



Jagat taran golden Jubilee school

Class – 7

Subject :- science

(2020 – 21)

Assignment – 3

- 1) Read chapter 3 (Fibre to fabric) properly from NCERT science text book.
- 2) Do the following questions in your assignment copy :-
 - (a) Explain the sequences of processes involved in wool processing.
 - (b) Explain the process of obtaining silk.
 - (c) Draw diagram to show life cycle of a silk moth.
 - (d) Explain – shearing, sorting, sericulture, reeling of silk.
- 3) Link for the assignment 
https://diksha.gov.in/cbse/play/collection/do_312796455263043584117078?contentType=TextBook&contentId=do_31279858549559296017187
- 4) Link for the vedio tutorial 
https://diksha.gov.in/cbse/play/collection/do_312796455263043584117078?contentType=TextBook&contentId=do_31274794791965491214682

https://diksha.gov.in/cbse/play/collection/do_312796455263043584117078?contentType=TextBook&contentId=do_31274794800815308814684

Teacher – snigdha bhattacharya

जगत तारन गौळडेन जुबिली विद्यालय,
प्रभागराज

सत्र - 2020-21

वर्ष - 7

विषय - हिन्दी

पुस्तक - वसंत भाग 2 (N.C.E.R.T)

पाठ संख्या 3 (Assignment No. 3)
प्रश्नों के उत्तर हिन्दी उत्तर-पुस्तिका में लिखो।

- (1.) हिमालय की बेटियाँ किन्हीं कहा जाता है?
- (2.) पाठ में निहित किन्हीं पाँच प्रमुख नदियों के नाम लिखो।
- (3.) सौभाग्यशाली किसे कहा जाता है? पाठ के आधार पर लिखो।
- (4.) हिमालय पर्वत की नदियों का ----- कहा जाता है।
- (5.) 'विरमय' शब्द का अर्थ बताते हुए वाक्य में प्रयोग करो।
- (6.) 'बाबा बालेबजर' ने नदियों को क्या बदल चुका है?
- (7.) हिमालय के जंगलों में मुख्यतः कौन-कौन से वृक्ष पाए जाते हैं?
- (8.) लैरवक की नदियों का कौन सा रूप आकर्षक लगा?
- (9.) पाठ में महाकवि बालिराल के लिए प्रसिद्ध ग्रन्थ का उल्लेख करो।
- (10.) गठिविधि - अनुच्छेद लेकर - 'गंगा की एक पवित्र नदी'
(Paragraph) (75 से 100) शब्दों का अनुच्छेद लिखो।

**J.T. GOLDEN JUBILEE SCHOOL,
PRAYAGRAJ.**

SESSION:

2020-2021

CLASS: VII

SUBJECT: Computer

Science

TEACHER: Neha Jaiswal

ASSIGNMENT III

STUDY MATERIAL

Lesson: 2 Charts in Excel 2010

Thoroughly go through the chapter given below.

CHAPTER 2

CHARTS IN EXCEL 2010

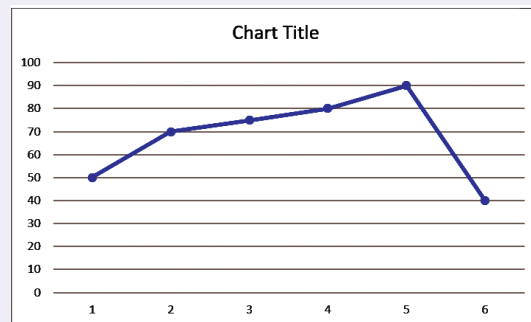
IN THE CHAPTER

- Chart Components
- Various Chart Types
- Charting Rules
- Creating a Chart
- Elements of a Chart
- Chart Tools
- Formatting a Chart
- Sparklines

Think and Ink

Observe and write the lowest number from the given data.

50
70
75
80
90
40



Which of the two options is more convenient to find the lowest number?

Excel is a spreadsheet application in MS Office suite that lets you store, manipulate and analyze data. It can be used to enter all sorts of data and perform different functions or calculations. Excel helps to easily incorporate range of data into a neat graphical display. These graphical displays make the data attractive, easy to read and evaluate.

A chart is a graphical representation of data in a worksheet. It is more attractive and appealing. It helps you to understand the data easily. It draws comparison between the data. Excel can build a

chart automatically based on the existing data. Later on, chart can be moved, resized and deleted without affecting the data in the worksheet.

Chart Components

1. **Chart Title** is placed at the top of each chart. It is used to display information regarding the visualized chart, i.e. heading for the chart.
2. **Chart Area** is the place, which represents a layout region of the chart that holds data series, axis, data, legend, etc.
3. **Data Series** refers to the sets of values that are going to be on the chart, it may be a line, a bar, a slice, etc.
4. **Plot Area** presents the actual chart which includes both axis, data labels, gridlines and data series.
5. **X-Axis** or **Category Axis** is the horizontal axis of the chart.
6. **Y-Axis** or **Value Axis** is the vertical axis of the chart.
7. **Legend** tells you, what each bar, pie, etc. represents on a chart. It is usually colour-code or pattern given to the data series. It has the names beside them that are from the spreadsheet.
8. **Gridlines** are used to make the data in a chart easier to read. You can display horizontal and vertical gridlines.

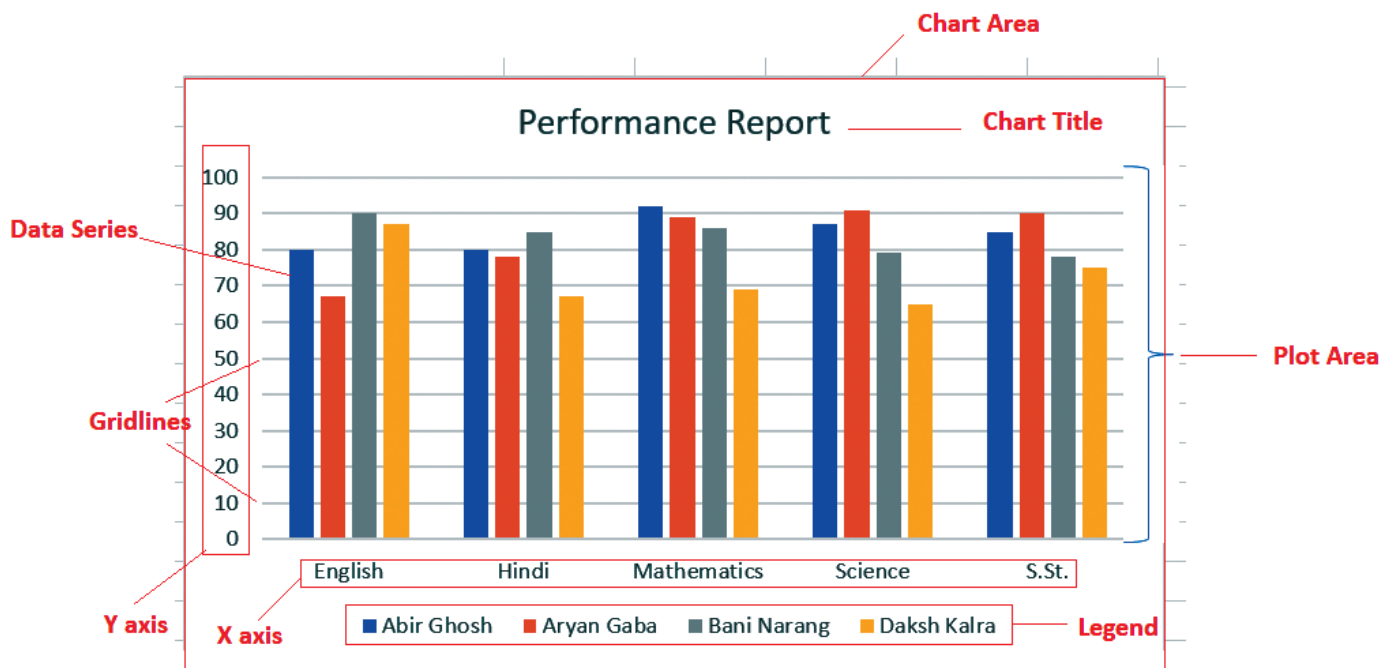










Fig 2.1: Chart Components

Various Chart Types

Types of Charts	Description
Column/3-D Column 	It represents the data in the form of vertical bars. It displays individual values that can be compared to each other and shows multiple series of data. It is the most commonly used chart.
Bar/3-D Bar 	It represents the data in the form of horizontal bars. It displays individual values that can be compared to each other and shows multiple series of data.
Line/3-D Line 	It represents the multiple series of data in a line format with data markers; representing each value in that series. Data markers can be displayed in a variety of formats including triangles, squares, diamonds, etc.
Area Chart 	It is similar to the line chart, except that the areas under the lines are filled in.
Pie/3-D Pie series 	It displays only one data series as a group. Each value in that is displayed as a slice of that pie. The size of the slice is displayed as a percentage that the value contributes to the whole series.
Scatter Chart 	It is known as X-Y chart also. It is used to compare pairs of value.
Doughnut Chart 	It is similar to a pie but displays more than one series. It displays series as rings and each ring is divided into slices like a pie chart.
Waterfall Chart 	It provides a great method to visualize the impact of multiple data points typically a series of positive and negative values.

