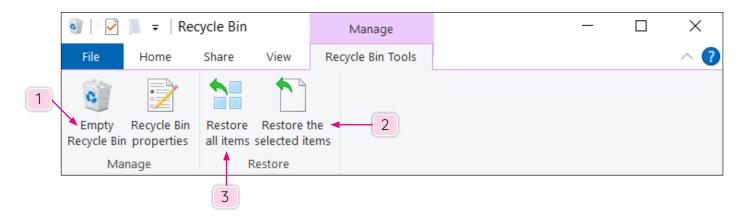
1. To delete all the files and folders permanently, click on the **Empty Recycle Bin** button.

Chapter 2 I More on Windows 10

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Restore

- 2. To restore selected files or folders, click on the Restore the selected items button.
- 3. To restore all the files and folders, click on **Restore all items**.



TASKBAR

Taskbar is the horizontal bar located at the bottom of the desktop. It shows all programs opened in different windows. It has Start Button and Notification Area. It also contains shortcuts to applications that are often used. We can change the application we want to add to the Taskbar.

Pin an application to the Taskbar

To pin an application to the Taskbar means to add a shortcut to the Taskbar.

Follow these steps to pin an application to the Taskbar:

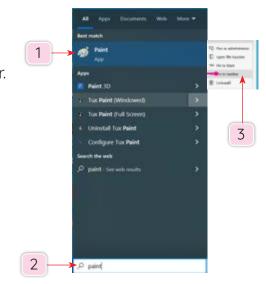
- 1. Type and **search** the name of the application you want to pin in the search box. Let's search for Paint.
- 2. Right-click on the application name in the search results. A menu with options appears.
- Click on Pin to the taskbar option. The application icon will appear in the Taskbar.

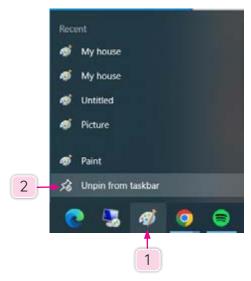
Unpin an application from the Taskbar

To unpin an application to the Taskbar means to remove a shortcut from the Taskbar.

Follow these steps to pin an application to the Taskbar:

 Right-click on the application icon on the Taskbar. A menu with options appears.





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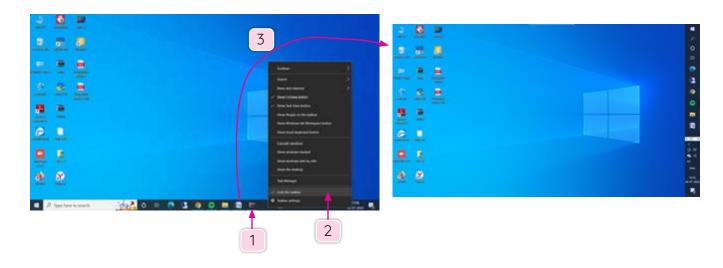
2. Click on **Unpin to the taskbar** option. The application icon will be removed from the Taskbar.

Moving the Taskbar

The position of the Taskbar can be changed. It can be moved from the bottom of the screen and placed on any of the four sides of the screen.

Follow these steps to change the position of the Taskbar:

- 1. Right-click on the **Taskbar**. A menu of options will appear.
- 2. Uncheck the 'Lock the taskbar' by clicking on it.
- **3.** Click on the Taskbar and **drag** it to the side of the screen.



MANAGING FILES AND FOLDERS

In the previous class, we have learnt about files and folders. We can make changes to existing files and folders such as renaming the file. We can also copy, move, or delete an existing file or folder. Let us learn how to make these changes.

Copy a File or Folder

When we copy a file or folder, we make a copy of the original file or folder. It can be saved in the same location or in another location, without moving it from the original location.

Follow these steps to move a file or a folder to a new location:

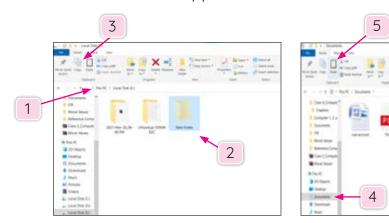
Method 1

- 1. Browse the location of the file or folder you want to delete in **File Explorer**.
- 2. Select the file or the folder to be copied.
- 3. Click on the Copy command, in the Clipboard group.
- 4. Select the location where you want to move it.
- 5. Click on the **Paste** \bigcap_{Paste} command, in the **Clipboard** Group.

Chapter 2 I More on Windows 10 21

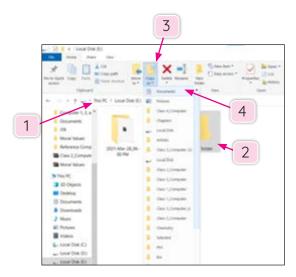
Computer G4_Ch-2.indd 21 23-02-2023 13:55:00

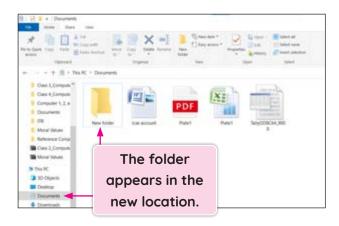
The selected file or folder will appear at the new location.



Method 2

- 1. Browse the location of the file or folder you want to delete in **File Explorer**.
- 2. Select the file or the folder to be moved.
- 3. Click on the **Copy to** command, in the **Organize** group.
- **4.** Select the location where you want to save it. Click on it. The file or the folder will copy to the new location.





The copied folder appears at the new location.

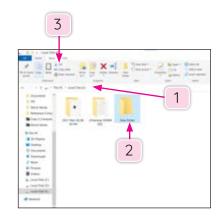
Move a File or a Folder

A file or a folder saved in one location can be moved to another. The file or the folder is removed from the original location and placed at the new location when we move it.

Follow these steps to move a file or a folder to a new location:

Method 1

 Browse the location of the file or folder you want to move in File Explorer.

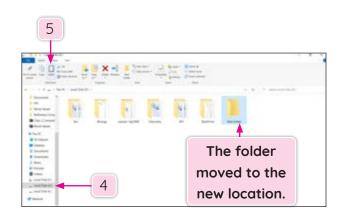


Chapter 2 | More on Windows 10

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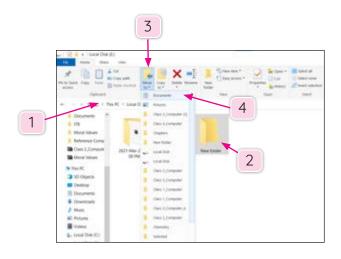
- 2. Select the file or the folder to be moved.
- Click on the Cut command, in the Clipboard group.
- **4.** Select the location where you want to move it.
- Click on the Paste command, in the Clipboard Group.

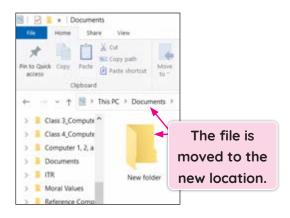
The selected file or folder will move to the new location.



Method 2

- 1. Browse the location of the file or folder you want to delete in **File Explorer**.
- 2. Select the file or the folder to be moved.
- 3. Click on the **Move to** command, in the **Organize** group.
- **4.** Select the location where you want to move it. The file or the folder will move to the new location.





QUICK BYTE

The Shortcut keys to-

Copy a file/folder: Ctrl + C

Paste a file/folder: Ctrl + V

• Cut a file/folder: Ctrl + X

СМ

Chapter 2 | More on Windows 10

Delete a File or Folder

We can delete a file or folder saved on the computer system.

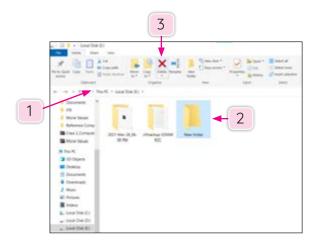
Follow these steps to delete a file or folder:

Method 1

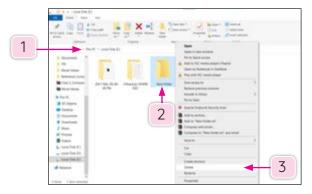
- Browse the location of the file or folder you want to delete in File Explorer.
- 2. Select the file or the folder to be deleted.
- Click on the Delete X command, in the
 Organize group. The folder will disappear.

Method 2

- Browse the location of the file or folder you want to delete in File Explorer.
- 2. Right-click on the file or folder you want to delete. A list of commands will appear.
- 3. Click on the **Delete** option.



Method 1



Method 2



СМ

Windows 10 is the first version of Windows with digital personal assistance, Cortana.

ACTIVITY TIME





Write the functions for these keyboard shortcuts.

- 1. Ctrl + V
- 2. Ctrl + X
- 3. Ctrl + C

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- Start menu is the location in Windows to find installed programs, files or folders.
- Live tiles are the shortcuts of applications found in a grid on the right pane.
- Icons are the small images or symbols that appear on the desktop.
- Taskbar is the horizontal bar located at the bottom of the desktop
- We can find all the deleted folders and files in the Recycle Bin.
- We can make changes to existing files and folders such as renaming the file.

	BRO	WSE						
A	Choose the correct option.							
	1.	This is the Start menu button.						
		a. 4	b. (C.	-			
	2.	The start menu has						
		a. three panes	b. two panes	C.	four panes			
	3.	To add a tile, we have to click on						
		a. Pin to Taskbar	b. Unpin to Start	C.	Pin to Start			
	4.	Clicking on This PC icon opens a window. This window is known as						
		a. File Explorer	b. This PC	C.	File			
	5.	We can find all the deleted files and folders in						
		a. This PC	b. Start menu	C.	Recycle Bin			

Computer G4_Ch-2.indd 25 23-02-2023 13:55:0

B Fill in the blanks with the words given below.

	left	symbols	Empty	Taskbar	tiles			
	1.	Icons are		the	at appear	on the deskto	p.	
	2.	shows all programs opened in different windows.					dows.	
	3.	The		pane sh	ows an al	phabetical list (of all pro)-
		grams installed	on the co	mputer.				
	4.	Live are the shortcuts of applications found in a				n a		
		grid on the righ	nt pane.					
	5.	To delete all the	e files and	folders permo	anently, c	lick on the		
<u>.</u>				Recycle Bin.				
G	Write	te T for true statements and F for false statements.						
	1.	You can resize a tile from the right pane.						
	2.	You cannot restore the files after deleting them.						
	3.	We can make changes to existing files and folders such as renaming.						
	4.	A file or a folder saved in one location cannot be moved to another.						
	5.	You cannot pin Paint to the Taskbar.						
D	Answ	er the following	g question	s in one word	l or one s	entence.		
	1.	What is the location in Windows to find installed programs, files or folders?						
	2.	Where do you click to open Start menu?						

Chapter 2 I More on Windows 10

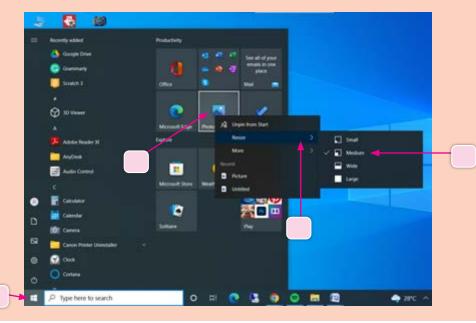
Computer G4_Ch-2.indd 26

- 3. What is the shortcut key to copy a file?
- 4. What do you call the horizontal bar located at the bottom of the desktop?
- 5. Where can you find the notification menu?
- E Answer the following questions.
 - 1. What are live tiles?
 - 2. Write the steps to remove a tile.
 - 3. What are icons?
 - 4. What is a Taskbar? Write the steps to change the position of a Taskbar.
 - 5. Write the steps to delete a file or a folder.



СТ

Fill in the boxes with the correct sequence (1-4) to resize a tile.



Chapter 2 I More on Windows 10

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Activity A: Select any of the app that is not pinned on the Taskbar and pin it to the Taskbar.

Activity B: To create a folder and move it to a new location.

- First create a new folder and save it with your name on the desktop.
- Now, copy-paste the folder and save it in D: drive.
- Then, go back to Desktop and cut-paste the folder you have created and save in D: drive.

FOR THE TEACHER

- Discuss the various components of the desktop.
- Explain the various functions of the icons This PC and File Explorer.
- Explain how to work with tiles.
- Explain how to create, rename or delete file or folder.

PERIODIC ASSESSMENT 1

A. Identify the following images and write their names.







- 1. _____ 2. ____ 3. ____
- B. Fill in the blanks using the words given below.

RECYCLE BIN DESKTOP ICON BYTE TWO

- **1.** _____ is the basic unit of measuring the computer memory.
- 2. Deleted files are stored in ______
- **3.** _____ is the main interface between the user and computer.
- **4.** Computer memory is categorised into ______ types.
- **5.** _____ are the small symbols of programs on the desktop.
- C. Match the following.
 - **1.** 1024 bytes
 - 2. Right Pane
 - **3.** Primary Memory
 - **4.** Magnetic Disk
 - 5. Copy a File

- a. Hard Disk
- **b.** ROM
- c. Ctrl + C
- d. 1 Kilobyte
- e. Live Tiles

Periodic Assessment 1

Chapter

Editing Text in MS Word 2016



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Selecting text
- © Copying or Cutting text
- O Deleting text
- Inserting text
- **O** Undo and redo
- Spelling and Grammar check



SIGN IN

Match the following.

- 1. Ribbon
- 2. File Tab
- 3. Rulers
- 4. Zoom Slider
- 5. Status Bar
- 6. Quick Access Toolbar

a.







b. Page 1 of 1





C.











e.

d.



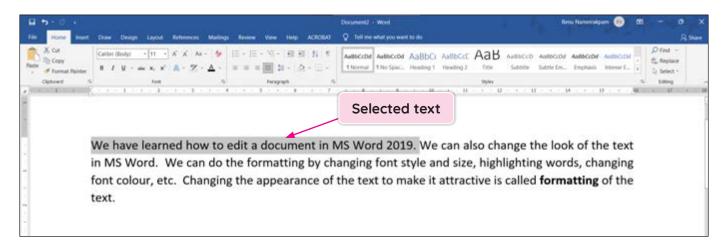
f.



MS Word is word processing software that helps us to create and print documents. We can also edit existing documents in MS Word. To edit a document means making changes in the document. We have already learnt how to create and save a document. In this chapter, let us learn how to edit an existing document.

SELECTING TEXT

We can make changes to the existing text. To make the required changes, we need to select it. In the picture given below, we can see that a sentence has been selected.



We have learned that we can select text by dragging the cursor over it. Let us learn how to select text using shortcuts in MS word 2016. Text can be selected using a keyboard or a mouse.

Using a keyboard to select text:

- Press + to select a letter on the right of the cursor.
- Press to select a letter on the left of the cursor.
- Press + to select one line up the cursor.
- Press to select one line down the cursor.
- Press + 1 to select a word on the right of the cursor.
- Press + to select a word on the left of the cursor.

Using a Mouse to select text:

- Double-click on a **word** to select it.
- Click on the left margin next to the line to select it.
- Click while holding the we key on a **sentence** to select it.
- Click three times on a **paragraph** to select it.

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The original name of MS Word was 'Multi-Tool Word' but it was shortened to its current name 'Word' as they felt the name is too long.

COPYING OR CUTTING TEXT

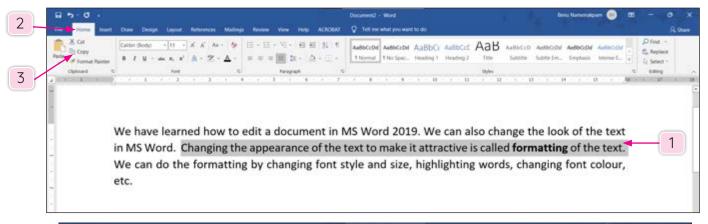
We can copy or cut text and paste it in a different place.

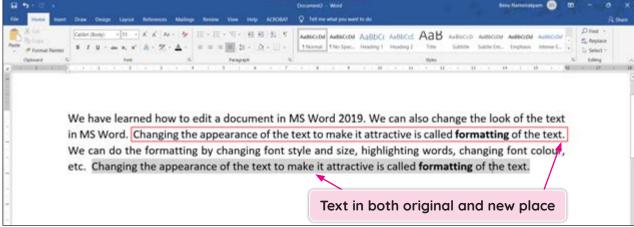
Copying the text means creating a duplicate of the original text. When we copy and paste the text, it will remain in the original place and where it is pasted.

Cutting the text means removing the original text. When we cut and paste the text, it will be removed from its original place. It will move to the new place.