Rules to Create Charts

There are three basic rules to create charts:

1. Excel does not automatically add a chart title and a sub title to your chart based on the first row and the second row of selected information. You can add the chart title and sub title during the chart layout.
2. Do not leave any rows and columns empty in your source data otherwise chart will leave empty space for every empty row or column.
3. If there are more rows than columns, Excel will plot the data by column. The first column becomes the X-axis labels, the remaining of the columns are the data series. The first row after the title becomes the legend's labels and if columns are more than rows than Excel will follow same rule but vice-versa.

Creating a Chart

It is very easy to create a chart in Excel but before that you must enter data into a worksheet.

To create a chart in Excel follow the steps given:

Step 1: Select the data for which you want to create a chart.

	A	B	C	D	E	F	G
1							
2	Roll No.	Name	English	Hindi	Mathematics	Science	S.St.
3	1	Abir Ghosh	80	80	92	87	85
4	2	Aryan Gaba	67	78	89	91	90
5	3	Bani Narang	90	85	86	79	78
6	4	Daksh Kalra	87	67	69	65	75
7	5	Gurleen Kaur	68	70	75	79	76
8	6	Harman Vij	54	67	71	84	87
9	7	Sanvi Garg	82	89	86	79	85

Fig 2.2: Sample Data

Step 2: Click on the **Column** drop-down menu in **Charts** group of the **Insert** tab.

Step 3: Click on **Clustered Column**, the first column chart in the 2-D Column list.

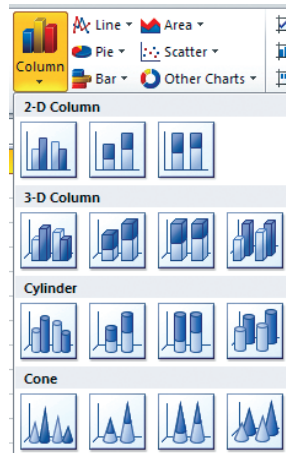


Fig 2.3: Selecting Clustered Column Chart

Excel places the chart as an embedded object on the current worksheet and the **Design**, **Layout** and **Format** tabs appear on the Ribbon.

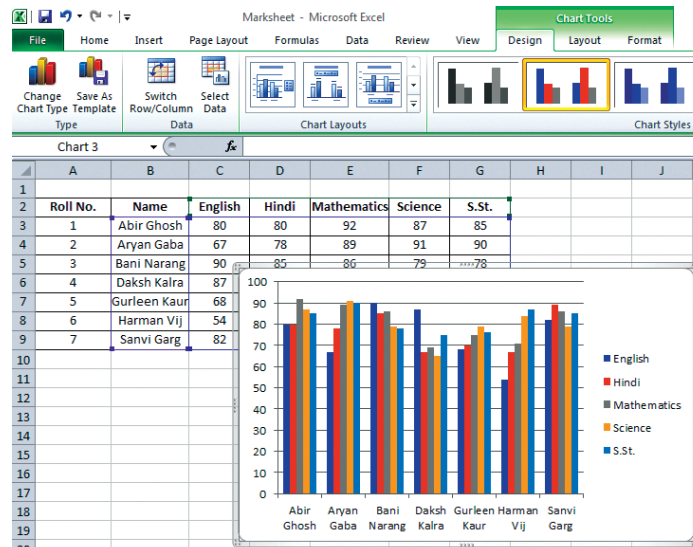


Fig 2.4: Clustered Column Chart

Smart Bit

To create a chart instantly, select the data that you want to represent in the chart and then press the F11 key.

To switch rows and columns

Sometimes, you may want to change the way charts group your data. To switch the rows and columns, follow the steps given below:

Step 1: Select the chart you want to modify.

Step 2: From the **Design** tab, select the **Switch Row/Column** command in the **Data** group.

Step 3: The rows and columns will be switched. In our example, the data is now grouped by names, with columns for each subject marks.

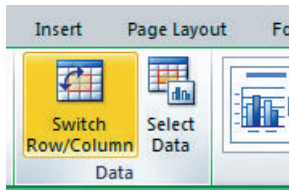


Fig 2.5: Selecting Switch Row/Column option

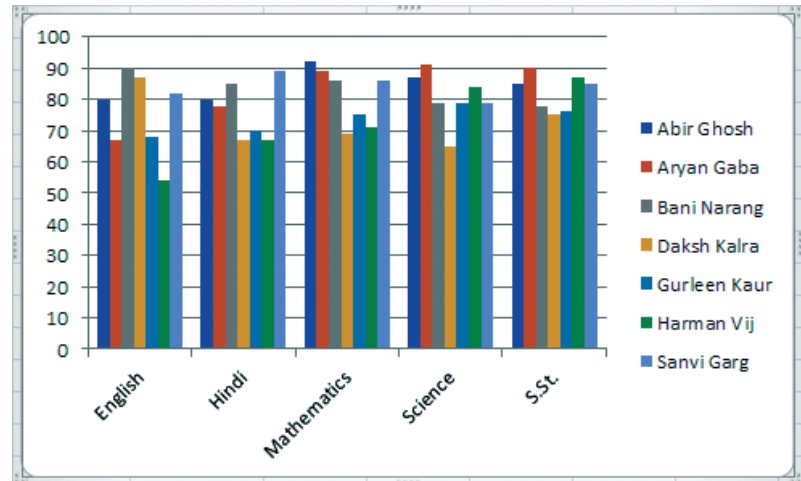


Fig 2.6: Switched rows and columns

Elements of a Chart

You can add the different components of chart like Chart Title, Axis Title, Legend, etc. whenever you require.

Adding Chart Title

To change the chart title, follow the given steps:

Step 1: Click on the chart to which you want to add title. It will highlight **Design**, **Layout** and **Format** tab.

Step 2: Click on **Chart Title** in the **Labels** group of the **Layout** tab.

A list of options will appear.

Step 3: Click on **Centered Overlay Title** or **Above Chart** under the **Chart Title** option. A box with the words Chart Title appears on the chart.

Step 4: You can type the desired title by double-clicking the new text box that says 'Chart Title'.

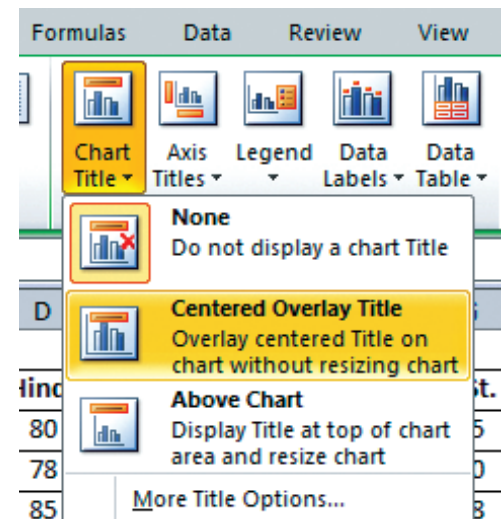


Fig 2.7: Selecting Chart Title option

Adding Legend

A legend helps readers to understand the graphical components of a chart. For example, in a bar chart, the legend tells the readers what each bar of a particular color or pattern represents. Legends can be placed anywhere within the chart area, but are commonly located at the bottom of the chart. To change the position of a legend of chart, follow these steps:

Step 1: Click the chart to which you want to edit and change the position of legend.

Step 2: Click on **Legend** in the **Labels** group of the **Layout** tab.

A drop-down menu will appear.

Step 3: Choose the desired option (e.g. Show Legend at Right, Show Legend at Top, etc.).

Adding Axis Title

To add title to the axis, follow the steps:

Step 1: Click on **Axis Titles** option in the **Labels** group of the **Layout** tab.

Step 2: Select **Primary Horizontal Axis Title** option to add title for an X axis.

Step 3: Click on **Title Below Axis**. The **Axis Title** box appears at the bottom. Type the title in the box.

Similarly, by selecting the **Primary Vertical Axis Title** option you can add Y-axis title.

Adding Data Labels

Step 1: Click on **Data Labels** option in the **Labels** group of the **Layout** tab.

Step 2: A drop-down menu will appear. Choose the desired option from the list.

The data labels will be inserted at the desired points.