Follow these steps to copy or cut text:

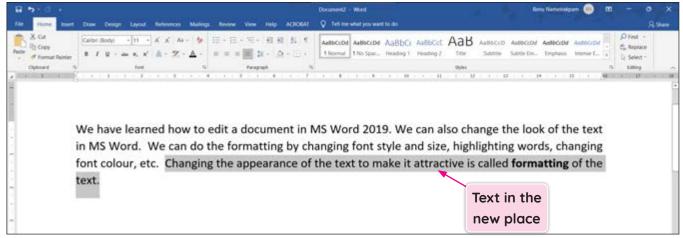
- 1. Select the text you want to copy.
- 2. Click on the **Home** tab.
- 3. Click on the Copy button 🖺 Copy or Cut button 💥 Cut in the Clipboard group.
- **4.** Select the place where you want to copy the selected text.
- 5. Click on the **Paste** button in the **Clipboard** group.





After copy and paste

Chapter 3 | Editing Text in MS



After cut and paste



The shortcut key to-

Copy text: Ctrl + C

Cut text: Ctrl + X

Paste text: Ctrl + V

СМ

DELETING TEXT

We can easily remove text if we have made a mistake while typing. It can be done using the **Backspace** or the **Delete** key.

Using Backspace Key

- To delete the text to the left of the cursor, press Backspace key.
- To delete the word to the left of the cursor, press + Backspace key.

Using Delete Key

- To delete the text to the right of the cursor, press key.
- To delete the word to the right of the cursor, press + key.

To delete a group of text, a sentence or a paragraph, select the text and press or key.

INSERTING TEXT

We can insert text between existing words. To insert the text, place the pointer where the text is to be inserted and click. The cursor will appear. Now, type the text and you can see the inserted text where the cursor appears.

Chapter 3 | Editing Text in MS Word 2016

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UNDO AND REDO

Undo is used to remove or cancel the previous action. For example, if we mistakenly delete a word, we can recover it by using undo action. To undo an action, click on the **Undo** button on the Quick Access Toolbar.

Redo is used to reverse the action of Undo command. To undo an action, click on the **Redo** button on the Quick Access Toolbar.

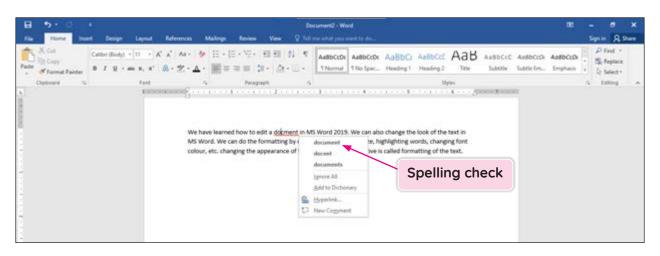
Shortcut keys:

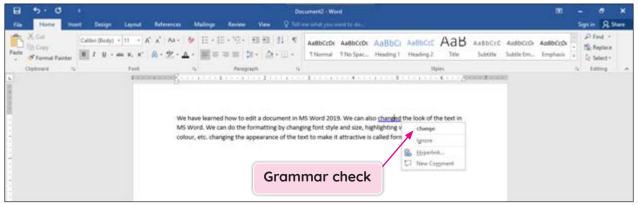
To Undo: Ctrl + ZTo Redo: Ctrl + Y

SPELLING AND GRAMMAR CHECK

MS Word has a Spelling and Grammar check feature that helps us create error-free documents. It highlights if we make any spelling or grammatical mistakes. In MS Word 2016, spelling mistakes are shown by a **red wavy line** and grammatical mistakes are shown by **two blue lines**.

When we right-click on words with a red wavy line or two blue lines, a list of suggestions to replace the incorrect word appears. Choose and click the correct word on the list.





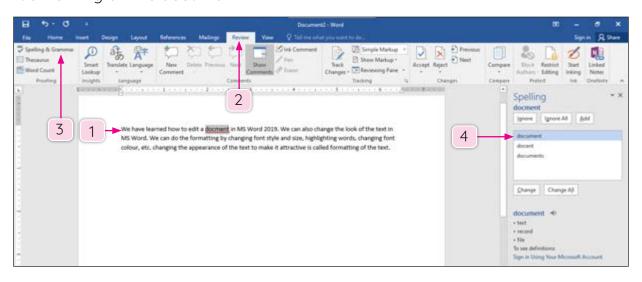
Chapter 3 | Editing Text in MS Word 2016

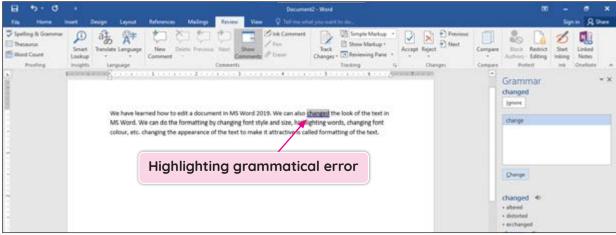
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To check spelling and grammar through Spelling and Grammar button, follow these steps:

- 1. Click at the beginning of the document.
- 2. Click on the **Review** tab on the ribbon.
- 3. Click on Spelling and Grammar in the Proofing group.
 The first mistake will be selected and displayed with a list of suggested options in the side panel.
- **4.** Choose and click on the suggestion you want to use for correcting the error. The word will be replaced with the correct option.

After the first mistake, it will select the next mistake and display it on the side panel. Choose the correct option and click on it. Click **Ignore once** or **Ignore All option** to skip errors and continue working on the document.





QUICK BYTE

СМ

Shortcut key to check Spelling and Grammar: F7

Chapter 3 I Editing Text in MS Word 2016

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СМ

Word is the most popular word processor.

ACTIVITY TIME

СТ

Match the following.

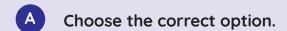
- 1.
- 2.
- 3.
- 4. 5
- 5.

- a. Cut
- b. Undo
- c. Paste
- d. Redo
- e. Copy

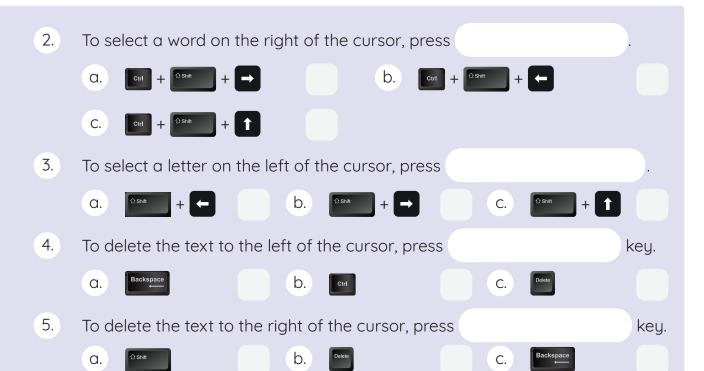
REFRESH

- MS Word is word processing software that helps us to create and print documents.
- Text can be selected using a keyboard or a mouse.
- Copying the text means creating a duplicate of the original text.
- Cutting the text means removing the original text.
- Undo is used to remove or cancel the previous action.
- Redo is used to reverse the action of Undo command.
- MS Word has a Spelling and Grammar check feature that helps us create error-free documents.

BROWSE



- 1. To select one line up the cursor, press
 - a.
- ∯ Shift
- -
- b.
- û Shift
- 1
- C.
- ជាន
- **-** + **C**



B Fill in the blanks with the words given below.

means to make changes in the the text means creating a dupli original text. the text means removing the or	ndo Edit	ndo
the text means creating a dupli original text.		
original text.		
the text means removing the or	original text.	orig
is used to remove or cancel the		
is used to reverse the action of		



- 1. Double-click on a paragraph to select it.
- 2. Ctrl + V is the shortcut key to copy text.

Chapter 3 | Editing Text in MS Word 2016

- 3. We use the Backspace key to delete text.
 4. We cannot check spelling and grammatical mistakes in MS Word.
 5. In MS Word, spelling mistakes are shown by a red wavy line.
- Answer the following questions in one word or one sentence.
 - 1. How do you select a line using a mouse?
 - 2. How do you select a word using a mouse?
 - 3. What is the shortcut key to Redo?
 - 4. What is the shortcut key to Undo?
 - 5. What is the shortcut key to check Spelling and Grammar?
- E Answer the following questions.
 - 1. What is the difference between copying and cutting text?
 - 2. Write the steps to delete text using the Delete key.
 - 3. How do you insert text between two existing words?
 - 4. What is the difference between Redo and Undo?
 - 5. What is the Spelling and Grammar check feature in MS Word? How are they shown in a document?

Chapter 3 I Editing Text in MS Word 2016

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Arrange the commands in the correct group.

- 1. Undo
- 2. Spelling check
- 3. Paste
- 4. Redo
- 5. Grammar check
- 6. Cut
- 7. Copy

QUICK ACCESS TOOLBAR	PROOFING	CLIPBOARD

66 LET'S EXPLORE





- In the lab, open MS word and type **'Shortcut Keys'** and operate all the shortcut keys mentioned in this chapter
- Now, on a chart paper, create a poster of all the shortcut keys and their functions. Refer to the image given below.



FOR THE TEACHER

- Explain what editing a document means.
- Show the students how to edit a document using the editing features in MS Word discussed in the chapter.
- Ask the students to edit a document.

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Chapter 3 | Editing Text in MS Word 2016



Formatting Text in MS Word 2016



LEARNING OBJECTIVES

In this chapter, students will learn about:

- © Changing Font Style
- © Changing Font Size
- © Changing Font Colour
- © Changing Font Case
- Mighlighting Text
- Applying Bold, Italic and Underline
- Applying Text Effects
- © Changing Text Alignment
- Applying borders
- Applying Shading
- **Sullets and Numbering**







→ SIGN IN

Design your school timetable. Fill in the table using the given colour code:

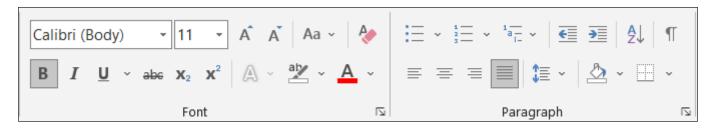
Name of the days—Blue; Maths—Green, Hindi—Pink, English—Purple, Computer—Yellow, Social Science—Red and Science—Orange. You can add other subjects and the number of periods if required.



40

Chapter 4 | Formatting Text in MS Word 2016

We have learnt how to edit a document in MS Word 2016. We can also change the look of the text in MS Word. Changing the appearance of the text to make it attractive is called **formatting** of the text. We can do the formatting by changing font style and size, highlighting words, changing font colour, etc. Formatting can be done using the **Font** group and **Paragraph** group which are contained in the **Home** tab.



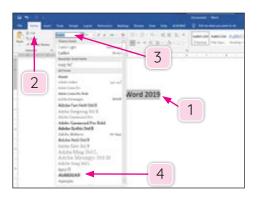
Let us learn about the formatting text in detail.

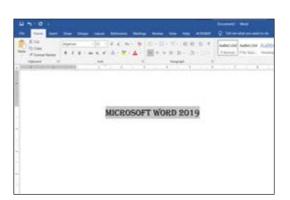
CHANGING FONT STYLE

Font is the characteristic of a specific style and size used for typing the text. When we open a new blank MS Word document, the default font style and size are already in place. The default font is Calibri and the font size is 11 point. These can be changed according to the requirement.

Follow these steps to change the font style of the text:

- 1. Select the text to be formatted.
- 2. Click on the **Home** tab.
- Click on the drop-down arrow to the right of the Font boxCalibri (Body) in the Font group. A list of all the fonts appears.
- 4. Choose and click on the required font. The font will be changed.





Calibri

Ourla 145° All Foets

Abadi Adobe Ambu Alida Culim Pu

Adobe Carbos Per Bold Adobe Deveragari Adobe Fan Heiti Std B

Adobe Fangsong Std R

Adobe Gothic Std B Adobe Hebene Adobe Helti Std R

Adobe Ming Std



СМ

The small window that appears on selecting the text has all the basic formatting command buttons.

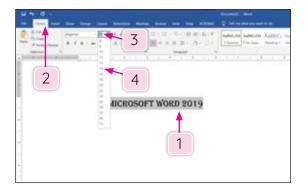
Chapter 4 I Formatting Text in MS Word 2016

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CHANGING FONT SIZE

Follow these steps to change the **font size** of the text:

- 1. Select the text to be formatted.
- 2. Click on the **Home** tab.
- 3. Click on the drop-down arrow to the right of the **Font size** box 11 in the **Font** group. A list of all the font sizes appears.
- 4. Choose and click on the required font size. The font size will be changed.





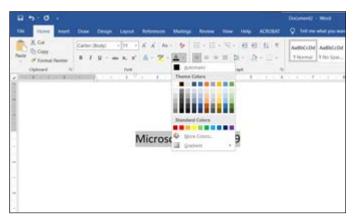
CHANGING FONT COLOUR

Follow these steps to change the **font colour** of the text:

- 1. Select the text to change the font colour.
- 2. Click on the **Home** tab.
- Click on the drop-down arrow to the right of the Font color box A in the Font group. A colour palette appears.
- **4.** Choose and click on the colour you want to change the text. The font colour will be changed.



Colour Palette





Chapter 4 I Formatting Text in MS Word 2016

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CHANGING FONT CASE

In MS Word, we can change the text to uppercase, lowercase or other common capitalization. Word 2016 offers five case options.

Follow these steps to change the **case** of the selected text:

- Select the text to be formatted.
- Click on the **Home** tab.
- Choose the required option from the following list and—
- Click on Sentence case to capitalize only the first letter of a sentence.
- Click on lowercase to set all the letters as lowercase.
- Click on **UPPERCASE** to capitalize all the letters.
- Click on Capitalize Each Word to capitalize the first letter of each word.
- Click on **tOGGLE cASE** to shift between Capitalize Each Word and the opposite. (Capitalize Each Word—cAPITALIZE eACH wORD)

Sentence case. Jowercase UPPERCASE Capitalize Each Word tOGGLE cASE

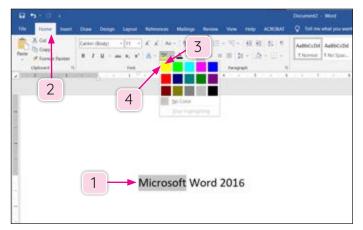
Options offered by Word

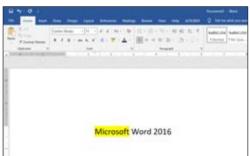
HIGHLIGHTING TEXT

The important text in a document can be highlighted. Highlighting text means placing a coloured rectangle over it. The background colour of the selected text changes when we highlight them.

Follow these steps to highlight the selected text:

- 1. Select the text to be highlighted.
- 2. Click on the **Home** tab.
- 3. Click on the drop-down arrow to the right of the **Text Highlight Color** button in the **Font** group. A colour palette appears.
- 4. Choose and click on the colour you want to use.





Chapter 4 I Formatting Text in MS Word 2016

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APPLYING BOLD, ITALIC AND UNDERLINE

To make the text **Bold** means to make the text darker than the rest of the text.

- To make text *italicised* means to make it slanted to the right.
- To <u>underline</u> text means to put a line under it.

Follow these steps to format the selected text:

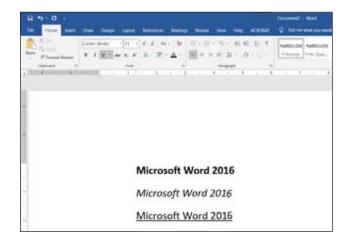
- 1. Select the text to be highlighted.
- 2. Click on the **Home** tab.
- 3. Choose the required option from the following list—
 - Click on **B** button in the **Font group** to make the selected text bold.
 - Click on **I** button in the **Font group** to make the selected text italics.
 - Click on **u** button in the **Font group** to underline the selected text.

QUICK BYTE



The shortcut key to-

- make the text bold: Ctrl+B
- make the text italicized: Ctrl+I
- underline the text: Ctrl+U

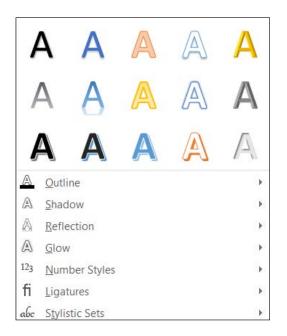


APPLYING TEXT EFFECTS

Some of the text effects that can be applied to the text include making the text as blurred, outlining the text, changing font colour and style and shadowing the text.

Follow these steps to apply text effect:

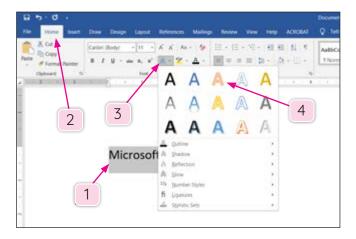
- Select the text for which text effects are to be added.
- 2. Click on the **Home** tab.
- Click on the **Text Effects** button in the **Font** group.The available effects will appear.
- **4.** From the effects, choose and click on the effect you want to apply.

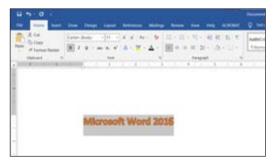


Text effects

Chapter 4 I Formatting Text in MS Word 2016

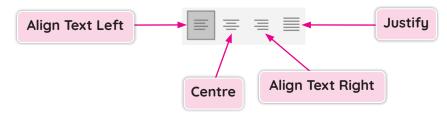
Computer G4_Ch-4.indd 44 27-02-2023 11:10:10





CHANGING TEXT ALIGNMENT

Alignment refers to how the text is set with respect to the margins in a document. MS Word has four alignment options—left, centre, right and justify. The default setting in MS Word is left-align. We can change this alignment to any of the given options.



Follow these steps to change the alignment:

- 1. Select the text.
- 2. Click on the **Home** tab.
- 3. Choose and click on one of the alignment options in the **paragraph** group.
 - Click on **Align Text Left** | button to set the text towards the left margin.
 - Click on **Centre** = button to set the text in the centre of the left and right margins.
 - Click on **Align Text Right** | button to set the text towards the right margin.
 - Click on **Justify** button to set the text evenly between the left and the right margins.



Applying Align Text Left



Applying Align Text Right



Applying Centre alignment



Applying Justify alignment

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QUICK BYTE



The Shortcut key to—

• align text Left: Ctrl + L

Centre align: Ctrl + E

align text Right: Ctrl + R

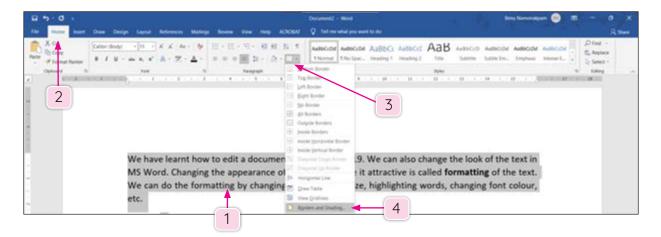
• Justify align: Ctrl + J

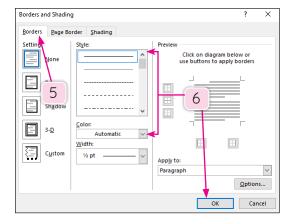
APPLYING BORDERS

We can make a document attractive by adding a border to a set of text or the whole page. Borders can be a set of lines, shapes, boundaries or graphics.

Follow these steps to apply a border to the selected text:

- 1. Select the text.
- 2. Click on the Home tab.
- 3. Click on the **Borders** option in the paragraph group.
- Select Borders and Shading from the list box. Borders and Shading dialog box will appear.
- 5. Click on the **Borders** tab in the dialogue box.
- **6.** Choose a border style and colour and click on the **OK** button.







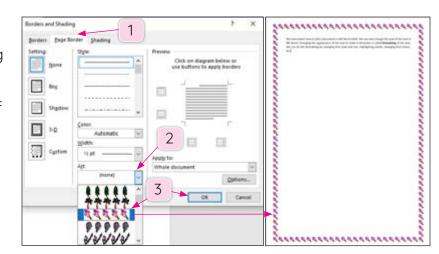
Chapter 4 | Formatting Text in MS Word 2016

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We can also apply artistic border to a page.

Follow these steps to apply artistic border:

- Click on the Page Border tab in the Borders and Shading dialog box.
- Click on the drop-down arrow of the Art section. You can see the Art section box below the Color box.
- Choose and click on the border style.





NEWS FEED



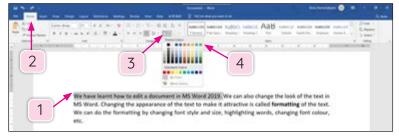
We can also create a custom border in MS Word using clip art, a picture file, a scanned photograph, or a picture created in a drawing program.

APPLYING SHADING

Shading is applied to make the text attractive.

Follow these steps to apply shading:

- 1. Select the text.
- 2. Click on the **Home** tab.
- **3.** Click on the **Shading** option in the paragraph group.
- 4. Choose a colour.





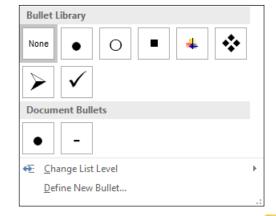
BULLETS AND NUMBERING

We can format a list in a document by using bullets and numbers.

A **bullet** is a small symbol such as a dot, tick, or square used to list items.

Follow these steps to use bullets:

Click on the Home tab.



Chapter 4 I Formatting Text in MS Word 2016

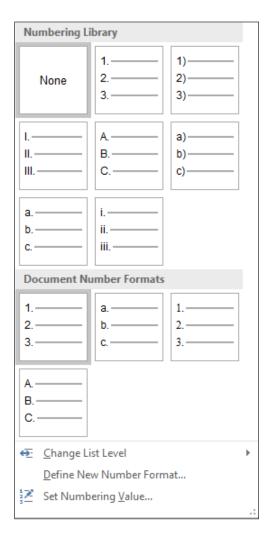
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- 2. Click on the drop-down arrow next to the **Bullets** in the Paragraph group.
- **3.** Select and click the bullet style you want to use from the **Bullet Library**.
- 4. Type the first item of the list next to the bullet. Then, press the **Enter** key. The next bullet will appear below it.

To finish the list, press the **Enter** key twice.

Follow these steps to apply **numbering**:

- 1. Click on the **Home** tab.
- 2. Click on the drop-down arrow next to the **numbering** in the Paragraph group.
- **3.** Select and click the numbering style you want to use from the **Numbering Library**.
- **4.** Type the first item of the list next to the numbering.
- **5.** Then, press the **Enter** key. The next number will appear below it.
- **6.** To finish the list, press the **Enter** key twice.





Chapter 4 I Formatting Text in MS Word 2016

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- Changing the appearance of the text to make it attractive is called formatting of the text.
- Font is the characteristic of a specific style and size used for typing the text.
- The default font is Calibri and the font size is 11 point.
- We can change the font style, size, colour and case.
- Highlighting text means placing a coloured rectangle over it.
- Alignment refers to how the text is set with respect to the margins in a document.
- We can format a list in a document by using bullets and numbers.

-0	BRO	WSE			
	489				
A	Choo	se the correct answer.			
	1.	The default font in MS Wor	rd 2016 is		
		a. Calibri	b. Arial	c. Algerian	
	2.	The shortcut key to make t	the text bold is		
		a. Ctrl + I	b. Ctrl + B	c. Ctrl + U	
	3.	To outline the text, we have	e to click on		
		a. Text highlight color	b. Font color	c. Text effects	
	4.	The shortcut key to align the	ne text left is		
		a. Ctrl + E	b. Ctrl + L	c. Ctrl + R	
	5.	The shortcut key to Justify	text alignment is		
		a. Ctrl + J	b. Ctrl + I	c. Ctrl + L	

Chapter 4 I Formatting Text in MS Word 2016

B Fill in the blanks with the words given below.

	bul	let	11	Ctrl + E	formatting	Ctrl + U		
	1.	Chang	ing the c	appearance of the	of the text to make e text.	it more attrac	tive is called	
	2.	The de	fault for	nt size in MS	Word 2016 is		point.	
	3.	The sh	ortcut ke	ey to underli	ne a text in MS Wo	rd 2016 is		
	4.	A		is a	small symbol such	as a dot.		
	5.	The sh	ortcut ke	ey to align th	ne text in the centre	eis		
G	Write	T for t	rue stat	ements and	I F for false staten	nents.		
	1.	We car	nnot chc	inge the font	t colour in MS Word	d 2016.		
	2.	MS Wo	ord 2016	offers five co	ase options.			
	3.		palette ghlight (· ·	clicking on the drop	o-down arrow (on the	
	4.	Pressir	ng Ctrl +	B key will ito	llicise the text.			
	5.	You ca	nnot out	tline the text	in MS Word 2016.			
D	Answ	er the f	ollowing	g questions in	n one word or one	sentence.		
	1.	What o	does it m	nean to make	e the text bold?			
	2.	What o	does it m	nean to italici	ize the text?			

Chapter 4 I Formatting Text in MS Word 2016

- 3. What is the default text alignment set in MS Word?
- 4. What is the shortcut to align the text towards the right margin?
- 5. What does it mean to highlight text?
- **E** Answer the following questions.
 - 1. Write the steps to change the font size of text?
 - 2. List the different case options offered by MS Word.
 - 3. What are some of the text effects that can be applied to a text?
 - 4. Write the steps to apply border to a document.
 - 5. What is a bullet? Write the steps to insert bullets to a document.

ACTIVITY TIME





Match the following buttons with their function.

- 1.
- 3. ≡
- 4. aby -
- 5. A

- a. to highlight text
- b. to change font colour
- c. to centre align the text
- d. to left align the text
- e. to format items in a list

Chapter 4 | Formatting Text in MS Word 2016







Perform the activity given below in the computer lab.

Open a new MS Word and type the following text.

ALICE was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she peeped into the book her sister was reading, but it had no pictures or conversations in it, "And what is the use of a book", thought Alice, "without pictures or conversations?"

- Lewis Carroll, Alice's Adventures in Wonderland

Now, format the text:

- Change the font size to 13.
- Change the font style to any of your choice.
- Italicise the text.
- Bold and underline the author and the book name.
- Save and name your document.

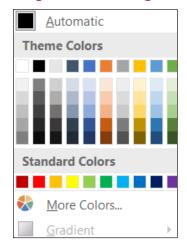
FOR THE TEACHER

- Elaborate on the formatting features of Word.
- Explain the usefulness of the Bullets and Numbering feature.
- Show the students the different text effects available in MS Word.
- Ask the student to format an unformatted text using all the formatting features of Word.

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PERIODIC ASSESSMENT 2

A. Identify the following images and write their names.







- 1. _____ 2. ____ 3. ____
- B. Fill in the blanks using the words given below.

RED WAVY SENTENCE CASE BACKSPACE REDO CUTTING

- 1. _____ key is used to remove the text.
- **2.** _____ the text means removing the original text.
- **3.** _____ is used to reverse the action of the Undo command.
- 4. _____ lines represent the spelling mistakes in MS Word.
- **5.** _____ is used to capitalise the first letter of a sentence.
- C. Match the following.
 - 1. 5
 - 2. <u>A</u> ~
 - 3. 💥
 - 4. ab/
 - 5. B

- a. Bold button
- **b.** Cut button
- c. Undo button
- d. Font Color box
- e. Text Highlight Color box

Periodic Assessment 2

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TEST PAPER 1

A.	Ch	oose the correct opti	on.	
	1.	1024 Gigabytes make	es 1	
		a. Kilobyte	b. Megabyte	c. Terabyte
	2.	The Start menu has _		panes in Windows 10.
		a. three	b. two	c. four
	3.	Ctrl + V shortcut key	is used for	text.
		a. pasting	b. copying	c. cutting
	4.	Font group is present	t in	tab, in MS Word.
		a. Insert	b. Review	c. Home
	5.	RAM stands for		<u> </u>
		a. Random Access M	1emory	
		b. Read Access Mem	nory	
		c. Random Adaptab	le Memory	
В.	Fill	in the blanks.		
	1.		is a permaner	nt memory.
	2.		text is slanted	to the right.
	3.		the text mean	s duplicating the original text.
	4.		is a flash drive	e that can be used in mobile
		phones.		
	5.		are the shortc	uts of applications found in a grid
		on the right pane in \	Windows 10.	
C.	Wr	ite T for true stateme	ents and F for false	statements.
	1.	RAM is also known as	s non-volatile memo	ry.
	2.	GUI stands for Graph	nical User Interface.	
	3.	Taskbar is an icon or	the desktop.	

Test Paper 1

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5.	In MS	Word.	Font	stule	can	be	changed	bu	usina	Font	box.

D. Short answer type questions.

- 1. Name the types of computer memory.
- 2. What is meant by text alignment in MS Word?
- **3.** Which two keys can you use to delete text in MS Word?
- **4.** Write the name of any four components of the desktop.
- **5.** What is the shortcut key to make text bold in MS Word?

E. Long answer type questions.

- 1. Define secondary memory and its types.
- 2. What is meant by resizing a tile? How can you do this?
- 3. How can you check spelling in MS Word?
- **4.** Mention any five ways to select text by using a keyboard.
- **5.** Write the steps to apply border on the page in MS Word.

Test Paper 1

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Chapter Introduction to MS PowerPoint 2016



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Starting MS PowerPoint 2016
- Parts of PowerPoint window
- © Creating a new presentation
- © Entering text in the slide
- Adding new slides

- Obligation
 Obligatio
- Viewing a presentation
- Saving a presentation
- Existing PowerPoint





SIGN IN





Write one or two sentences for each of the pictures given below. Arrange it in the way you want and share it with the class.

1.





3.







Chapter 5 | Introduction to MS PowerPoint 201

When you share what you have written in the above exercise, you are presenting some information about the pictures to the class. So, what is a presentation and how do we do it?

A **presentation** is a systematic display of information using text, pictures, audio and video. We create a presentation to share information or express ideas from a speaker to a group of people. It is widely used at offices and schools to inform, educate, etc.

There are many software which help us to make a presentation. Some of them are MS PowerPoint, Apple Keynote, OpenOffice, etc. Let's learn about MS PowerPoint in this chapter.

MS PowerPoint is an application that helps us in creating presentations using text, graphics, pictures and other multimedia. It is developed by Microsoft. It is also called PPT. It allows us to create professional and attractive presentations. PowerPoint presentations can include pictures, charts, audio, video, etc.

PowerPoint has many versions such as PowerPoint 2003, 2007, 2010, 2013, 2016 and 2019. PowerPoint 2019 is the newer version of PowerPoint.

The default file format in PowerPoint version 2007 and newer versions is .pptx. The file format in PowerPoint version 97 to 2003 is .ppt.



СМ

PowerPoint was originally called 'Presenter' and was created by a software company named Forethought, Inc in 1987 and was brought by Microsoft in the same year.

STARTING MS POWERPOINT 2016

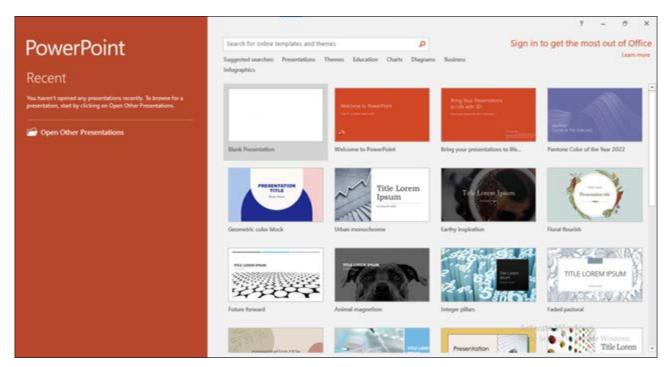
Follow these steps to start MS PowerPoint:

- Click on the **Start** button. 1.
- Scroll through the list of programs to PowerPoint and click on it.



Chapter 5 | Introduction to MS PowerPoint 2016

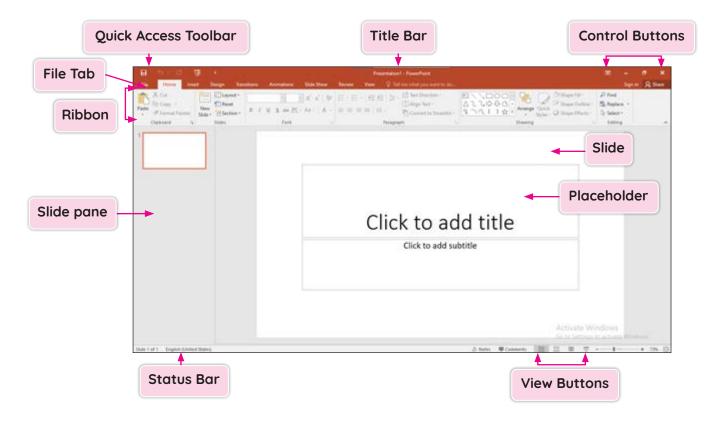
The PowerPoint start screen opens. It is also called the Backstage view.



MS PowerPoint window

PARTS OF POWERPOINT WINDOW

A PowerPoint window has many parts. Let's learn about these parts.



Chapter 5 I Introduction to MS PowerPoint 2016

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Title Bar

It is located at the top of the MS PowerPoint window. It displays the name of the current presentation you are working on. It also shows the name of the program.

Control Buttons

The three control buttons—Minimize Button, Maximize/Restore Down Button and Close button are located on the right side of the Title Bar.

Quick Access Toolbar

It appears on the top left corner of the MS PowerPoint screen. It consists of icons for features that are frequently used such as **Save**, **Undo** and **Redo**. It also has the button **Start from the Beginning**. This button is used to start a slide show.

Ribbon

It is located below the Title bar. It has tabs such as Home, Insert, etc. These tabs consist of groups of related commands.

File tab

It shows a backstage view that contains commands such as **New**, **Open**, **Save**, **Print**, etc.

Slide

It is a single page of a presentation. It contains information about the presentation topic.

Placeholder

It is a dotted box present on a slide. It may contain text, images, videos, etc.