Chart Tools

There are many ways to customize and organize your charts. For example, Excel allows you to change the chart type, its layout, style, location and so on.

To change the chart type:

If you find that your data is not well suited to a certain chart, it is easy to switch to a new chart type. To change the chart type, follow the steps given below:

Step 1: From the **Design** tab, click the **Change Chart Type** command.

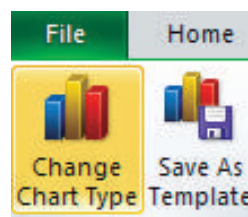


Fig 2.8: Selecting Change Chart Type option

Step 2: The **Change Chart Type** dialog box will appear. Select a new chart type and layout, then click **OK**. In our example, we will choose a **Line** chart.

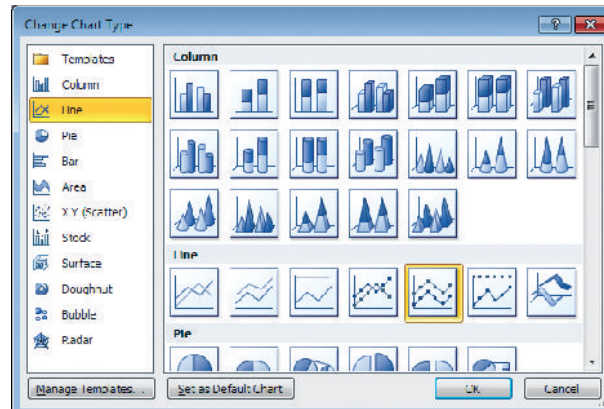


Fig 2.9: Selecting a chart

The selected chart type will appear.

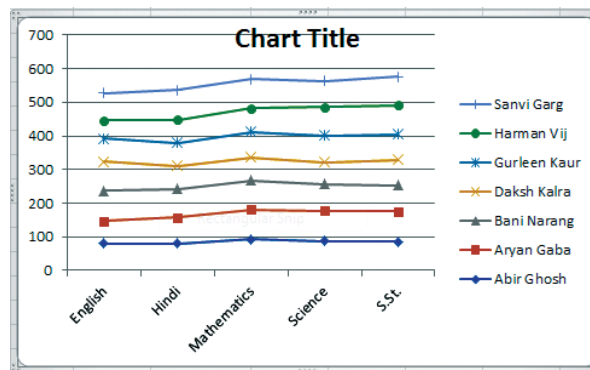


Fig 2.10: Changed Chart Style

To change the chart style:

Excel provides several preformatted chart styles that can be used to change the appearance of the chart. A chart style includes pre-formatted colors, background, shading, gradients, etc. which gives your chart a consistent visual appeal. To change the chart style, follow these steps:

Step 1: Select your chart.

Step 2: Under the **Design** tab, in the **Chart Styles** group, click on the **More** arrow. It will display all the available chart styles for a particular chart type.

Step 3: Choose the chart style. The chart will appear with new style.

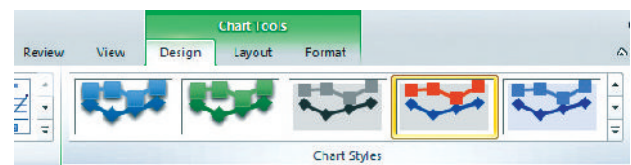


Fig 2.11: Selecting a design

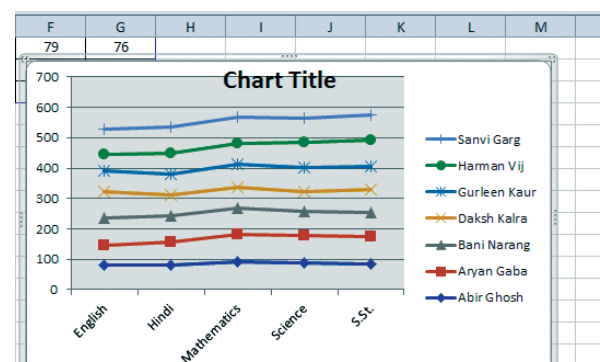


Fig 2.12: Changed Chart Style

Formatting a Chart

You can change the format of individual chart elements, such as the chart area, plot area, data series, axes, titles, data labels, or legend.

To format a chart:

You can format any element of the chart by selecting it. For example, to format the plot area of chart, follow the steps given below:

Step 1: Select the Plot Area.

Step 2: Right-click it and click **Format Plot Area**.

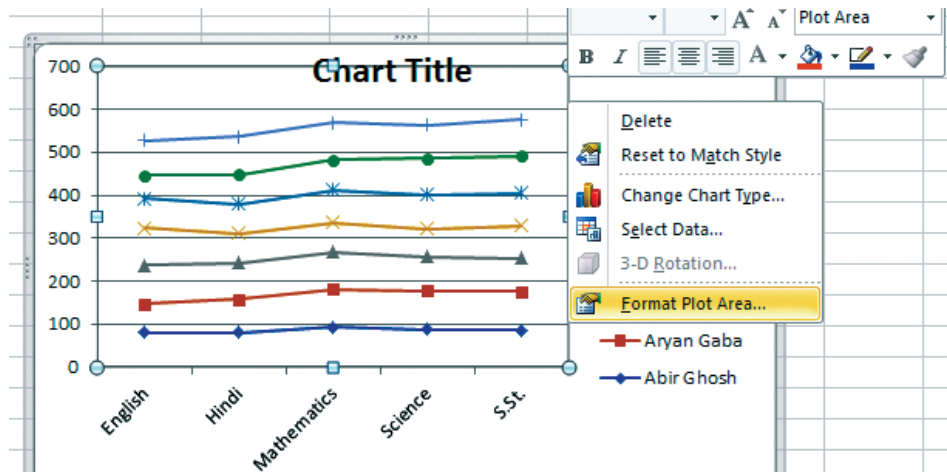


Fig 2.13: Selecting Format Plot Area option

The Format pane appears on the right side with options.

Step 3: Click on the **Fill** tab and select **Pattern Fill** radio button. Choose the desired pattern.

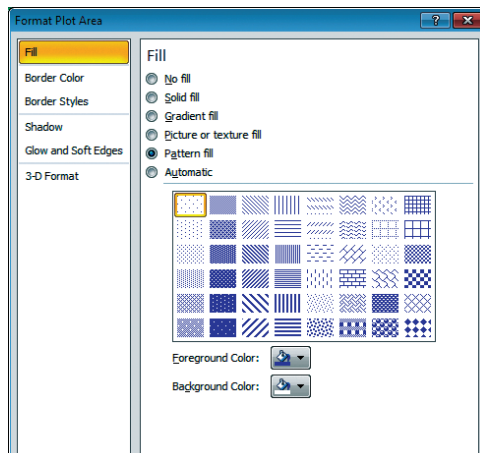


Fig 2.14: Selecting Pattern Fill

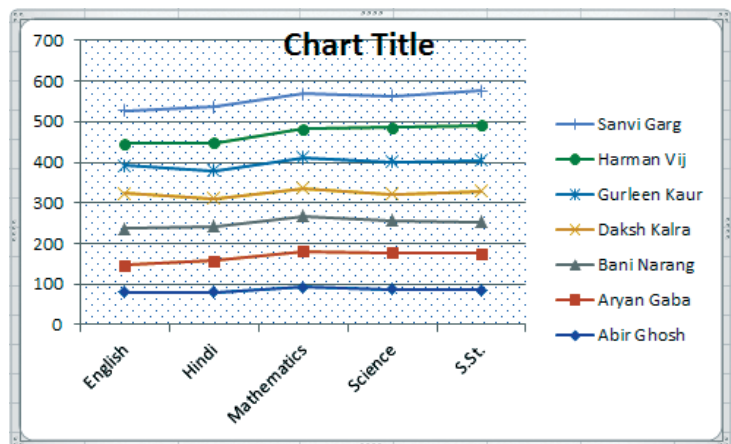


Fig 2.15: Applied Pattern Fill in Plot Area

Similarly, you can format any chart element by selecting the chart element (for example, data series, axes, or titles), right-clicking it and clicking **Format <chart element>**.

Sparklines

A sparkline is a very small line chart; typically drawn without axes or coordinates. Sparklines are introduced in Excel 2010 to be a convenient alternative to charts. These are miniature charts that

fit into a single cell. It presents the general shape of the variation in some measurement, in a simple and highly condensed way.

These charts are usually located very close to the data they represent, making it easier both to spot trends in the existing data and to see how changes would affect the results.

Types of sparklines

There are three types of sparklines:

1. **Line:** Similar to a line chart, the Line type of sparkline can appear with or without a marker for each data point. The first group is the example of line sparklines.
2. **Column:** Similar to a column chart, the second group shows the Column sparklines.
3. **Win/Loss:** A Win/Loss sparkline is a binary-type chart that displays each data point as a high block or a low block. In this sparkline, each data point is depicted as a high block (win) represented by blue square or a low block (loss) represented by red square.