Slide pane

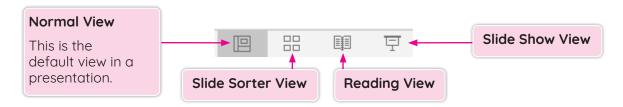
It is located on the left side of the window. It shows the thumbnails of all the slides in the presentation.

Status Bar

It is located at the bottom of the window. It gives information about the presentation such as the number of the current slide and the total number of slides in the presentation.

View Buttons

It is located on the right side of the status bar. It gives options for viewing.



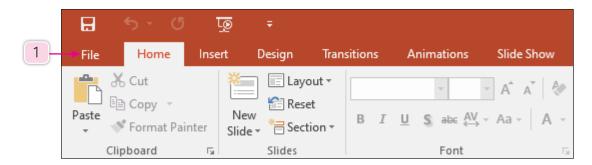
Chapter 5 | Introduction to MS PowerPoint 2016

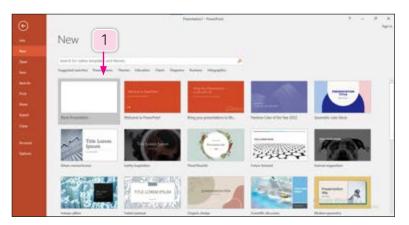
CREATING A NEW PRESENTATION

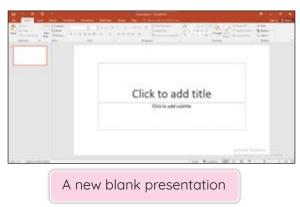
A presentation consists of many slides. The default slide that opens when we start a presentation is the **title slide**. This slide has two placeholders.

Follow these steps to start a new presentation:

- 1. Click on the File tab.
- 2. Click on the **Blank Presentation**. A new presentation with a blank slide will open.







QUICK BYTE

СМ

The shortcut key to open a new blank presentation: Ctrl + N

ENTERING TEXT IN THE SLIDE

Follow these steps to enter text inside the placeholder:

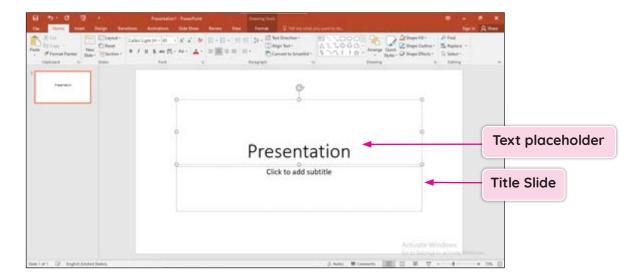
In Title Placeholder

- 1. Click on the title text placeholder (Click to add title) box.
- 2. Type your text in the **text placeholder**. For example, in the image given below, the text entered is Presentation.

Chapter 5 I Introduction to MS PowerPoint 2016

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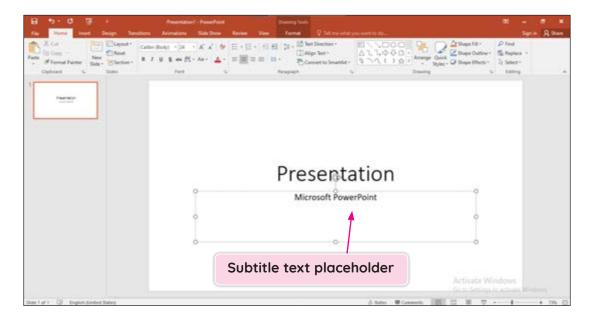
The type text is displayed in the title text placeholder and the Slide pane.



In Subtitle Text Placeholder

- 1. Click on the subtitle text placeholder (Click to add subtitle) box.
- 2. Type your text in the **text placeholder**. For example, in the image given below, the text entered is Microsoft PowerPoint.

The typed text is displayed in the title text placeholder and the Slide Pane.



INSERTING A NEW SLIDE

We need to add new slides to create a presentation. We can add any number of slides as required.

Chapter 5 | Introduction to MS PowerPoint 2016

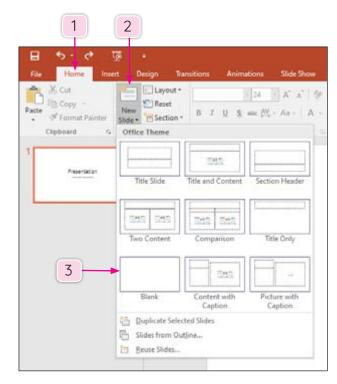
Follow these steps to insert a new slide:

Method 1

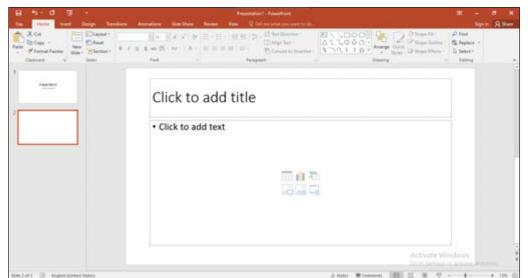
- 1. Click on the **Home** tab.
- Click on the New Slide command in the Slides group.
- Select the type of style you want and click on it. A new slide is added. The new slide can also be seen on the Slide Pane.

Method 2

- Right-click on the Slide Pane. A pop-up menu will appear.
- Click on the **New Slide** option. A new slide is added.







A new slide is added

QUICK BYTE



The shortcut to insert a new slide: Ctrl + M





There is no limit to the number of slides in a PowerPoint presentation.

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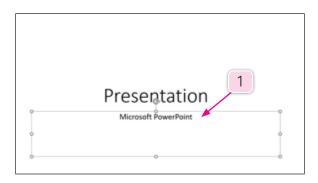
Computer G4_Ch-5.indd 62 27-02-2023 11:11:40

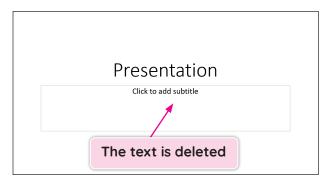
DELETING TEXT IN A PLACEHOLDER

Follow these steps to delete text in a placeholder:

- 1. Select the placeholder by clicking its border.
- 2. Press the **Delete** key. This will delete the text in the placeholder.

We can delete text in multiple placeholders at the same time. To delete text in more than one placeholder, hold down the **Ctrl** key and click on the border of each text box. Then, press the **Delete** key.





DELETING A SLIDE

Follow these steps to delete a slide:

- On the Slides pane, select and right-click on the slide that you want to delete. A pop-up menu will appear.
- Click on **Delete Slide** on the pop-up menu. The slide will be deleted.

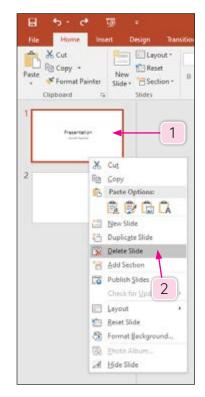
VIEWING A PRESENTATION

We can view each slide of a PowerPoint presentation one after the other, in a set pattern. A slide show is a display of slides in a prearranged sequence on full screen.

Follow these steps to view a slide show:

Method 1

- Click on the Slide Show tab on the Ribbon.
- 2. Click From Beginning from the Slide Show group.



Chapter 5 | Introduction to MS PowerPoint 2016



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Method 2

Click on the **Slide Show** icon $\ \ \, \ \ \, \ \ \,$ on the **Status** bar. The slide show will begin.

QUICK BYTE

СМ

The shortcut key to view the slide show from the beginning: F5

The shortcut key to view the slide show from the current slide: Shift + F5

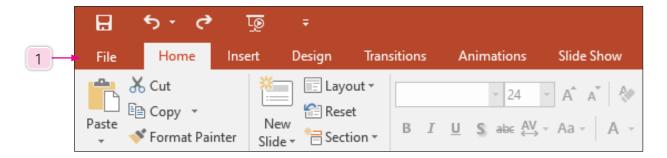
The shortcut key to exit the slide show: Esc

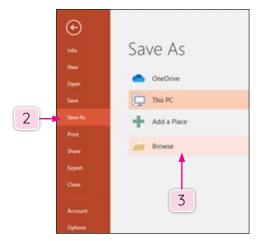
SAVING A PRESENTATION

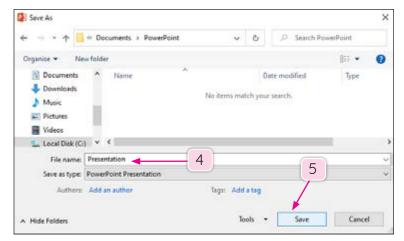
To use the presentation or share it with others, we need to save the presentation.

Follow these steps to save a presentation:

- 1. Click on the File tab.
- Click on the Save or Save As button.
 Or click on the Save button on the Quick Access Toolbar. The Save As dialog will appear.
- 3. Select the location you want to save the file. Select **This PC** and click on the **Browse** option.
- 4. Type a name for the file in the File name text box.
 Click on the Save button. The presentation is saved and the file name will appear on the title bar.







Chapter 5 I Introduction to MS PowerPoint 2016

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QUICK BYTE



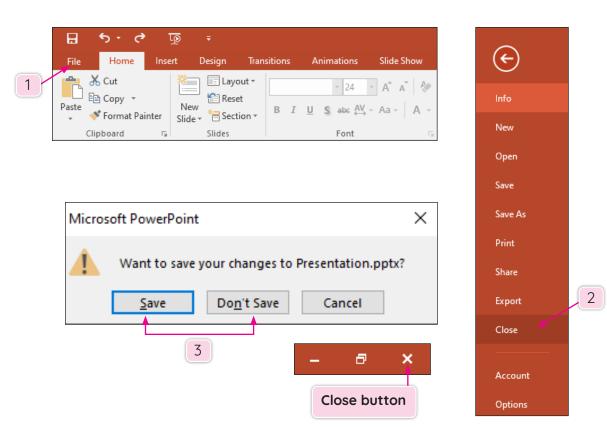
The shortcut key to save a presentation: Ctrl + S

CLOSING A PRESENTATION

Follow these steps to close a presentation:

- 1. Click on the File tab.
- 2. Click on the **Close** option. If the presentation is not saved, a message box will appear asking 'Save your changes to this file?'
- Click on the Save button if you want to save the changes.
 Or Click on Don't Save button if you do not want to save the changes.

We can also close the presentation by clicking on the **Close** button in the **Title** bar.



Chapter 5 | Introduction to MS PowerPoint 2016

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Find the following words in the word puzzle.

Backstage	Presentat	ion	Slides	Placeholder
Ribbon	Slideshow	Po	werpoint	Slide Pane

G	Р	F	L	S	J	Q	Α	R	ı	В	В	0	Ν	S	S	G	В
0	Τ	L	Ζ	L	Z	S	Α	Χ	Н	K	L	F	Т	L	Υ	Р	S
S	\cup	\cup	Α	Р	0	W	Ε	R	Р	0	_	Z	Τ		J	R	F
Н	L	Υ	Q	С	Ν	J	Н	S	L		D	Ε	S	D	W	Q	K
0	М	-	В	R	Е	G	Р	R	L	М	В	S	S	Е	Т	Н	М
Н	K	K	D	Н	В	Н	Υ	L	F	L	L	K	Ζ	S	Q	Χ	Е
Z	Ν	W	Υ	Ε	J	U	0	Ε	Н	Р	W	G	А	Н	Ε	В	Υ
Ν	W	Ε	Z	С	Р	U	Χ	L	W	Ν	Ζ	Т		0	А	W	Н
В	А	С	K	S	Т	Α	G	Ε	D	Ε	Т	В	L	W	-	С	В
Α	Υ	Υ	U	С	L	Н	Ν	G	В	Ε	G	Υ	K	L	F	W	L
J	М	D	S	S	Ζ	W	1	Е	Ν	U	R	F	J	J	Р	F	S
V	Р	R	Ε	S	Е	Ν	Т	А	Т	1	0	Ν	U	L	U	Н	W

REFRESH

- MS PowerPoint is an application that helps us in creating presentations using text, graphics, pictures and other multimedia.
- A PowerPoint window has many parts such as Title Bar, Slide, Placeholder, Status Bar, etc.
- The title bar displays the name of the current presentation you are working on.
- A placeholder is a dotted box present on a slide.
- A presentation consists of many slides.
- A slide is a single page of a presentation.
- A slide show is a display of slides in a prearranged sequence on full screen.
- PowerPoint presentations can include pictures, charts, audio, video, etc.



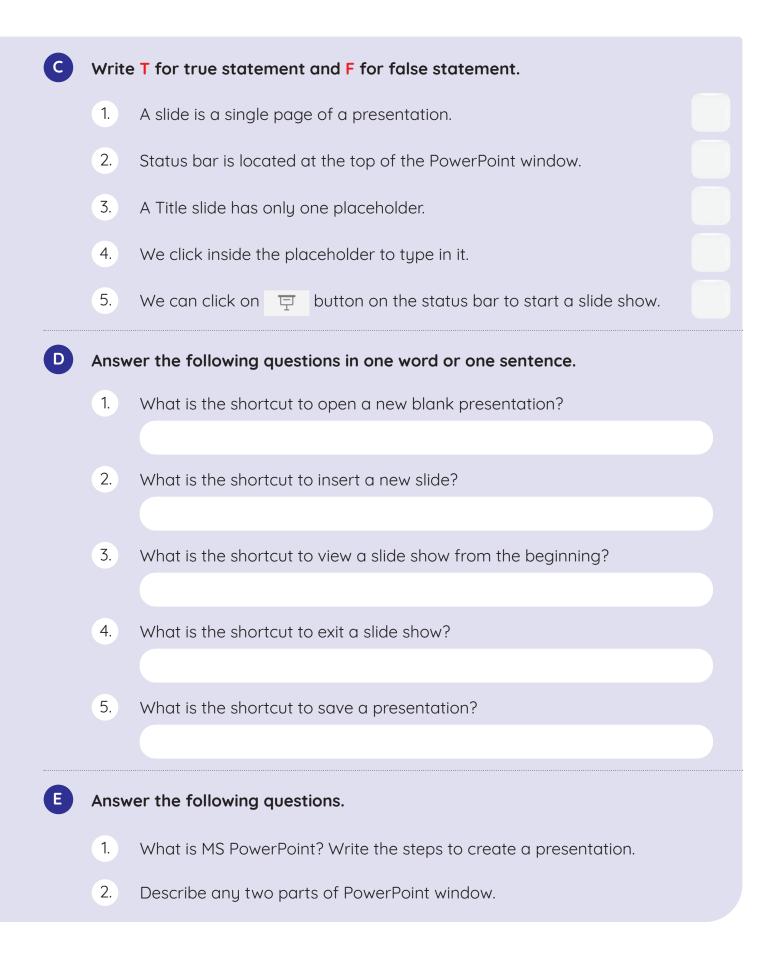
Computer G4_Ch-5.indd 67

A	Choo	se the correct option			
	1.	It displays the name	of the presentation you o	are working on.	
		a. Title bar	b. Quick Access Toolbar	c. Status Bar	
	2.	It is the default view o	of a presentation on Pow	verPoint.	
		a. Slide sorter view	b. Normal view	c. Reading view	
	3.	It shows the number	of the current slide we a	re working on.	
		a. Status bar	b. Slide pane	c. View Buttons	
	4.	It is the default slide t	that appears when we op	oen a new PowerPoint window	
		a. New Slide	b. Title Slide	c. Backstage	
	5.	It consists of icons fo	r features that are frequ	ently used.	
		a. Control buttons	b. View buttons	c. Quick Access Toolbar	

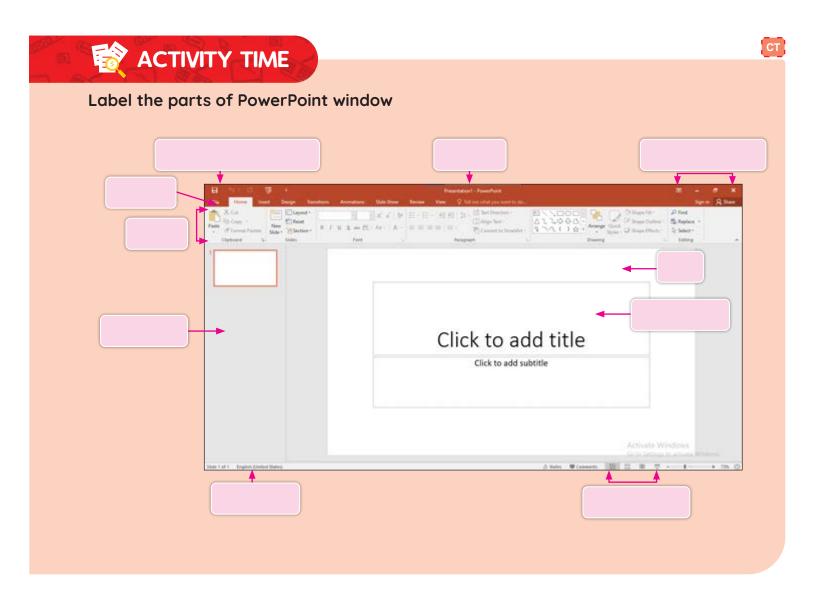
B Fill in the blanks using the words given below.