Sparklines are ideal for situations where you want to make the data clearer and more eye catching and where you do not need all of the features of a full chart. On the other hand, charts are ideal for situations where you want to represent the data in greater detail and they are often better for comparing different data series.

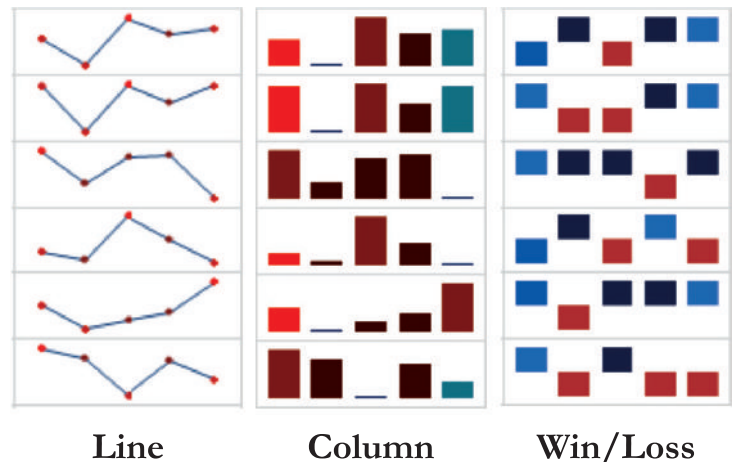


Fig 2.16: Sparklines

To create sparklines

Generally, you will have one sparkline for each row, but you can create as many as you want in any location you want. Just like with formulas, it is usually easier to create a single sparkline and then use the fill handle to automatically create sparklines for the remaining rows.

The steps to create a sparkline are as follows:

Step 1: Click on the **Insert** tab.

Step 2: In the **Sparklines** group, select the **Line** option. The **Create Sparklines** dialog box will appear.

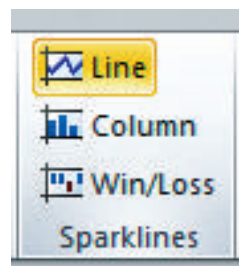


Fig 2.17: Selecting Line option

Step 3: Specify the **Data Range** and **Location Range** where you want the sparkline to be. Click on **OK**.

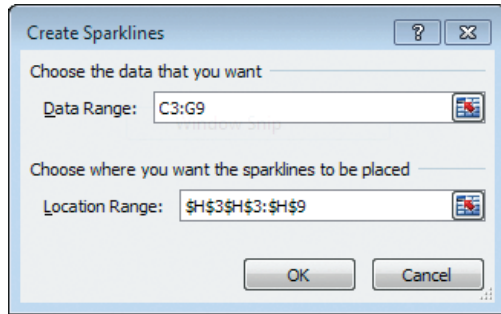


Fig 2.18: Specifying Data Range

	B	C	D	E	F	G	H
1							
2	Name	English	Hindi	Mathematics	Science	S.St.	
3	Abir Ghosh	80	80	92	87	85	
4	Aryan Gaba	67	78	89	91	90	
5	Bani Narang	90	85	86	79	78	
6	Daksh Kalra	87	67	69	65	75	
7	Gurleen Kaur	68	70	75	79	76	
8	Harman Vij	54	67	71	84	87	
9	Sanvi Garg	82	89	86	79	85	
10							

Fig 2.19: Sparklines

The sparklines will appear in the document.

Sparkline Formatting Options

After inserting the sparklines, you will find a new ribbon called as “Sparklines Tools – Design” ribbon. This is where all the formatting options for sparklines are included.

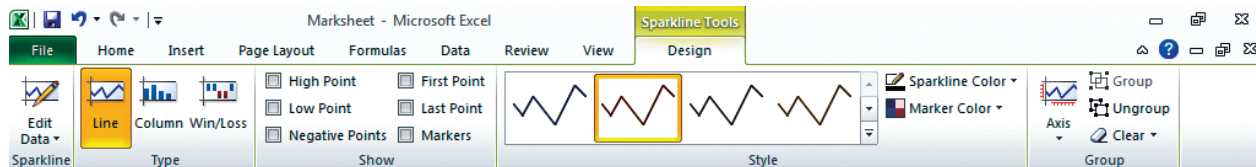


Fig 2.20: Sparkline Tools – Design Ribbon

Some of the key formatting/customizations you can do are,

1. Change the sparkline type.
2. Change the source data/target cells of sparkline.
3. Set different colors for first point, last point, highest and lowest points (applicable for column and line chart types).
4. Set axis options (show/hide axis, set min and max value for vertical axis, set axis type to date axis, etc.).
5. Group/ungroup a bunch of sparklines.
6. Remove or clear sparklines.

Sparklines and Missing Data – How does it work?

1. If the sparkline source data contains non-numeric data, they are neglected while plotting the sparklines.
2. If data has some #NA values, they are neglected.
3. If data has blanks, sparkline shows blanks too.
4. If data has zeros, zero value is plotted.
5. If data has some hidden rows/columns, the values are neglected (unless you enable “Show data in hidden cells” option).

RECAP

- Charts are graphical representation of data in a worksheet.
- It helps you to analyse and draw comparison between the data.
- Chart Area is the place, which represents a layout region of the chart that holds data series, axis, data, legend, etc.
- Data Series refers to the sets of values that are going to be on the chart, it may be a line, a bar, a slice, etc.
- Plot Area presents the actual chart which include both axis, data labels, gridlines and data series.
- A sparkline is a very small line chart.

EXERCISE

A. Tick (✓) the correct answer.

1. The _____ tab provides various chart style options.
a) Layout b) Design c) Format
2. It displays only one data series as a group.
a) Pie Chart b) Bar Chart c) Line Chart
3. _____ presents the actual chart which includes both the axis, data labels, gridlines and data series.
a) Plot Area b) Chart Area c) Legends
4. They are miniature chart that fit into a single cell.
a) Sparkbars b) Spark columns c) Sparklines
5. Which chart type displays data in form of a circle?
a) Line b) Pie c) Bar

B. Fill in the blanks.

1. _____ is referred to the sets of values.
2. In _____ chart, each data value represents one slice of a pie.
3. _____ is the vertical axis that is used to plot the values.
4. _____ is usually used to identify the colour-code or pattern given to data series.
5. A _____ is a very small line chart.

C. Write True (T) or False (F).

1. Bar chart represents the data in the form of vertical bars.
2. X- axis is the horizontal axis.
3. Sparkline is a small pie chart.
4. The Chart Area contains the actual chart itself and includes data series, category and value axis as well.
5. Column Chart type displays data in the form of circle.

D. Read the given clues and name the chart types.

1. It looks like a small round cake with a hole in the centre. _____
2. It looks like a pizza with pieces cut. _____
3. It looks like a horizontal chocolate bar but each bar has different size. _____
4. It represents a layout region of the chart. _____

E. Short answer type questions.

1. What is a chart?

2. How is a Column chart different from a Bar chart?

3. What are sparklines?

F. Long answer type questions.

1. Name and describe any three components of a chart.

2. Write the steps to change the chart style.

3. How can you create sparklines?

G. Application based questions.

1. Sanya has created a chart. She wants to improve the appearance of her chart by changing the chart style. Which option will you suggest her to perform this task?

2. During a cricket match, only five batsmen of the winning team played. Which chart will help you to demonstrate the individual contribution of each batsman?

H. Lab activity.

1. The following is the information about temperatures in 4 cities on a given day. Enter the details in Excel and plot a line graph for the given information.

TIME	TEMPERATURE			
	New Delhi	Mumbai	Bengaluru	Jaipur
12 midnight	20	25	32	38
3:00 am	18	24	28	32
6:00 am	16	20	22	28
9:00 am	25	30	33	36
12 noon	32	38	42	46

2. Create a 3-D column chart comparing marks for a student in different subjects.

Subject	Unit I	Term I	Unit II	Term II	Total
English	40	85	42	90	257
Hindi	32	70	38	76	216
S.St.	38	79	39	80	236
Science	42	87	45	92	266
Maths	48	96	47	97	288

- Create a Column chart depicting the student's average marks in all the subjects for both terms and units.
- Create a Pie chart displaying the overall performance in each subject to the whole.
- Create Line Sparkline chart for each subject.

NUMBER SYSTEM

EXERCISE

A. Tick (✓) the correct answer.

- _____ number system uses 10 as base.
 a) Octal ✓ b) Decimal c) Hexadecimal
- In binary addition $1 + 1 =$ _____.
 a) 2 b) 1 ✓ c) 0
- To convert decimal number into binary number, divide the number by _____.
 a) 8 b) 10 ✓ c) 2
- Which of the following is an octal number representation?
 ✓ a) $(14)_8$ b) $(129)_{10}$ c) $(1010)_2$
- In the number 72096, the most significant digit is _____.
 a) 9 b) 6 ✓ c) 7

B. Fill in the blanks.

- Decimal number system is the most widely used number system.
- In binary number system, 0 means OFF state.
- In hexadecimal number system, letters A to F are used to represent number from 10 to 15.
- The rightmost digit of a number has the lowest weight.
- The leftmost digit of a number is known as most significant digit.

C. Convert the following decimal numbers into their binary equivalents.

- i) $(120)_{10} = (1111000)_2$ ii) $(354)_{10} = (101100010)_2$
 iii) $(75)_{10} = (1001011)_2$ iv) $(24)_{10} = (11000)_2$

D. Convert the following binary numbers into their decimal equivalents.

- i) $(101)_2 = (5)_{10}$ ii) $(110101)_2 = (53)_{10}$
 iii) $(110111)_2 = (55)_{10}$ iv) $(00111010)_2 = (58)_{10}$

E. Perform as directed.

1. Perform binary addition for the following:

$$\begin{array}{r} \text{(a) } 1000 \\ + 0111 \\ \hline 01111 \end{array} \qquad \begin{array}{r} \text{(b) } 1001101 \\ + 1000101101 \\ \hline 01001111010 \end{array}$$

2. Perform binary subtraction for the following:

$$\begin{array}{r} \text{(a) } 110111 \\ - 101110 \\ \hline 001001 \end{array} \qquad \begin{array}{r} \text{(b) } 10011 \\ - 01010 \\ \hline 01001 \end{array}$$

3. Multiply the following binary numbers:

$$\begin{array}{r} \text{(a) } 101 \\ \times 011 \\ \hline 101 \\ 101 \times \\ 000 \times \times \\ \hline 01111 \end{array} \qquad \begin{array}{r} \text{(b) } 101010 \\ \times 1011 \\ \hline 101010 \\ 1101010 \times \\ 000000 \times \times \\ \hline 111001110 \end{array}$$

F. Short answer type questions.

1. Define number system.
- A. An organised way of representing numbers is called number system.
2. Define the term base.
- A. Base is defined as the number of digits in the number system.
3. What is base of a hexadecimal system?
- A. The base of a hexadecimal system is 16.

G. Long answer type questions.

1. Write the steps to convert decimal number to binary number.
- A. **Step 1:** Divide the given number by 2.
Step 2: Write the remainder either 0 or 1 and divide the quotient again by 2.
Step 3: Repeat the step 2 till the quotient is zero.

Remainders which are obtained at each step are written in reverse order, the obtained number is the binary conversion of the given decimal number.

2. Describe hexadecimal number system.
- A. Hexadecimal number system has base 16 as it uses sixteen distinct symbols, digits 0-9 to represent values from zero to nine and A, B, C, D, E, F to represent values from ten to fifteen.

H. Application based questions.

- Reema wants to convert 5698 into binary system. Suggest her method to do so.
- A. She should divide the number by 2 and write the reminders in reverse order.
- The teacher has given an assignment to Ritika on binary subtraction. She is confused how to subtract $(0011)_2$ from $(1100)_2$. Help her solve this.

A. $(1100)_2$
 $-(0011)_2$
 $(1001)_2$

CHARTS IN EXCEL 2010

EXERCISE

A. Tick (✓) the correct answer.

- The _____ tab provides various chart style options.
a) Layout ✓ b) Design c) Format
- It displays only one data series as a group.
a) Pie Chart b) Bar Chart ✓ c) Line Chart
- _____ presents the actual chart which includes both axis, data labels, gridlines and data series.
a) Plot Area ✓ b) Chart Area c) Legends
- They are miniature chart that fit into a single cell.
a) Sparkbars b) Spark columns ✓ c) Sparklines
- Which chart type displays data in form of a circle?
a) Line ✓ b) Pie c) Bar

B. Fill in the blanks.

- Data Series is referred to the sets of values.
- In Pie chart, each data value represents one slice of a pie.
- Y axis is the vertical axis that is used to plot the values.
- Legend is usually used to identify the colour-code or pattern given to data series.
- A sparkline is a very small line chart.

C. Write True (T) or False (F).

- Bar chart represents the data in the form of vertical bars. F
- X- axis is the horizontal axis. T
- Sparkline is a small pie chart. F
- The Chart Area contains the actual chart itself and includes data series, category and value axis as well. T
- Column Chart type displays data in the form of circle. F

D. Read the given clues and name the following.

- It looks like a small round cake with a hole in the centre.
- It looks like a pizza with pieces cut.
- It looks like a horizontal chocolate bar but each bar has different size.
- It represents a layout region of the chart.

Doughnut Chart

Pie Chart

Bar Chart

Chart Area

E. Short answer type questions.

1. What is a chart?
- A. Charts is a graphical representation of data in your worksheet.
2. How is a Column chart different from a Bar chart?
- A. Column chart represents the data in the form of vertical bars that display individual values that can be compared to each other and can show multiple series of data.
Bar chart represents the data in the form of horizontal bars that display individual values that can be compared to each other.
3. What are sparklines?
- A. Sparklines are very small line charts, typically drawn without axes or coordinates. These are miniature charts that fit into a single cell.

F. Long answer type questions.

1. Name and describe any three components of a chart.
- A. Chart Title is placed at the top of each chart. It is used to display information regarding the visualized chart i.e. heading for the chart.
Chart Area is the place, which represents a layout region of the chart that holds data series, axis, data, legend, etc.
Data Series refers to the sets of values that are going to be on the chart, it may be a line, a bar, a slice, etc.
2. Write the steps to change the chart style.
- A. **Step 1:** Select your chart.
Step 2: Under the Design tab, in the Chart Styles group, click on the More arrow. It will display all the available chart styles for a particular chart type.
Step 3: Choose the chart style. The chart will appear with new style.
3. How can you create sparklines?
- A. **Step 1:** Click the Insert tab.
Step 2: In the Sparklines group, select Line option. The Create Sparklines dialog box will appear.
Step 3: Specify the Data Range: and Location Range: where you want the sparkline to be. Click OK.
The sparkline will appear in the document.

G. Application based questions.

1. Sanya has created a chart. She wants to improve the appearance of her chart by changing the chart style. Which option will you suggest her to perform this task?
- A. Sanya should select Design tab and then choose different style from Chart Styles group.
2. During a cricket match, only five batsmen of the winning team played. Which chart will help you to demonstrate the individual contribution of each batsmen?
- A. In this case Pie Chart is the best suited.

Note: Write only questions and answers of both the chapters in your note book.

JAGAT TARAN GOLDEN JUBILEE SCHOOL

ASSIGNMENT- 3

FOR CLASS 7

SUBJECT- ENGLISH

SESSION- 2020-2021

BOOK PRESCRIBED- ORIENT BLACKSWAN- GULMOHAR (9TH EDITION)

SUBJECT TEACHER- SUGANDHA BANERJEE

1. The pdf of literature chapter -1 – AN UNCOMFORTABLE BED is given below.
2. The summary of the chapter is given below.
3. Video link for chapter -1 <https://youtu.be/6qRstV9VMol>

INSTRUCTIONS FOR STUDENTS

1. Go through the text of the chapter given below.
2. Go through the summary of the chapter given below.
3. Click the video link to see the chapter in animated form.



Guy de Maupassant was a French writer best known for his short stories. He wrote around 300 short stories, along with a few novels and travel books. 'The Necklace' and 'An Uncomfortable Bed' are some of his most famous stories.