Placeholder	Ribbon	four	MS PowerPoint	Slide pane
		is a pre	esentation software.	
. A dotted re	ectangular b	oox on a	slide is called	
5.		shows	the thumbnails of a	ll the slides in t
presentation	on.			
		has ta	bs such as Home, In	sert, etc.
MS PowerF	Point has		options	s to view a pres

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- 3. What is a slide show? Write the different ways in which you can view a slide show.
- 4. Write the steps to delete a slide.
- 5. Write the steps to save a presentation.



Chapter 5 | Introduction to MS PowerPoint 2016

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Using PowerPoint 2016, make a presentation on the topic "My Life".

Instructions:

- Open PowerPoint 2016.
- Make a title slide entitled "My Life". Write your name on the subtitle placeholder.
- On the second slide, write the title "Three Interesting Facts About Me" and write three facts about yourself.
- On the third slide, write the title "Three Things I want to do" and write what you to do in future.
- Now, view the presentation from the beginning.
- Then exit the presentation and save it. Name the file as "All About Me"

FOR THE TEACHER

- Discuss about the importance and effectiveness of presentations.
- Show the students a presentation to make their understanding easier.

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hapter 5 | Introduction to MS PowerPoint 2016

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More on the Internet

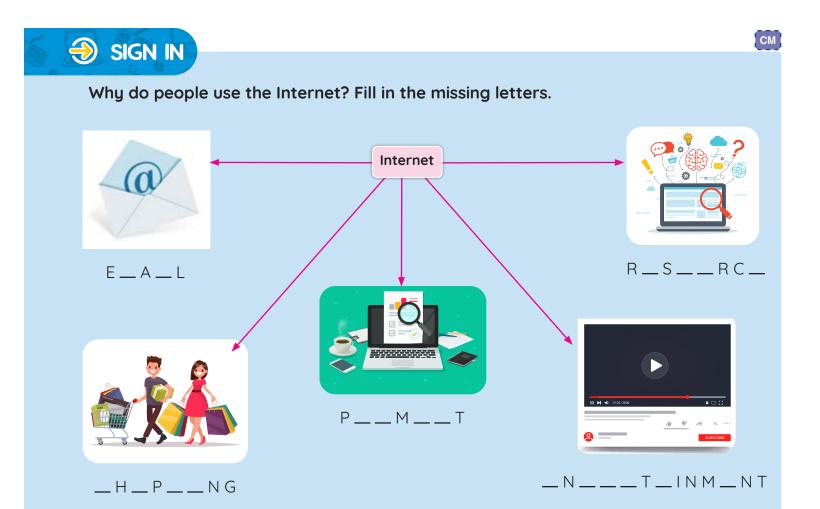


LEARNING OBJECTIVES

In this chapter, students will learn about:

- Mow the Internet started
- Terms related to the Internet
- Microsoft Edge
- **©** Computer Virus
- Antivirus software





Chapter 6 | More on the Internet

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THE INTERNET

The **Internet** is a well-connected network of computers all over the world. It is also called simply 'the net'. It enables all the connected computers to share information. Through an Internet connection, we can communicate with people from anywhere.

HOW THE INTERNET STARTED

The Internet is a result of a research experiment by the Defense Department of the United States of America. They set up a research agency, **Advanced Research Project Agency** (ARPA), for carrying out research for the military. In 1969, ARPA set up a network of computers called **ARPANET** (Advanced Research Project Agency Network). This network enables the computer to share and exchange data. After some time, the United States Government opened ARPANET for educational purposes. This leads to many universities and government agencies connected through this network. Thus, the network grew bigger and gave birth to the Internet.

TERMS RELATED TO THE INTERNET

World Wide Web

World Wide Web (WWW) is commonly known as the Web. It has the largest collection of information in the form of websites on the Internet. Through the Web, we can get access to various information found over the Internet. This information can be in the form of text, images, audio, video, etc.

Web Page

A **web page** is a digital page similar to the page of a book that contains information about a single topic. It is a part of a website.

Website

A **website** is a collection of web pages. These pages have related content. The first page of the website is called the home page. Some examples of websites are Google, Wikipedia, Facebook, YouTube and Amazon.

Google.com is the most visited website in the world.

URL (Uniform Resource Locator)

URL (Uniform Resource Locator) is the unique address of a website or web page. Each website and web page has a specific URL. The URL of a website starts with **http://.** The URL for the website for banks and e-commerce starts with **https://.** The 's' here stands for secure which means the website is safe and secure for browsing.

Chapter 6 I More on the Internet

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Web Browser

A **web browser** is an application software used to access information on the World Wide Web. When we enter a keyword related to the information we are looking for, the web browser looks for the data from the web. Then the results in the form of links to the web pages are displayed on the screen of computer. Some commonly used web browsers are Microsoft Edge, Mozilla Firefox, Google Chrome, Opera and Apple Safari.



Hyperlink

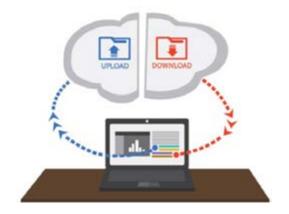
Hyperlinks are text or images that when we click give access to another webpage, image, document or other content. Hyperlinks are highlighted and underlined in blue. Hyperlinks are also called links as they are linked to other locations or files.

Downloading

It means **receiving data** or a file from host computer (server) through the Internet on our computer. We can download varieties of file such as images, videos, music, games and software from the Internet.



It means **sending data** or file from our computer to the host computer through the Internet. We can upload and share different files such as pictures, videos, documents, etc.



Internet Service Provider (ISP)

An **ISP** is a company that provides us access to the Internet for specific fees. BSNL, MTNL, Reliance Communication, Airtel and Vi are some popular service providers in India.









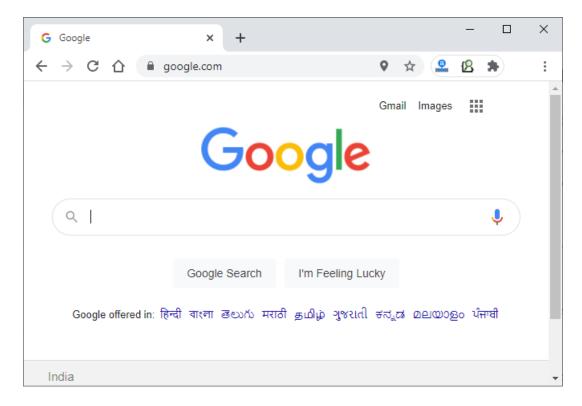


Chapter 6 I More on the Internet

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Search Engine

A **search engine** is software that is used to search or look for information on the Internet. Some popular search engines are www.google.com, www.g



Follow these steps to access a website using a search engine:

- 1. Click on the web browser icon to open a web browser.
- 2. Enter the URL (or web address) of the website in the Address bar of the browser.
- **3.** Press the **Enter** key. The web server locates the file and the web browser displays the page on the screen.

Microsoft Edge

The default web browser in the Windows 10 operating system is Microsoft Edge.

Follow these steps to open Microsoft Edge:

- 1. Step on the **Start** button.
- 2. Search Microsoft Edge.
- 3. Click on Microsoft Edge.

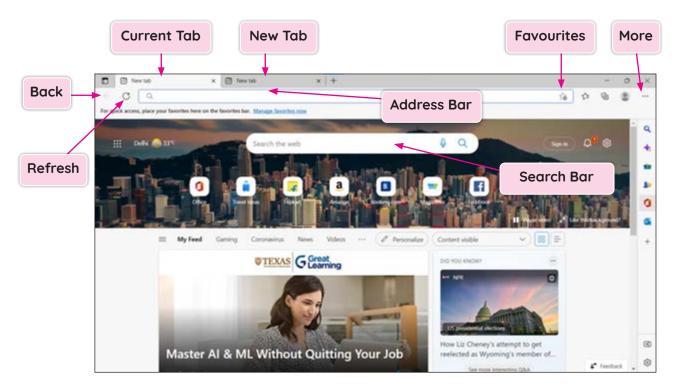
Or

Click on the icon of **Microsoft Edge** on the **Taskbar**.

The web browser will open.

Parts of Microsoft Edge Window

Microsoft Edge Window has many parts.



Current tab: Microsoft Edge uses tabs for each opened web page.

Backward: Click on this button to go back to the previous web page.

New Tab: Click this button to open a new tab.

Refresh: Click on this button to refresh the page.

Address Bar: Type the web address or the URL of the web page you want to open.

Search Bar: Microsoft Bing is the default web engine for Edge. Type the keywords or

phrases for the information you are looking for.

Favourites: This star icon helps us to set a web page as a favourite. This helps us to easily open the page when we want to read it again.

More: Click on this button to see the extra features such as zoom, print, share, etc.

COMPUTER VIRUS

How do you feel when you are not well? How do you know you are not well?

When we are not well, our body is not able to function normally as it used to.

One of the most common diseases that make us sick is viral fever. It is caused by a virus. The virus infects and attacks our bodies making us weak and unfit to do most activities.

A computer system can also get infected by a **virus**. It will not able to work properly when it gets infected with a virus. The virus that attacks a computer is a program.

The first computer virus is known as 'Brain' and was released in 1986.

A **computer virus** is a program or application that duplicates itself and causes harm to the computer. It is installed without the user's knowledge. It infects the programs and files that keep the computer from working normally or makes the computer stops working altogether. It gets transferred from one system to another like a human virus that is spread from one person to another. It is spread from one system to another by hiding through a document or an application. Some examples of computer viruses are Worms, Trojans and Ransomware.

How a virus harms a computer

Computer viruses are of different types and can infect a device in different ways. Some of the harms caused by the virus are:

- It can damage programs.
- It can delete files.
- It can keep on restarting the computer on its own.
- It can stop the computer from starting.
- It can crash your hard disk.
- It can decrease the processing speed of the computer.
- It can send harmful emails from your account.



A man with a laptop infected with virus

How a virus-infected computer performs

A computer may be infected if:

- The computer takes more time in opening and closing a program.
- The computer keeps shutting down by itself.
- Some unusual messages or a different window opens up when you try to open a window.
- Some of the files or programs go missing without any reason.

How a computer gets a virus

There are many ways through which computer viruses are transferred from one system to another. These are some of the ways:

- Sharing files such as music, images, and documents from an infected system to another system.
- Using pen drives that are infected with a virus.

- Downloading files from the Internet such as free games, movies and songs.
- Downloading programs or software from the Internet.
- Visiting websites that are infected with viruses.
- Opening or downloading an infected email attachment

How to protect a computer from a virus

A computer virus can cause harm to our computer, so we should be careful that viruses do not infect the computer. These are some of the practices that will help to avoid a computer infecting with a virus:



- Do not open any email attachments from unknown senders.
- Do not visit unsafe or suspicious websites.
- Avoid downloading programs, games or music from a source that is not official.
- Install antivirus software that will protect the computer from viruses.



ANTIVIRUS SOFTWARE

An **antivirus** is software that can detect viruses in a computer. It is installed on the computer. When a system has an antivirus, it does not allow the virus to copy itself onto the computer. Antivirus software can also search through the files in a computer and determine those files that are infected with viruses. Some of the antivirus software are McAfee Antivirus, AVAST Antivirus, Norton Antivirus, Kaspersky Antivirus, AVG Antivirus etc.



An antivirus software scanning for virus

Logos of some of the common antivirus software are given below.











McAfe

AVAST

Norton

Kaspersky

AVG





The first antivirus software was developed in 1987 by two German inventors Andreas Lüning and Kai Figge

Chapter 6 I More on the Internet

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Identify the software that will be used to scan virus. Circle them.

1.



3.



5.



7.



2.



4.



6.



8.



REFRESH

- The Internet is a well-connected network of computers all over the world.
- World Wide Web (WWW) is the largest collection of information in the form of websites on the Internet.
- A website is a collection of web pages.
- URL (Uniform Resource Locator) is the unique address of a website or web page.
- An ISP is a company that provides us access to the Internet for specific fees.
- A search engine is software that is used to search or look for information on the Internet.
- The default web browser in the Windows 10 operating system is Microsoft Edge.
- A computer virus is a program or application that duplicates itself and causes harm to the computer.
- An antivirus is software that can detect viruses in a computer.



A	Choo	ose the correct option.									
	1.	ARPANET stands for .									
		a. Advanced Research Project Agency Networking									
		b. Advanced Researching Project Agency Network									
		c. Advanced Research Project Agency Network									
	2.	WWW stands for .									
		a. World Wide b. World Whole C. World With Web Web									
	3.	URL stands for .									
		a. Uniform Resource Location b. Uniform Resource Locator									
		c. Uniform Resource Locating									
	4.	Which of the following is not a search engine?									
		a. www.google.com b. www.lndia.com									
		C. www.yahoo.com									
	5.	Which of the following is not a web browser?									

B Fill in the blanks with the words given below.

We	eb page	Downloading	Web	Hyperlinks	Internet	
1.	The		is c	ı well-connected	I network of	computers
	all over th	ne world.				
2.			has the	largest collection	n of informa	ition in the
	form of w	vebsites on the Inte	ernet.			

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	3.	Α	is a digital page similar to the page of a boo									
	4.		are text or images that when we click give									
		access to another webpage.										
	5.	means receiving data or a file from the										
		computer through the Interi	net.									
G	Write T for true statements and F for false statements.											
	1.	Clicking on the refresh butto	on opens a new tab.									
	2.	Chrome is the default searc	h engine for Edge.									
	3.	A computer gets a virus visi	ting websites that are infected with viruses.									
	4.	A computer virus can cause	A computer virus can cause harm to computers.									
	5.	The URL of a website starts with http://.										
D	Answer the following questions in one word or one sentence.											
	1.	1. What is commonly known as the web?										
	2.	What do you call the collect	cion of web pages?									
	3.	Give two examples of web k	prowsers.									
	4.	Give two examples of ISP.										
	5. Give two examples of antivirus software.											

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- 1. What is a computer virus?
- 2. How does a virus harm a computer?
- 3. How does a computer get infected by a virus?
- 4. How can you protect a computer from a virus?
- 5. What is antivirus software?



СМ

Identify the following pictures and write the correct term from the box.

IPS Anti-virus URL web browser Search engine Email





1. 2.





3. 4.

https://www.google.com



5. 6.

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In the computer lab, do these activities:

Activity 1: Using the Internet search for information on any topic that you want to know about. Start the web browser. Then, open the search engine and type the topic.

Activity 2: Scan the computer for virus using an antivirus software. Learn which software is used.

FOR THE TEACHER

- Elaborate on the importance of the Internet in our life.
- Show them how to search for information using search engines.
- Explain that there are many Internet service providers.
- Explain the importance of scanning a file for virus and show how to do it using an antivirus software.

PERIODIC ASSESSMENT 3

A. Identify the following images and write their names.







- 1. _____ 2. ____ 3. ____
- B. Fill in the blanks using the words given below.

SLIDE ANTIVIRUS SLIDE PANE NET WEB PAGES

- 1. _____ is the software that detects viruses in the computer.
- 2. The Internet is also known as the _____
- **3.** _____ is the single page of the presentation.
- **4.** Website is the collection of ______
- **5.** _____ shows the thumbnail of all the slides in the presentation.
- C. Match the following.
 - 1. Ctrl+M
 - 2. Ctrl+S
 - 3. Ctrl+N
 - 4. Antivirus
 - **5.** Internet Service Provider

- a. McAfee
- **b.** To open new blank presentation
- c. Airtel
- d. To insert new slide a presentation
- e. To save a presentation

Periodic Assessment 3

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7 Introduction to Scratch



LEARNING OBJECTIVES

In this chapter, students will learn about:

- Starting Scratch
- Parts of Scratch window
- Scratch Blocks
- **O**Choosing a sprite
- Deleting a sprite
- © Choosing a Backdrop
- Saving the project









Look at the map chart and answer the questions.

START		

Right

Forward

Backward

Left

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- 1. From **Start**, take 3 steps forward and 1 step right. Where are you?
- 2. From **Start**, take 1 step forward, 2 steps right and 1 step forward. Where are you?
- **3.** From **Start**, take 3 steps right, 4 steps forward and 3 steps backward. Where are you?
- **4.** From **Start**, take 1 step right, 4 steps forward and 1 step left. Where are you?
- 5. From **Start**, take 1 step right, 4 steps forward, 3 steps right and 4 steps backward.

Understanding instructions and following them step-by-step is important to solve a problem. A computer works in the same way. It follows step-by-step instructions from us. These instructions that we give to the computer are called **programming**. In the previous class, we have learnt about a programming language that is used to draw and do mathematical calculations. In this chapter, we will learn about another programming language, Scratch.