Picardy: a region in northern France

made much of me: gave me a lot of attention and importance

at my expense: with me as the target of a joke

ferret: a small cat-like animal which hunts rabbits by entering their burrows and driving them out



victim of the joke: the person whom the others play a prank upon

exaggerated: more than what was usual or necessary

Q

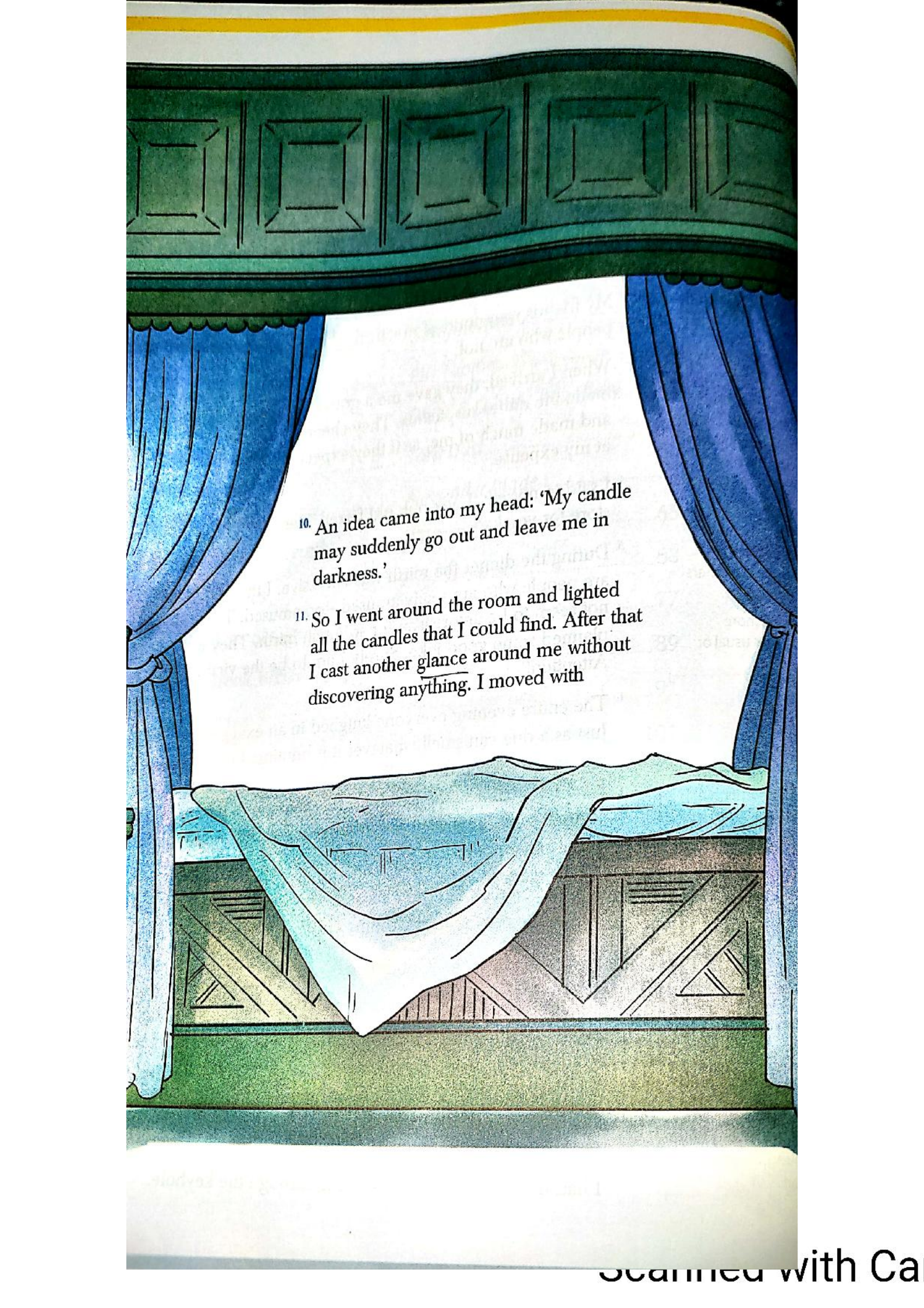
How does the writer build up your interest in the story? (paras 1 to 6)

distrustfully: with suspicion; in a way that showed he could not trust them

cast a glance: took a quick look

hangings: curtains or other objects hung on walls for decoration

1. One autumn, I went to spend a few days with some friends in Picardy.
2. My friends were fond of practical jokes. I do not care to know people who are not.
3. When I arrived, they gave me a grand reception, which at once made me rather suspicious. They cheered loudly, embraced me and made much of me, as if they expected to have great fun at my expense.
4. I said to myself: 'Look out, old ferret! They have something in store for you.'
5. During the dinner the mirth was excessive. I thought: 'Here are people who are really amused—too amused. There does not seem to be any reason for so much mirth. They must have planned some good joke. Surely I am to be the victim of the joke. Attention!'
6. The entire evening everyone laughed in an exaggerated fashion. Just as a dog can smell whatever it is hunting, I could almost smell a practical joke in the air. But what was it? I was watchful, restless. I did not miss a single word, or a meaning, or a gesture. Everyone seemed to be a suspect, and I even looked distrustfully at the faces of the other guests.
7. The hour struck for going to bed. The whole household came to accompany me to my room. Why?
8. They called to me, "Goodnight."
9. I entered my room, shut the door, and remained standing, without moving a single step, holding the candle in my hand. I heard people laughing and whispering in the corridor. Without doubt they were spying on me. I cast a glance round the walls, the furniture, the ceiling, the hangings and the floor. I saw nothing to justify suspicion. I heard persons moving about outside my door. I had no doubt they were looking through the keyhole.

An illustration of a room. At the top, there is a green decorative border with a repeating square pattern. Below this, blue curtains are drawn back to reveal a white sheet of paper with text. The text is numbered 10 and 11. Below the paper, a bed with a white sheet and a blue blanket is visible. The bed's headboard and footboard are made of wood with a geometric pattern. The floor is green.

¹⁰. An idea came into my head: 'My candle may suddenly go out and leave me in darkness.'

¹¹. So I went around the room and lighted all the candles that I could find. After that I cast another glance around me without discovering anything. I moved with

bedstead: the frame of a bed

groping: moving uncertainly by touching the things around him as he could not see in the dark

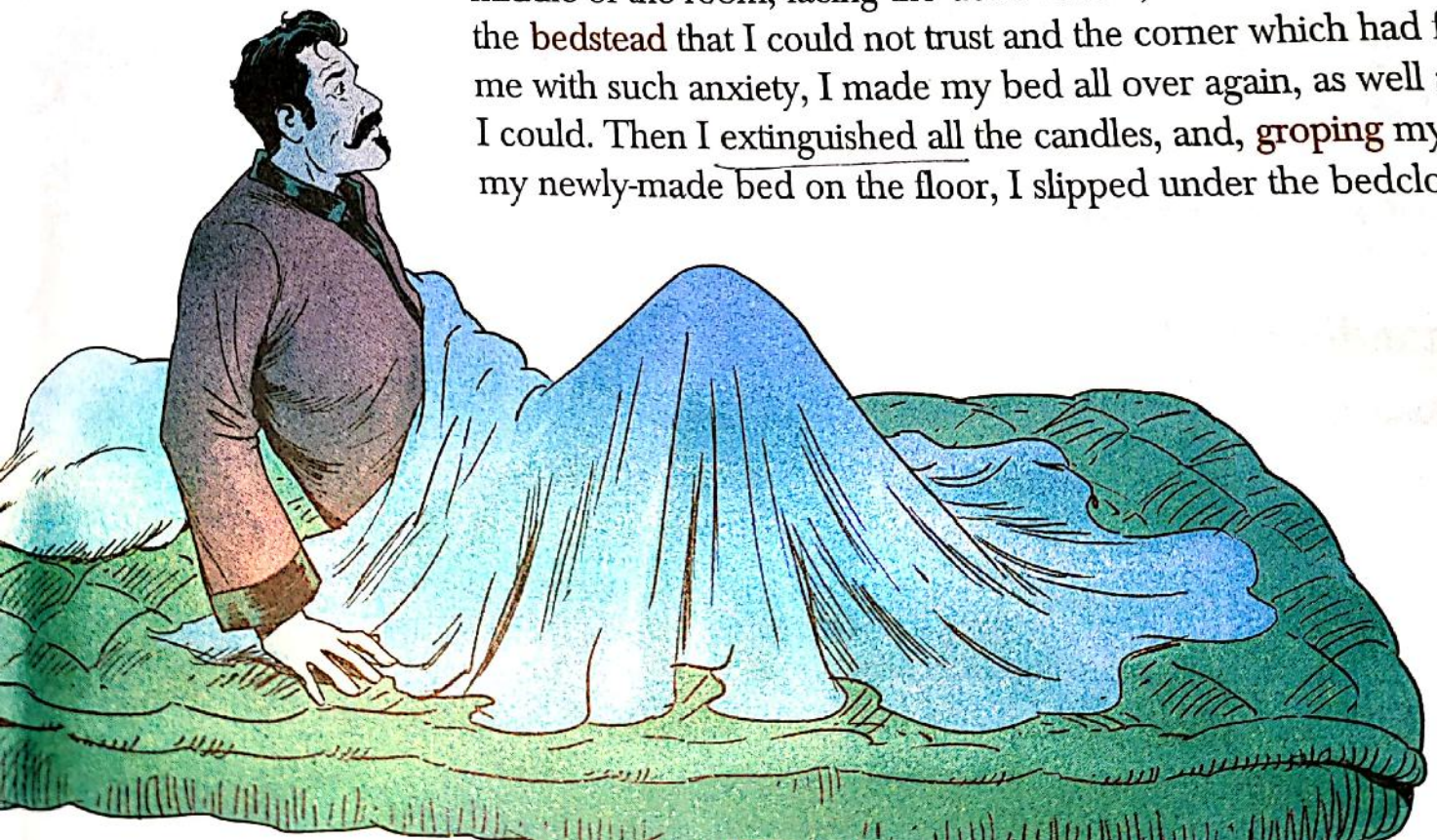
short steps, carefully examining the room. Nothing. I inspected every article, one after the other. Still nothing. I went over to the window. The shutters, large wooden shutters, were open. I shut them with great care, and then drew the curtains, enormous velvet curtains, and placed a chair in front of them, so as to have nothing to fear from outside.

12. Then I sat down cautiously. The armchair was solid. I did not dare to get into the bed. However, the night was advancing; and I finally came to the conclusion that I was being foolish. I was certain that my friends were spying on me, waiting for the success of whatever joke they had prepared. But in that case, they must have been laughing their heads off at my terror. I could not let them have so much fun at my expense. I made up my mind to go to bed.

13. But the bed was particularly suspicious-looking. I pulled at the curtains. They seemed to be secure. All the same, there was danger. There must be. Perhaps I was going to receive a cold shower from overhead. Or perhaps, the moment I stretched myself out, I would find myself sinking to the floor with my mattress. I searched in my memory for all the practical jokes I had ever experienced. And I did not want to be caught. Ah! Certainly not! Certainly not!

14. Then I suddenly thought of a precaution which could ensure my safety. I caught hold of the side of the mattress carefully, and very slowly drew it toward me. It came away, followed by the sheet and the rest of the bedclothes. I dragged all these objects into the very middle of the room, facing the door. There, at some distance from the bedstead that I could not trust and the corner which had filled me with such anxiety, I made my bed all over again, as well as I could. Then I extinguished all the candles, and, groping my way to my newly-made bed on the floor, I slipped under the bedclothes.

Q
What does the writer do to build up the suspense further?



starting: making a sudden, quick movement because he was surprised

sideboard: a cupboard, usually kept beside a dining table, for storing cups, dishes and so on

smothered: unable to breathe because his face was covered by an unknown weight

whiskers: the hair growing on a man's face

improvised: made up on the spot without plan or preparation

dismayed: shocked and upset

valet: a person employed to look after a man's personal items and tasks

Q

In paras 16–18, the writer takes the excitement to a peak and then provides an explanation. What is the peak? How does the explanation add to the humour of the story?

15. For at least another hour I remained awake, starting at the slightest sound. Everything seemed quiet in the house. I fell asleep.

16. I must have been in a deep sleep for a long time. All of a sudden, I was awakened with a start by a heavy body tumbling down right on top of me. At the same time, I received on my face, my neck and my chest a burning liquid which made me utter a howl of pain. And a dreadful noise, as if a sideboard laden with plates and dishes had fallen down, almost deafened me.

17. The weight that had fallen upon me was crushing me and preventing me from moving. I was getting smothered beneath it. I stretched out my hand to find out what was the nature of this object. I felt a face, a nose, and whiskers. With all my strength, I struck a blow at this face. But I immediately received a shower of slaps which made me jump straight out of the soaked sheets. The door of the room was open. I rushed into the corridor in my nightshirt.

18. Oh, heavens! It was broad daylight. The noise brought my friends hurrying to the spot. As I looked into the room with them, I found, lying on my improvised bed, a dismayed valet. While bringing me my morning cup of tea, he had tripped over the unexpected bed in the middle of the floor and fallen on his stomach, spilling my breakfast over my face.

19. I had taken many precautions by closing the shutters and going to sleep in the middle of the room. But those very precautions had brought about the practical joke I had been trying to avoid.

20. Oh, how they all laughed that day!

Understanding the Text

Answer these questions.

1. My friends were fond of practical jokes. I do not care to know people who are not.
 - a. From the second sentence, what do you think the speaker valued in his friends?
 - b. Can you find any evidence in the text that supports the first sentence?
2. ...which at once made me rather suspicious.
 - a. Which other words in the text tell you how the speaker was feeling and acting? (paras 16–18)
 - b. Add one more word of your own to describe his state of mind.

3. 'Look out, old ferret! They have something in store for you.'
 - a. Another meaning of 'ferret' is to find something by searching carefully. Why do you think the speaker called himself a ferret?
 - b. What did he think his friends had in store for him?
4. Once inside his room, how did the speaker move and act? Why?
5. Why did the speaker close the shutters and draw the curtains? (para 11) What happened as a result of this? What else did he do in para 14 that helped to bring about the outcome?
6. The armchair was solid. (para 12) Why was this discovery important to the speaker?
 - a. It meant that he could protect himself with the chair if necessary.
 - b. It meant that he could sleep in the chair.
 - c. It meant that his friends had not laid a trap for him in the chair.
7. I did not dare to get into the bed. (para 12) Why didn't the speaker dare to get into the bed? Why did he finally go to bed?
8. The speaker was awakened by a body falling over him (para 16). What else did he feel and hear at the same time? When and how did he realise what had really happened? (para 18)

Appreciating the Text

Irony is a term used to mean a situation or event which is the very opposite of what was expected, and which is sometimes funny as a result. What could be the irony in this story?

This story is a first-person narrative—the speaker is a character in the story. How does this style of narration help to build the irony?

Grammar and Usage

► nouns and quantifiers (advanced)

Read these sentences.

- I went to spend a few days with some friends.
- There were eight candles in the bedroom.

In the first sentence, 'a few' quantifies the countable noun 'days'. In the second sentence, the number 'eight' quantifies the countable noun 'candles'.

Here are some more ways to understand how to quantify nouns.

1. We know that some nouns are countable but become uncountable when we use them in a general sense.

► I will buy a dozen bananas. / The banana is a tropical fruit.

2. There are other nouns, especially abstract and material nouns, which are typically uncountable. We use the structure a... of ... to quantify these nouns.

► a kilo of coal; a tonne of steel; a period of calm; a degree of suspicion.

3. There is yet another category consisting of nouns which are usually uncountable but can become countable depending on usage.

► There is a fear that elephants are still poached for ivory. / Getting an education is critical in the present day.

A. Underline the uncountable nouns in these sentences and write 1, 2 or 3 depending on which rule applies to each of them.

1. There is a grain of truth in what he says. rule 2
2. Experience is a good teacher. UN - rule 1
3. Their family has been in business for many years. UN - R 1
4. It is difficult to put out fire without an extinguisher. UN - R 1
5. The coming months are a period of excitement. UN - R 2
6. Seaweed is a widely used component in shampoos these days. UN - R 1
7. It was a friendship that was very special and rare. UN - R 3
8. He received a shower of praise for his new book. UN - R 2



revision: pronou

We have learned several kinds of pronouns, some of them very basic to our language.

subject pronouns - I, we, you, he, she, it, they

object pronouns - me, us, you, him, her, it, them

possessive pronouns - mine, ours, yours, his, hers, its, theirs

demonstrative pronouns - this, that, these, those

relative pronouns - who, whom, which, that, whose, whoever, wherever, whatever, whichever

reflexive (and emphasising pronouns) - myself, ourselves, yourself, yourselves, himself, herself, itself, themselves

We have also learned that there is another large group of pronouns called indefinite pronouns. Unlike definite pronouns above, the indefinite pronoun does not refer to any specific person or thing.

In the singular, we use: one, each, other, either, neither, another, anybody, anyone, anything, everybody, everything, nobody, no one, nothing, somebody, someone, something

For more than one, we use: both, few, others, many, several

For both singular and plural, we use: all, some, any, more, most, none

B. Complete these sentences with suitable indefinite pronouns from the box.

several anyone no one another something few most each

1. Something tells me that it will rain this afternoon. I can almost smell the rain.
2. Has anyone seen my glasses?
3. I don't think this fits, could I try another please?
4. Many people have watched this film, but few have liked it.
5. I don't have many music CDs, but Neetu has several.
6. No one can surpass his greatness as a music composer.
7. Both these cakes look delicious. I will be greedy and have one of each.
8. Just a few people have accepted the invitation but most have refused.

Words in Use

prefixes

A. Match each of these words to a prefix. Then, complete these sentences with the correct prefixed words.

prefix	word
un-	honest
dis-	expected
im-	polite
	comfortable
	trustful
	practical

- The guest felt uncomfortable when his friends started quarrelling.
- The students are debating the question, 'Is it always dishonest to hide the truth?'
- It would be rather impractical to wear sandals on a trek!
- After his friends played a prank on him, he felt distrustful of them.
- Mother taught us that it is impolite to criticise a gift.
- The unexpected ending of the story both surprised and amused her.