SCRATCH

Scratch is a programming language that helps young children to learn computer programming in an exciting way. It can be used to create games, interactive stories and animations. It has many fun tools that can help you to create your project. It has a big collection of sounds, music, graphics and animations that can be used to create interesting projects.

STARTING SCRATCH

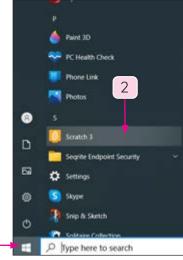
Scratch window can be opened in two ways.

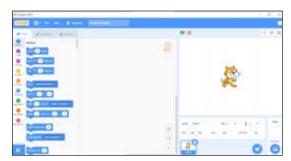
Method 1

1. If this icon (Scratch shortcut icon) is there on the desktop, double-click on it. It will open the Scratch window.

Method 2

- Click on the Start button. Scroll through the list of programs and search for Scratch 3.
- Click on Scratch 3. The Scratch Window appears.





Chapter 7 I Introduction to Scratch

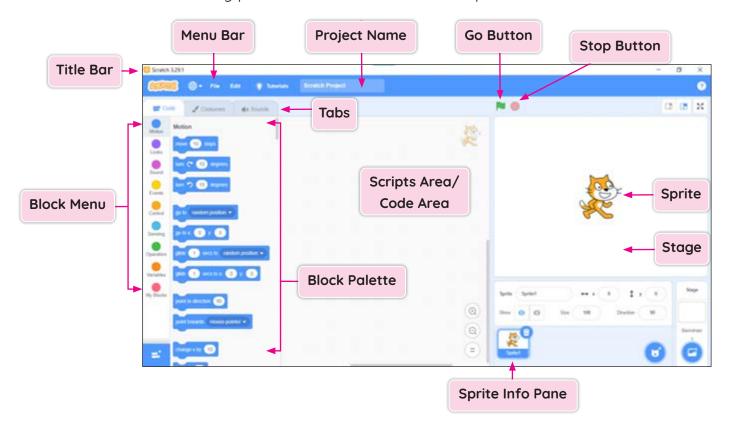
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Scratch was created by Scratcher Jocelyn and Mitchel Resnick, of the Lifelong Kindergarten group at MIT Media lab in 2007.

Parts of Scratch Window

A Scratch window has many parts. Let us learn about these parts in detail.



Title Bar

It is located at the top of the Scratch window. The name of the program is shown on the left side. On the right side of the title bar, there are three control buttons—**Minimise**, **Maximise** and **Close**.

Menu Bar

It is used to provide a drop-down that provides commands such as create a new, open an existing file or save the new file.

Project name

It shows the name of the project you are creating.

Go Button

Itis the green flag 🏲 present on the Screen window. We click on this button to run a Scratch program.

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Stop Button

It is the red button present on the Screen window. We click on this button to stop a program.

Sprite

It is the object or the main character that follows the instructions given by you. It performs the function on the Stage. The orange **cat** that is displayed on the Stage is the default Sprite.

Scripts Area/Code Area

It is the area where the instruction or the scripts is created. The script is created by dragging the blocks from the block palette and the Script area. These blocks are placed stepwise on top of each other. A **script** is the stepwise instructions to a sprite, given in the form of blocks. A script must have at least two blocks. The script is also called a **project**.

Stage

It is the main working area where the sprite performs actions. It shows the work that you have done. You can also play games and watch stories on the stage. The background of the stage is called the **backdrop**.

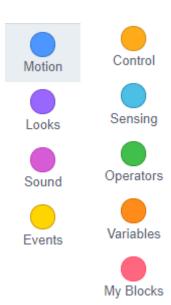
Sprite Info Pane

It is located directly below the Stage area. It displays small thumbnail versions of all the sprites and backdrops used in the project. In this area, we can add, delete, and change the size of the Sprite.

Tabs

Scratch has three main tabs.

- Code tab: It contains different block categories. It also contains
 the list of several script blocks of each category. The different
 types of block categories are—Motion, Looks, Sound, Events,
 Control, Sensing, Operators, Variables and My Blocks. These
 blocks are of different colours. Each block performs a different
 task. The script blocks connect like a jigsaw and create scripts.
- **Costumes Tab**: This tab contains the options to add or make changes in the appearance of the sprites and the backdrops.
- **Sounds Tab:** This tab contains the options to add and make changes in the sounds of the sprite and backdrop.



Block Menu

It shows the categories of blocks based on their functions and uses. The blocks that share similar function are group into one category and share the some colour. There are mainly nine categories of blocks available in Scratch 3.0.

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Block Palette

It contains various blocks that are used to perform specific tasks. Blocks are puzzle-piece shapes that are used to create scripts in Scratch. The blocks connect to each other vertically like a jigsaw puzzle. When we click on the Code tab, the block palette will open.

SCRATCH BLOCKS

Scratch blocks are divided into different categories. Each block performs a different function. To create a script, the blocks are dragged onto the script area. To add blocks to a script, drag them to the part of the script where you want them to appear. We can add blocks above or below the existing blocks. We can see these categories under the Code tab. Let us learn about the functions of some blocks.

Motion Block

The blocks in the **blue colour** are Motion Blocks. They are used to control the motion of a Sprite. These are the uses of some motion blocks:

- Use block to move the Sprite forward i.e. in the direction it is facing. The number inside the textbox is the number of steps the sprite will take. We write the number with a minus (-) sign to move the Sprite backwards. For example,
- Use block to turn the Sprite in a clockwise direction. The number given in the textbox will be the degree of turn.
- Use block to turn the Sprite in the anti-clockwise direction. The number given in the textbox will be the degree of turn.
- Use or one of the stage of the stage of the stage.

Looks Block

The blocks in the **purple colour** are Looks Blocks. They are used to control how a Sprite appears onstage. These are the uses of some looks blocks:

- Use block to add a speech bubble to the Sprite. The number given in the textbox is the duration of the speech in seconds.
- Use block to add a speech bubble to the Sprite with the given text. The speech will appear till the stop button is clicked.
- Use block to add a thought bubble with the given text. The number given in the textbox is the duration that the bubble will appear in seconds.
- Use block to add a thought bubble with the given text. The bubble will appear till the stop button is clicked.

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- Use transpersed by 25 to make changes to the Sprite according to the effect selected. For example the colour.
- Use and blocks to show or hide the Sprite on the stage.

Sound Block

The blocks in the pink colour are Sound Blocks. They are used to control sound functions. Using sound blocks we can add music or sound to our Scratch project. We can record a sound or our voice and use it in the Sounds block. These are the uses of some sound blocks:

- Use play sound Meow until done block to play a sound while pausing the Script.
- Use start sound Meow block to play a sound without pausing the Script.
- Use stop all sounds block to stop all sound being played.
- Use clear sound effects block to clear all the existing sound effects.

Events Block

The blocks in the yellow colour are Events Blocks. An event block triggers scripts to run. It controls how a particular action is done in a script. Events blocks control the events of scripts. These are the uses of some events blocks:

- The block when reduced activates the script when the green flag is clicked.
- The block when space very pressed activates the script when the chosen key is pressed.
- The block when this sprite alloked activates the script when you click the sprite.

Control Block

The blocks in orange colour are the Control Blocks. It controls how many times an event is repeated, how long an event happens or how long an event happens. These are the uses of some events blocks:

- Use block to pause the running of the script. The number given in the textbox is how long the Sprite will pause in seconds.
- Use block to repeat a set of blocks for the given number of times given in the text below.
- Use block to repeat a set of blocks till the stop button is clicked.

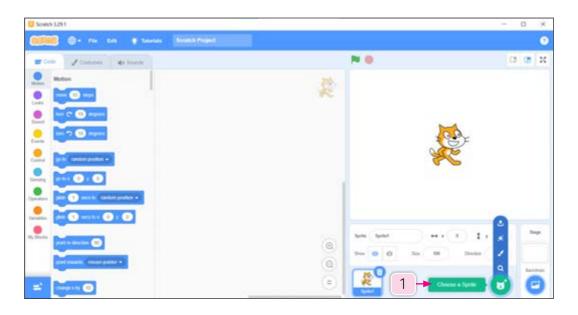
CHOOSING A SPRITE

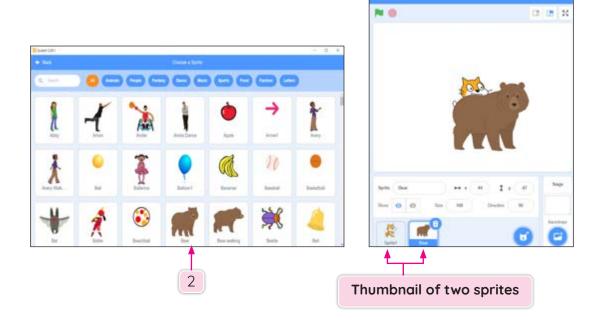
Scratch has a default sprite, the cat. The cat is located at the center of the stage. We can add more sprites to the stage.

Chapter 7 I Introduction to Scratch

Follow these steps to add another sprite to the stage:

- Click on the Choose a Sprite tool in the Sprite Info Pane.
 A Choose a Sprite window will open. It shows the available sprites you can choose from.
- 2. Click on the Sprite you want to add to your project. Here we have added a bear. Now, there are 2 sprite thumbnails in the Sprite Info Pane.





DELETING A SPRITE

A Sprite that we add on the stage can be removed or deleted.

Follow these steps to delete a Sprite:

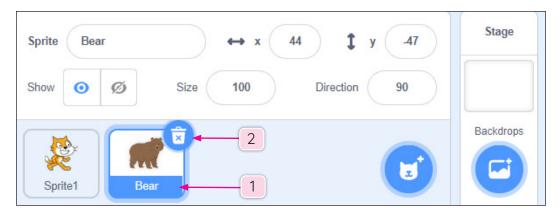
1. Click on the **thumbnail** of the Sprite you want to delete in the **Sprite Info Pane**.

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2. Click on the cross symbol that appears on the thumbnail of the Sprite.

The Sprite will be deleted from the stage.



CHOOSING A BACKDROP

A **backdrop** is the background of the stage. We can choose a backdrop from the available backdrop in Scratch.

Follow these steps to choose a backdrop:

- Click on the Choose a Backdrop tool in the Sprite Info Pane.
 A Choose a Backdrop window will open. It shows the available backdrops that you can choose.
- 2. Click on a backdrop you want to add to your project. Here, the castle 2 backdrop is added. The thumbnail of the backdrop will appear in the Sprite Info Pane.







Chapter 7 I Introduction to Scratch

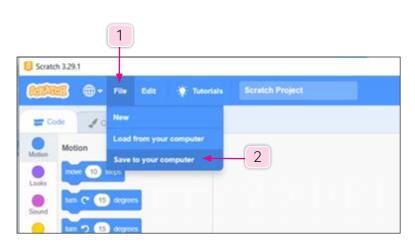
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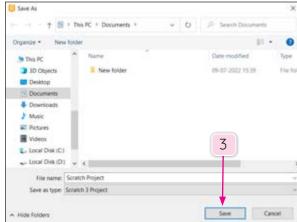
SAVING THE PROJECT

After a project is created, we need to save it.

Follow these steps to save a project:

- 1. Click on the File tab.
- 2. Click on **Save to your computer**. The Save as dialog box appears.
- **3.** Choose the location where you want to save the project. Type the name in the File name box and click on the **Save** button.







СМ

Scratch is available for free download at http://scratch.mit.edu.

ACTIVITY TIME





Match the following.

- 1. start sound Meow ▼
- 2. say Hello!
- 3. when this sprite clicked
- 4. 1 seconds
- 5. move 10 steps

- a. Looks Block
- b. Motion Block
- c. Control Block
- d. Events Block
- e. Sound Block

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- Scratch is a programming language for young children.
- Scratch is used to create games, interactive stories and animations.
- Sprite is the object or the main character that follows the instructions given by you.
- Scripts area is the area where the instruction or the script is created.
- Stage is the main working area where the sprite performs actions.
- A script is the stepwise instructions to a sprite, given in the form of blocks.
- Sprite Info Pane displays the detail of all the sprites and backdrops used.
- Scratch has three main tabs—Code tab, Costumes tab and Sounds tab.
- Blocks are puzzle-piece shapes that are used to create a script in Scratch.
- Block palette contains various blocks that are used to perform specific tasks.

BROWSE Choose the correct option. 1. It is the green flag present on the window. c. Sprite a. Stop Button b. Go Button 2. The background of stage is called a. Background b. Project Backdrop 3. These blocks are used to control how a sprite appears on stage. a. Motion Blocks b. Looks Blocks c. Sound Blocks 4. These blocks are yellow in colour. a. Events Blocks b. Sound Blocks c. Looks Blocks 5. The cat is located at the a. Centre of the stage b. Right end of the stage c. left end of the stage

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Chapter 7 | Introduction to Scratch

Fill in the blanks with the words given below.

	scr	ript Code motion progra	amming red					
	1.	Scratch is a	language.					
	2.	We click on the	button to stop a program.					
	3.	A in the form of blocks.	is the stepwise instruction to a sprite, given					
	4.	tal	b contains different block categories.					
	5.	The blocks in the blue colour are	blocks.					
G	Write	e T for true statements and F for t	false statements.					
	1.	The Looks block is pink in colour.						
	2.	The orange cat is the default sprite	e in scratch.					
	3.	The script is also called a project.						
	4. Costumes tab contains the options to add and make changes in the sound of sprite and backdrop.							
	5.	Blocks are puzzle-piece shapes tha	at are used to create scripts in scratch.					
D	Answ	wer the following questions in one	word or two words.					
	1. Which tab contains the options to add or make changes in the appearance of the sprites?							

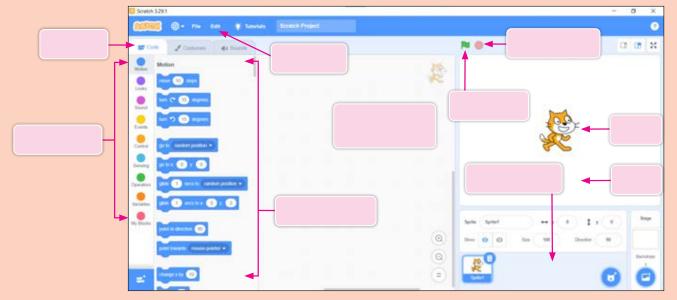
2. Which blocks are used to control sound functions?

- 3. Which blocks are used to control the motion of a sprite?
- 4. Which blocks control how a particular action is done in a script?
- 5. Where are the small thumbnail versions of all the sprites used in the project displayed?
- E Answer the following questions.
 - 1. What is Scratch?
 - 2. What is a sprite?
 - 3. What is a stage?
 - 4. What is the function of the Looks block?
 - 5. What is the function of the Control blocks?





Label the different parts of Scratch window.



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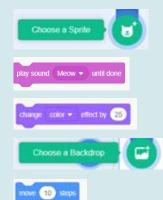




Create a program in Scratch. Do this activity in the computer lab.

Follow these steps to create the program:

- 1. Choose an animal
- 2. Add a sound
- 3. Make it change colour
- 4. Add a background
- 5. Make the animal move forward



FOR THE TEACHER

- Explain that Scratch has different blocks that are used to create programs.
- Elaborate on the different functions of the blocks.
- Demonstrate how to create a program in Scratch.

Chapter B Drawing in Scratch

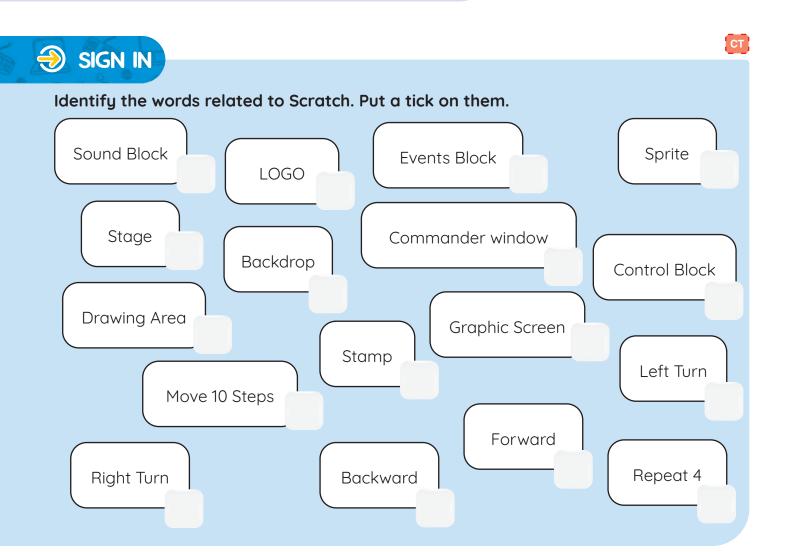


LEARNING OBJECTIVES

In this chapter, students will learn about:

- Pen Block
- Trawing a Line
- Trawing a Polygon
- **O** Drawing a Square
- Trawing a Circle





Computer G4_Ch-8.indd 97 21-02-2023 10:28:04

Chapter 8 | Drawing in Scratch

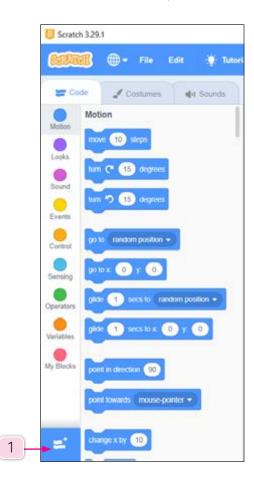
We have learnt that Scratch can be used to create games and animations. Scratch can also be used to create various shapes. To create shapes in Scratch, we use **Pen** blocks. Let us learn how to create shapes using the Pen block.

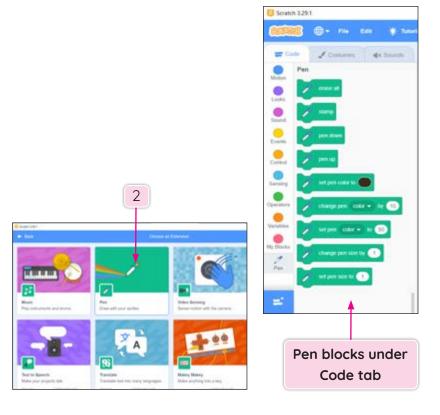
Pen Block

The Pen blocks allow a Sprite to draw shapes in Scratch. These blocks are green in colour. In Search 3.0, we have to add Pen blocks to the block category.

Follow these steps to add Pen blocks:

- Click on the Add Extension button at the bottom left corner of the Code tab. A
 Choose an Extension window will open.
- 2. Click on the **Pen** option. The **Pen** blocks will be added to the **Code** tab.





Uses of Pen blocks

These are the uses of Pen block:



This block is used to erase all the pen marks on the screen.



This block is used to create a copy of the Sprite. The image is stamped on the stage. The copied image will appear behind the Sprite. To see the image, click on the Sprite and drag.

Chapter 8 I Drawing in Scratch

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This block is used to put Sprite's pen up and does not draw anything

when it moves.



This block is used to put Sprite's pen down and draws as it moves.



This block is used to change the colour of the pen. We can choose the colour from the drop-down menu.



This block is used to change the properties of the pen such as colour, saturation, brightness and transparency.

Click on the first textbox to select the changes and change the pen properties.

2. Click on the second textbox to set the value by which the properties will change.



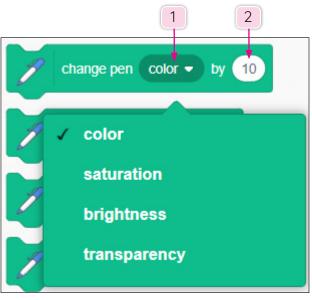
This block is used to set the properties of the pen that is colour, saturation, brightness and transparency to the given value.



This block is used to change the size of the pen by the chosen number.



This block is used to set the size of the pen to a chosen number.



Color 45

Brightness 94

DRAWING A LINE

Follow these steps to draw a line:

- Drag the when solicided block from the **Events** block menu.
- Drag the **_____** and **_____** blocks from the **Pen** block menu.
- 3. From the **Motion** block menu, drag the block. Change the value to 100 so that it becomes Move 100 steps. The line appears on the stage.

Chapter 8 | Drawing in Scratch

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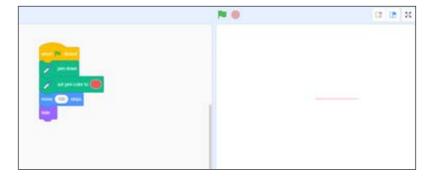


Scratch is used in more than 150 countries and has been translated into more than 60 languages.



We can hide the Sprite to display only the line on the stage.

To hide the Sprite, drag the block from the Looks block menu.

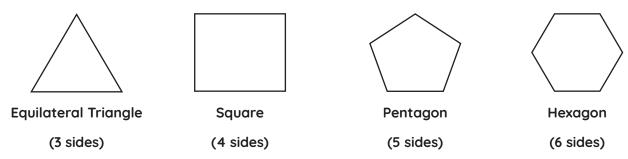


DRAWING A POLYGON

A polygon is a 2D closed figure made of connected lines. In a regular polygon—

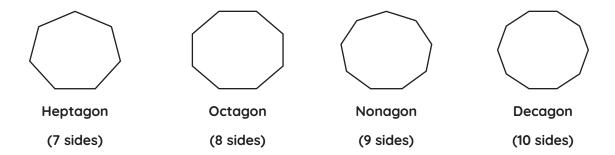
- all angles are equal and all sides are the same length.
- the number of sides is equal to the number of angles.

Some examples of polygons are:



Chapter 8 | Drawing in Scratch

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Using Repeat Command to draw regular polygons

A Sprite walks along the side of the polygon when it draws the polygon. It turns at a specific angle at each turn and turns 360 degrees before coming back. The degree of each turn is equal to 360 degrees divided by the number of sides. For example, to draw a triangle the Sprite has to turn three times and the degree is equal to 360 degrees divided by 4, that is 120 degrees.

It is easy to draw regular polygons using the **Repeat** block as the degree of turn for each turn is equal.

Follow these steps to draw a regular polygon using Repeat block:

- 1. Drag the when so clicked block from the **Events** block menu.
- 2. Drag the manu and blocks from the **Pen** block menu.
- 3. Drag the block from the **Contro**l block menu.
- 4. Drag the lock, lock, lock, lock and lock one by one and attach them inside the **Repeat** block.
- **5.** Change the repeat value, move value and turn value according to the polygon you are drawing.

Here, the repeat value is the number of sides, the move value is the length of the sides and the turn value is the degree of angle. The script will look like this:

Remember these points to draw a polygon in Scratch:

- Must know the number of sides of the figure to be drawn.
- Must know the degree of the angle for the turns. To get the degree divide 360 by the number of sides in the shape.
- Each time a repeat command is used, a line is drawn and turned at a corner.

Chapter 8 I Drawing in Scratch

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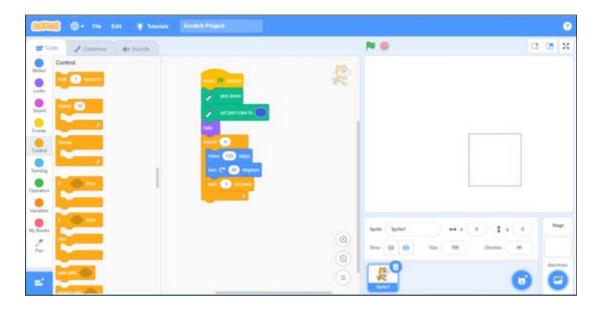
These are the commands to draw some of the polygons using **Repeat** block.

Triangle	\triangle	:	Repeat 3 Move 120 Steps Turn 120 degrees
Square		:	Repeat 4 Move 120 Steps Turn 90 degrees
Pentagon	\bigcirc	:	Repeat 5 Move 120 Steps Turn 72 degrees
Hexagon		:	Repeat 6 Move 120 Steps Turn 60 degrees
Heptagon	\bigcirc	:	Repeat 7 Move 120 Steps Turn 51 degrees
Octagon		:	Repeat 8 Move 120 Steps Turn 45 degrees
Nonagon	\bigcirc	:	Repeat 9 Move 120 Steps Turn 40 degrees
Decagon		:	Repeat 10 Move 120 Steps Turn 36 degrees

DRAWING A SQUARE USING REPEAT BLOCK

Follow these steps to draw a square:

- 1. Drag the block from the **Events** block menu.
- 2. Drag the mand man blocks from the **Pen** block menu.
- 3. Drag the block from the **Contro**l block menu. Change the value to 4 as the number of sides of a square is 4.
- 4. Drag the lock, lock, lock, lock and lock and block one by one and attach them inside the **Repeat** block. Change the values as move 120 steps and turn 90 degrees.



Chapter 8 I Drawing in Scratch

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DRAWING A CIRCLE USING REPEAT BLOCK

We can also draw a circle or a semicircle using the **Repeat** block. A full circle is 360 degrees and a semicircle is 180 degrees.

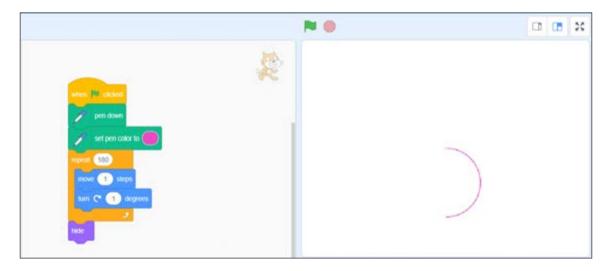
Command to draw a circle is:

Repeat 360, Move 1 Step, Turn 1 degree



Command to draw a semicircle is:

Repeat 180, Move 1 Step, Turn 1 degree



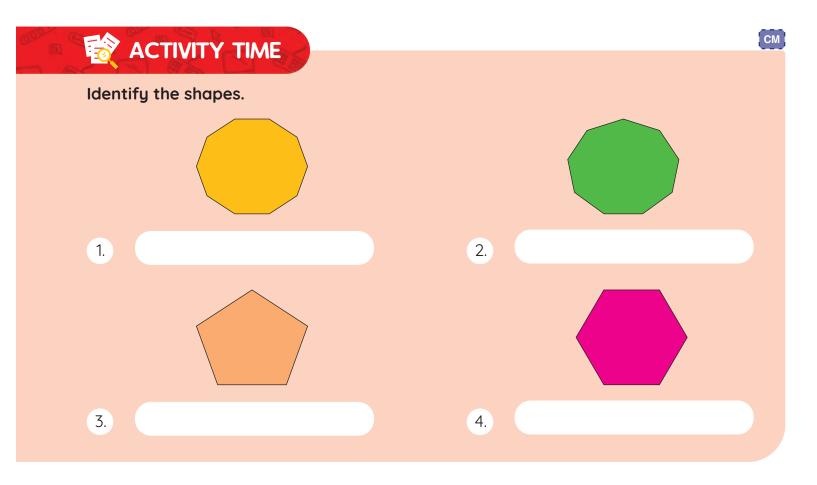


СМ

More than 22 million projects have been created in Scratch with almost 30,000 new ones being added every day.

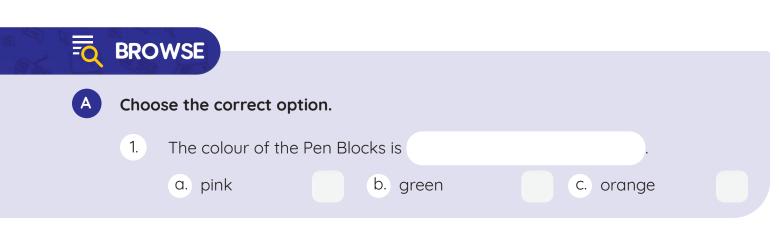
Chapter 8 | Drawing in Scratch

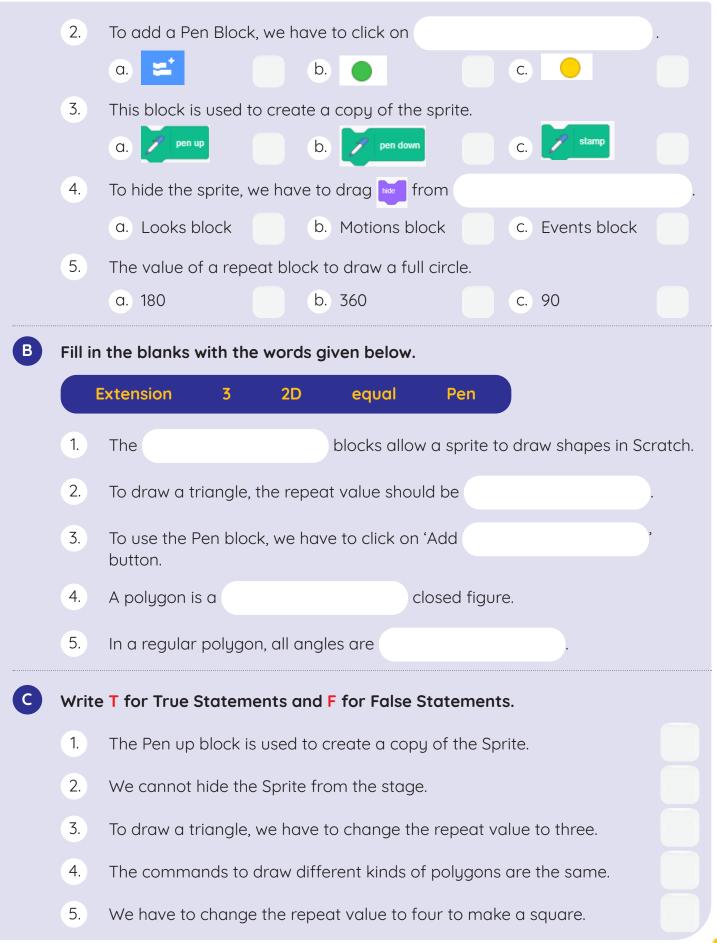
Computer G4_Ch-8.indd 103 21-02-2023 10:28:05



REFRESH

- Scratch can be used to create various shapes.
- The Pen blocks allow a Sprite to draw shapes in Scratch.
- Pen blocks are green in colour.
- Stamp Block is used to create a copy of the sprite.
- A polygon is a 2D closed figure made of lines connected.
- We need to know the number of sides and the degree of the angle for the turns to draw a polygon.





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Chapter 8 | Drawing in Scratch

- Answer the following questions in one word or one sentence.
 - 1. Which block is used to erase the pen marks on the screen?
 - 2. Which block is used to stop the sprite from drawing anything when it moves?
 - 3. What would be the repeat value to draw a pentagon?
 - 4. What would be the turn value to draw a square?
 - 5. What would be the turn value to draw a heptagon?
- E Answer the following questions.
 - 1. Write the functions of any three Pen blocks.
 - 2. What is the command to draw an Octagon?
 - 3. Write the steps to draw a line in Scratch?
 - 4. What are the points that we should remember to draw a polygon in Scratch?
 - 5. Write the commands to draw a circle and a semicircle.

ACTIVITY TIME





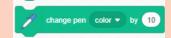
Group these blocks in the correct categories. Write the number in the table.

- 1. wai
- wait 1 seconds
- 2.
- hide

3.



- 4.
- pen down
- 5.
- when space ▼ key pressed
- 6.













10.



11.





EVENTS	LOOKS	MOTION	CONTROL	PEN

CONTRACTLET'S EXPLORE





Using these commands, draw the shapes in Scratch. Identify them.

- Repeat 5, Move 120 Steps, Turn 72 degrees
- Repeat 4, Move 120 Steps, Turn 90 degrees
- Repeat 6, Move 120 Steps, Turn 60 degrees
- Repeat 9, Move 120 Steps, Turn 40 degrees
- Repeat 10, Move 120 Steps, Turn 36 degrees

FOR THE TEACHER

- Discuss different shapes in the class.
- Explain how these different shapes are drawn in Scratch.
- Ask the students to draw them in Scratch.
- Show them how to create program using these shapes.

Chapter 8 | Drawing in Scratch

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LEARNING OBJECTIVES

In this chapter, students will learn about:



© Evolution of artificial intelligence







Read the clues and complete the crossword puzzle below.

				1		
2	3		Π			
		·				
			4			

Across

- It is the virtual assistant for Apple devices.
- 2. It is a program that chats with humans like a real person.
- **4.** It is the first smart speaker.

Down

- It is like a smart phone that you wear on your wrist.
- 3. It is the virtual assistant for Amazon.

Artificial Intelligence (AI) devices are capable of performing tasks that require intelligence. Al makes these devices capable of learning and thinking. Over the years, scientists have been working to develop machines that are able to work and behave in the same way as humans. There have been many evolutions in the field of artificial intelligence. Let us look at the inventions of some of the programs and AI devices.

1950: THE TURING TEST

In 1950, Alan Turing wrote a paper in which he proposed the idea of a test to check whether a machine can think or not. The name of the test was the **Imitation Game** and it was later recognised as the **Turing Test**.

He created **Bombe**, a machine that could decode the encoded messages. This is one of his greatest achievements.



Alan Turing



Bombe

1952: COMPUTER CHECKERS-PLAYING PROGRAM

In 1952, Arthur Samuels developed a **checkers playing program**. It was the first program that could play and compete against human players in the game.



Arthur Samuels playing checkers with his checkers-playing program

Chapter 9 I Evolution of AI

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1956: LISP PROGRAM

In 1956, John McCarthy who is known as the father of AI developed the **Lisp Program**. It is a computer programming language.



Research in AI in India started in 1986 with the launch of the Knowledge-Based Computing Systems (KBCS) program in conjunction with the United Nations Development by the Government of India Program.



John McCarthy

1966: ELIZA

In 1966, Joseph Weizenbaum developed **Eliza**, a computer program that can have interactions in the English language on almost any topic.



Joseph Weizenbaum

	EEEEEE		****	2222222				
	EE	LL	II	ZZ	AA	AA		
	EEEEE	LL	II	ZZZ	AAA	AAAA		
	EE	LL	II	ZZ	AA	AA		
	EEEEEE	THEFTE	HHI	2222222	AA	AA		
The original	program	was des	cribed	by Josep			um in	1966.
The original	program	was des	cribed	by Josep			um in	1966.
The original This implemen	program station	was des	cribed rt Lar	by Josep dateiner			um in	1966.
The original This implement ELIZA: Is som	program station	was des	cribed rt Lar	by Josep dateiner			um in	1966.
Eliza is a mo The original This implement ELIZA: Is som YOU: Men ar ELIZA: What i	program station mething se all a	was des by Norbe troublin	cribed ert Lan	by Josep dateiner	2005		um in	1966.
The original This implement ELIZA: Is som YOU: Men ar ELIZA: What i	program station mething se all a	was des by Norbe troublin like.	ert Lan	by Josep dateiner	2005 se ?			1966.

ELIZA

1973: WABOT-1

In 1973, Ichiro Kato created **WABOT-1**, a robot that has human characteristics. It can walk and grasp objects. It can also communicate but initially, it could only communicate in Japanese.



Wabot-2



СМ

Ichiro Kato



Wabot-1

1980: WABOT-2

In 1980, Waseda University's science and engineering department, Japan created the successor of WABOT-1. **WABOT-2** was able to communicate with a person and could play piano as well.

Chapter 9 | Evolution of A

1998: FURBY

In 1988, Dave Hampton and Caleb Chung created **Furby**, the first pet robot. It can communicate with humans. Initially, the words were gibberish but later, it could form clear English words.







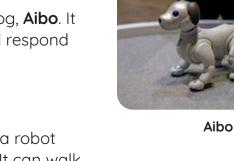
Dave Hampton

Caleb Chung

Furby

1999: AIBO

In 1999, Sony designed and manufactured a robot dog, **Aibo**. It is like an actual dog. It can interact with humans and respond on its own.



ALMIC

Asimo

2011: SIRI

2000: ASIMO

In 2000, Honda released **Asimo**, a robot that had human characteristics. It can walk, recognise faces, and use its arms like human beings.



In 2002, iRobot released Roomba, a robot vacuum cleaner that cleans on its own without crashing into obstacles



Roomba

In 2011, Apple released a voice-controlled personal assistant program for apple devices, **Siri**. It recognises human language and responds to almost any questions asked by the user.

Like Siri, other companies also developed various virtual assistants. For Example:

- Alexa was developed by Amazon in 2014.
- Cortana was developed by Microsoft in 2014.

Chapter 9 I Evolution of AI

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• Google Assistant was developed by Google in 2016.









Siri

Alexa

Cortana

Google Assistant

2014: GOOGLE'S DRIVERLESS CAR

In 2009, Google started developing a Self-Driving **or Driverless car** and launched it in 2014. These cars do not require a person to operate them. Google's driverless cars use cameras, sensors and artificial intelligence to go from one place to another.



2016: SOPHIA

Google's Self-driving car

In 2016, David Hanson created **Sophia**, a robot that has human characteristics and who can copy human gestures and facial expressions.

Sophia is the world's first robot citizen who was granted citizenship in Saudi Arabia.



David Hanson



Sophia

Artificial intelligence has become a very important part of our lives today. Devices with Al have made lives easier. Before we had to go and physically check whether a restaurant or a museum was open or not. But today, we can ask Siri or Alexa and they will tell us the update.



NEWS FEED



A robot built in the late 1990s called Kismet can recognise emotions through human body language and voice tone.

11

hanter 9 | Evolution of A

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Match the following.

1.



2.



3.



4.



a.



b.



C.



d.



REFRESH

- Artificial Intelligence (AI) devices are capable of performing tasks that require intelligence.
- John McCarthy is known as the father of Al.
- Joseph Weizenbaum developed Eliza in 1966.
- **Siri**, a voice-controlled personal assistant program for apple devices was released in 2011.
- Google's Self-Driving cars use cameras, sensors and artificial intelligence to go from one place to another.
- In 2016, David Hanson created **Sophia**, a robot that has human characteristics and who can copy human gestures and facial expressions.

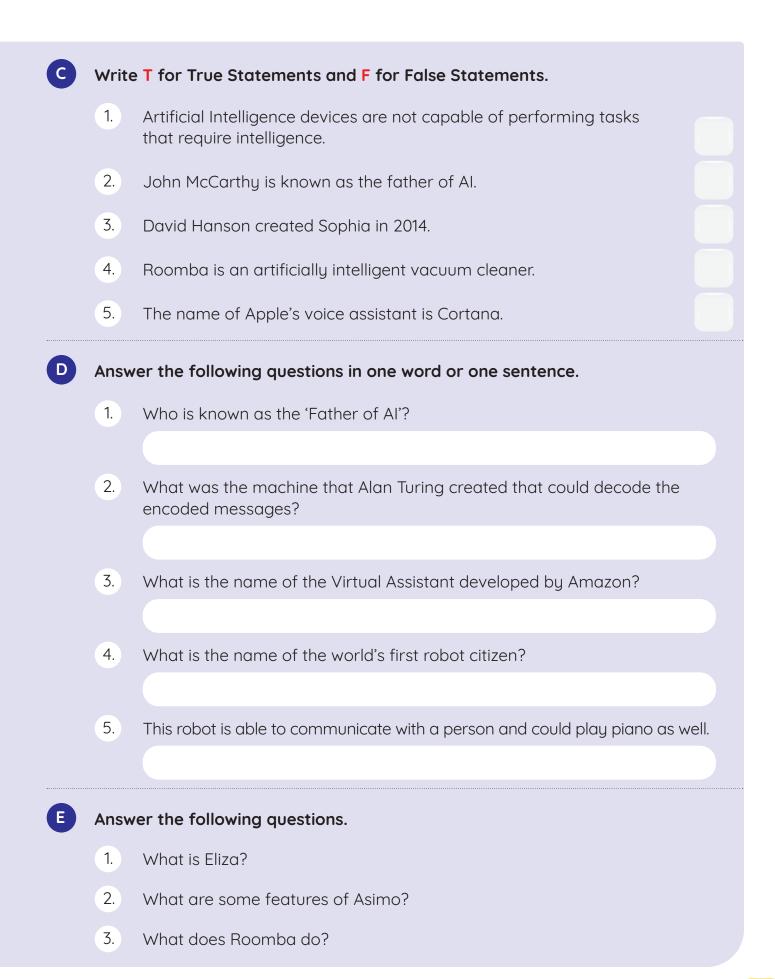
Chapter 9 | Evolution of Al

5.

A	Choo	se the correct option.							
	1.	It is the earlier name of the Turing Test.							
		a. Intimidating Game	b. I	mitation Game	C.	Internet Game			
	2.	He coined the term 'Art							
		a. Alan Turing	b. /	Arthur Samuels	C.	John McCarthy			
	3.	This program was crea	ted by Jos	seph Weizenbau	JM.				
		a. Eliza	b. \	Wabot-1	C.	Lisp Program			
	4.	They designed and ma	nufacture	d Aibo.					
		a. Apple	b. 9	Sony	C.	Amazon			
	5.	It is the name of the rol	oot vacuui	m cleaner.					
		a. Roomba	b. /	Asimo	C.	Furby			
В	Fill in	the blanks with the wo	rds given	below.					
		POT 4 Furby 200	M. Com						
	WA	NBOT-1 Furby 201	l1 Sopl	nia Lisp pro	gram				
	1.		ic	r a computor pr	oaramr	nina languago			
	1.		ıs	s a computer pr	ogrami	riirig lariguage.			
	2.	Ichiro Kato created							
	3.	Dave Hampton and Ca	leb Chung	created					
	4.	In		, Apple release	d a voic	e-controlled			
		personal assistant.							

Chapter 9 | Evolution of Al

David Hanson created



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- 4. What is Siri?
- 5. What does Google's self-driving car use to go from one place to one another?



Match the following Artificial Intelligence devices with their creator.

1.



Alan Turing

2.



Ichiro Kato

3.



David Hanson

4.



Joseph Weizenbaum

5.



Dave Hampton



a.



Sophia

b.



Furby

C.



Bombe

d.



Wabot-1

e.

	EFFFEE	EL	TITI	2222222	AA	AAA	
	EE	LL	II	22	AA	AA	
	EEEEE	LL	II	222	AAA	AAAA	
	EE	LL	II	ZZ	AA	AA	
	EEEEEE	LIMITE	HHI	ZZZZZZZ	AA	AA	
The origin	al program	was des	cribed	by Joses			um ir
Eliza is a The origin This imple	al program	was des	cribed	by Joses			um ir
The origin This imple	al program mentation	was des	cribed rt Lar	i by Josep ndsteiner			um ir
The origin This imple	al program mentation something	was des	cribed rt Lar	i by Josep ndsteiner			un ir
The origin This imple TLIZA: Is TOU: Men	al program mentation something are all a	was des by Norbe troublin	cribec rt Lar	i by Josep idsteiner	2005		um ir
The origin This imple ELIZA: Is COU: Men ELIZA: Wha	al program mentation something are all a t is the c	was des by Norbe troublin dlike.	cribec rt Lar g you n, do	i by Josep ndsteiner ? you suppo	2005 se ?		
The origin This imple ELIZA: Is COU: Men ELIZA: Wha	al program mentation something are all a	was des by Norbe troublin dlike.	cribec rt Lar g you n, do	i by Josep ndsteiner ? you suppo	2005 se ?		

ELIZA

Chapter 9 | Evolution of Al

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Using the Internet, search for information on five AI devices.

On chart paper, paste their pictures and write five sentences about them. You can choose to include the AI devices introduced in this chapter or you can select on your own.

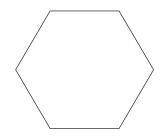
FOR THE TEACHER

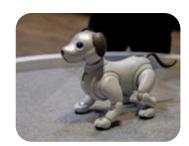
- Discuss the major development in the field of Artificial Intelligence.
- Show them the uses of AI with real-life AI enabled devices.
- Encourage the students to think of ways they have used AI in their life.

PERIODIC ASSESSMENT 4

Identify the following images and write their names.







- 2. _____
- Fill in the blanks using the words given below.

BACKDROP POLYGON ELIZA GO BUTTON PROGRAMMING

- **1.** ______ is a 2D closed figure made of connected lines.
- 2. Scratch is a _____ language.
- _____ is the background of the stage in Scratch.
- 4. Joseph Weizenbaum developed _______, a program that can interact in English language.
- **5.** _____ is a green flag present in the screen window in Scratch.
- C. Match the following.
 - 1. Sophia

 - 3. WABOT-1
 - **4.** Red button
 - 5. Pen Block
- **a.** Microsoft
 - CortanaTo stop a program
 - c. Allows sprite to draw shapes
 - **d.** David Hanson
 - e. Ichiro Kato

TEST PAPER 2

A.	Cho	oose the correct option.								
	1.	Google launched a driverless car in								
		a. 2009 b. 2014 c. 2019								
	2.	Texts that give access to another webpage on clicking are called								
		a. web browser b. hyperlink c. IPS								
	3.	block is used to add a								
		a. speech bubble b. thought bubble c. thinking bubble								
	4.	In PowerPoint, view mode can be used by clicking on								
		button.								
	_	a. Slide Sorter b. Reading c. Slide Show								
	5.	block is used to the sprite.								
		a. show b. move c. hide								
B.		in the blanks.								
	1.	blocks are in blue colour.								
	2.	block allows a Sprite to draw a shape in Scratch.								
	3.	developed Alexa in 2014								
	4.	view is the default view in a presentation.								
	5.	is the unique address of a website.								
C.		ite T for true statements and F for false statements.								
	1.	A decagon has 9 sides.								
	2.	Event block controls sound functions in Scratch.								
	3.	Slides cannot be deleted in PowerPoint.								
	4.	Computer viruses can delete files from the system.								
	5.	Asimo is a robot that has human-like characteristics.								

Test Paper 2

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D. Short answer type questions.

- 1. Name any four parts of Microsoft Edge window.
- 2. What is the title slide in PowerPoint?
- **3.** What is the command to draw a circle in Scratch?
- **4.** Define the term artificial intelligence devices.
- **5.** What is meant by the event block in Scratch?

E. Long answer type questions.

- 1. What is a website? How can you access it using a search engine?
- 2. Name any five parts of the Scratch window and define them.
- **3.** What is Polygon? How can you draw a polygon using a repeat command?
- **4.** Write a note on the Turing Test.
- 5. What are the two methods to view a presentation? Explain.

Test Paper 2

puter G4_Ch-9.indd 120 25-02-2023 17:52:53



A. Create the given document in MS Word 2016.

Windows

- 1. An operating system makes sure that the computer system is working smoothly.
- 2. Windows is an operating system based on the GUI provided by Microsoft.
- 3. It has many versions such as Windows XP, Windows 10 and Windows 11.
- 4. Windows 10 is the most popular version.
- 5. Windows 10 was launched in 2015.

Now, edit the document and make these changes:

- Change the font style of the heading "Windows" to Times New Roman.
- Change the font size of the heading to 20 point.
- Center align the heading.
- Change font case of the heading to UPPERCASE.
- Change font colour for point 1 to red.
- Highlight "GUI" in point 2.
- Bold "Windows 10" everywhere.
- Change numbering to bullets.

B. Draw the following shapes in Scratch.









Computer G4_Ch-9.indd 121 25-02-2023 17:52::

C. Create the following presentation on MS PowerPoint 2016.



Introduction

- ▶ Bullying is any pattern of behaviour that is intended to harm a person in some way or make other people feel bad about themselves
- ▶ In cyberbullying, electronic communication is used to bully a person, by sending harmful, mean or false messages about the person.

Slide 1 Slide 2

Examples of cyberbullying

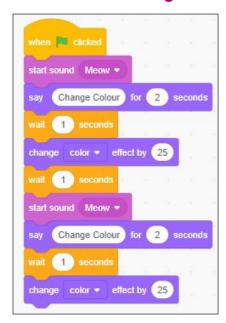
- Posting or spreading rumours about your friend online.
- ▶ Sending threatening texts to someone.
- Being rude to someone while playing an online game.
- Hacking into someone's social networking account.

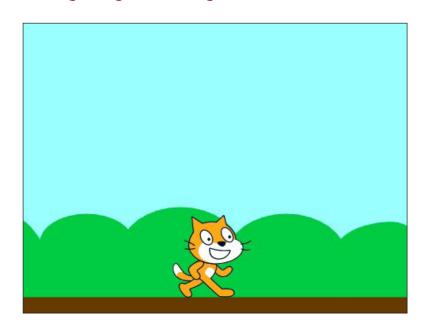
How to stop it

- Never send private, personal information such as name, address, or phone number to anyone online.
- ▶ Say no or ask questions when asked to share information online by some stranger
- Consult an adult if you are not sure of anything

Slide 3 Slide 4

D. Create the following in Scratch using the given coding.





Project Project

Computer G4_Ch-9.indd 122 25-02-2023 17:52:53



NATIONAL CYBER OLYMPIAD

(Sample paper)

LOGICAL REASONING

1.	Choose	the	correct	option to	com	olete	the	series.

165	180	195	210	?
-----	-----	-----	-----	---

a. 220

b. 225

c. 235

d. 250

2. Which of the following options shows the correct mirror image of the word 'READING'.

- a. GNIDAER
- CNIDAER '9
- READINe .2
- **d.** яEVDINe

3. If in a code language, POET is coded as 6789, WORD is coded as 1754, then how is POWER coded?

- **a.** 67185
- **b.** 76485
- **c.** 45678
- **d.** 95418

COMPUTERS AND INFORMATION TECHNOLOGY

- 4. E-mail can be used for ______.
 - a. video calling
 - **b.** counting steps
 - c. creating presentation
 - **d.** chatting
- 5. In MS-Word 2016, \equiv \equiv \equiv buttons are used for _____
 - **a.** text alignment
- **b.** font colour
- **c.** text effect
- d. font case
- 6. Select the software that can be used for making presentations.





c. B





b.



Print Screen SysRq

8. Choose the popular application software that can be used for audio and video calling.



a





ACHIEVERS SECTION

9. The given pop-up menu will appear when we right click on a desktop icon in Windows 10. Which of the following desktop icon is this?



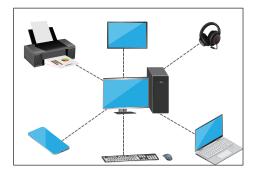
b. 6







10. Which of the following type of network is shown in the given image?



a. LAN

b. PAN

c. WAN

d. CAN