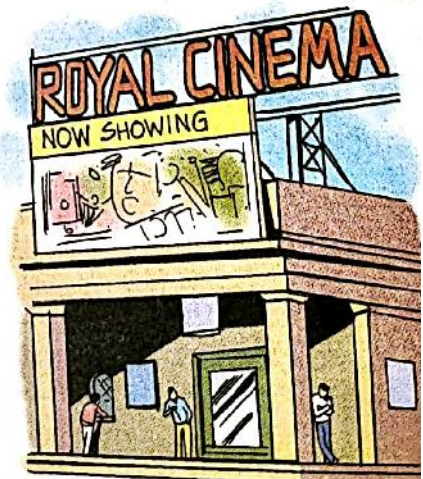
phrases in context

B. Use these phrases from the text to rewrite the sentences.

made much of
in store for
made up my mind

at my / his / her expense
cast a glance
all the same

- I went to watch a film which did not receive good reviews.
The film did not receive good reviews. All the same, I went to watch it.
- Her cousins were laughing at her. Alia did not seem to mind.
- He took a quick look at his notes. Then he entered the examination hall.
- Rohan's classmates gave him a lot of attention when he won the quiz competition.
- After a lot of thought, I decided to go to Himachal, and not Kerala.
- I think my family has planned a surprise for my birthday.



Summary



An Uncomfortable Bed

Guy de Maupassant

This story is told in the first person. The speaker is visiting some friends. From the moment he arrives at their house, he is convinced that his friends—who like practical jokes—are about to play a prank on him. Everything makes him suspicious—from how warmly they welcome him to how cheerful they look at dinner. He even wonders why so many people come to accompany him to his bedroom at bedtime.

When the speaker enters his room, he steps carefully, lights all the candles, and examines everything. He finds nothing suspicious. He closes the window shutters, draws the heavy curtains and places a chair in front of them so that he cannot be reached from outside through the window.

At first, he sits in the armchair because he does not dare to get into the bed—the prank, whatever it is, must have been set up at or around the bed. Yet, as the night advances, he argues with himself that his friends, who he thinks are waiting outside his door for the success of the joke, must be laughing at him for being so scared. He cannot let them have so much fun at his expense, so he decides to go to bed after all.

The bed-curtains seem secure, but what if he receives a cold shower from overhead or sinks down to the floor as soon as he lies down? Finally, the speaker thinks of a clever precaution.

He pulls the mattress and the bedclothes down to the floor and makes his bed there, in the middle of the room, facing the door. Then he puts out the candles and goes to sleep.

He is woken up rather abruptly, when a number of strange things happen at once. A heavy body falls on top of him; a burning liquid falls on his face, neck and chest; there is a noise of plates and dishes crashing. He tries to understand what has fallen on him and feels a face. He strikes at it, in return receiving a series of slaps himself. He then jumps out of the bed and rushes outside.

There, the speaker finds that it is morning. The noise brings his friends to the spot as well. All of them look into the room and realise what really happened. It is the valet who is lying on the bed on the floor, shocked. When he entered the room with the speaker's tea, he could not see the bed on the floor, since the candles were extinguished and the curtains were drawn, and tumbled down on top of the speaker.

Assignment to be done

Note:

- a) All the work to be done in English Literature Register Copy.
 - b) Do your work neatly.
- 1) Pick out 20 difficult words from the chapter and write them three times in your literature copies.
 - 2) Write the word meanings given in the chapter neatly.
 - 3) Make sentences with the following words- hangings, smothered, groping, whiskers, dismayed, valet.
 - 4) Do the following exercises in your copies (answers given below)-
 - i. ANSWER THESE QUESTIONS
 - ii. GRAMMAR AND USAGE- A and B
 - iii. WORDS IN USE- A and B

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CLASS 7 – LITERATURE- CHAPTER 1- AN UNCOMFORTABLE BED

ANSWERS OF UNDERSTANDING THE TEXT (PAGE NO.-4 AND 5)

ANSWER THESE QUESTIONS

1. a. The second sentence tells us that the speaker valued a sense of humour in his friends.

b. The only evidence that we can find in the text for the first sentence is the way the speaker's friends laughed when they found out what had happened. We do not see them actually playing any practical joke on the speaker.

2. a. watchful, restless, distrustfully, carefully, cautiously

b. Sample answers: nervous / apprehensive

3. a. The speaker calls himself a ferret because he was trying to find out what kind of prank his friends could play on him. He was trying to ferret out the truth, and he was also acting a bit like a ferret— hunting for clues and trying to 'catch' his friends

b. The speaker thought that his friends had set some kind of trap for him or set him up for a practical joke.

4. Once inside his room, the speaker shut the door, and remained standing, without moving a single step. He looked around at the walls, the furniture, the ceiling, the hangings and the floor. He thought that his candle may go out, so he lighted all the candles in the room. He moved with short steps, carefully examining the room, and inspected every article, one after the other. He was convinced that his friends had laid a trap for him inside the room, so he was being careful and trying to check everything.

5. The speaker closed the shutters and drew the curtains so that no trick could be played on him through the window. As a result of this, no light could come into the room from

outside. In para 14, he made his bed in the middle of the room, on the floor, and extinguished all the candles. Since the room was now completely dark, when the valet came in, he could not see the bed on the floor and tripped over it.

6. c

7. At first, the speaker did not dare to get into the bed because he was sure that his friends had made some arrangement in the bed for a prank. Yet, he also thought that his friends, who must be waiting for the success of their trick, would be laughing at him because he was too afraid to go to bed. He could not let them have so much fun at his expense and went to bed to challenge them.

8. As the speaker was awakened by a body falling over him, he felt a burning hot liquid on his face, neck and chest. It made him howl with pain. At the same time, he heard a great noise, as if many plates and dishes had fallen down. It was then that he realised it was morning, and in the light from the corridor, he saw that the valet, while bringing his tea, had tripped over his bed and fallen down, along with the plates he had been carrying. The hot liquid had been the tea.

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ASSIGNMENT 3

Class - 7

Subject- Mathematics

Teacher's name- S. Bihani

Simple Equations

4.1 A MIND-READING GAME!

The teacher has said that she would be starting a new chapter in mathematics and it is going to be simple equations. Appu, Sarita and Ameena have revised what they learnt in algebra chapter in Class VI. Have you? Appu, Sarita and Ameena are excited because they have constructed a game which they call mind reader and they want to present it to the whole class.



The teacher appreciates their enthusiasm and invites them to present their game. Ameena begins; she asks Sara to think of a number, multiply it by 4 and add 5 to the product. Then, she asks Sara to tell the result. She says it is 65. Ameena instantly declares that the number Sara had thought of is 15. Sara nods. The whole class including Sara is surprised.

It is Appu's turn now. He asks Balu to think of a number, multiply it by 10 and subtract 20 from the product. He then asks Balu what his result is? Balu says it is 50. Appu immediately tells the number thought by Balu. It is 7, Balu confirms it.

Everybody wants to know how the 'mind reader' presented by Appu, Sarita and Ameena works. Can you see how it works? After studying this chapter and chapter 12, you will very well know how the game works.

4.2 SETTING UP OF AN EQUATION

Let us take Ameena's example. Ameena asks Sara to think of a number. Ameena does not know the number. For her, it could be anything 1, 2, 3, ..., 11, ..., 100, Let us denote this unknown number by a letter, say x . You may use y or t or some other letter in place of x . It does not matter which letter we use to denote the unknown number Sara has thought of. When Sara multiplies the number by 4, she gets $4x$. She then adds 5 to the product, which gives $4x + 5$. The value of $(4x + 5)$ depends on the value of x . Thus if $x = 1$, $4x + 5 = 4 \times 1 + 5 = 9$. This means that if Sara had 1 in her mind, her result would have been 9. Similarly, if she thought of 5, then for $x = 5$, $4x + 5 = 4 \times 5 + 5 = 25$; Thus if Sara had chosen 5, the result would have been 25.

To find the number thought by Sara let us work backward from her answer 65. We have to find x such that

$$4x + 5 = 65 \quad (4.1)$$

Solution to the equation will give us the number which Sara held in her mind.

Let us similarly look at Appu's example. Let us call the number Balu chose as y . Appu asks Balu to multiply the number by 10 and subtract 20 from the product. That is, from y , Balu first gets $10y$ and from there $(10y - 20)$. The result is known to be 50.

$$\text{Therefore,} \quad 10y - 20 = 50 \quad (4.2)$$

The solution of this equation will give us the number Balu had thought of.

4.3 REVIEW OF WHAT WE KNOW

Note, (4.1) and (4.2) are equations. Let us recall what we learnt about equations in Class VI. *An equation is a condition on a variable.* In equation (4.1), the variable is x ; in equation (4.2), the variable is y .

The word *variable* means something that can vary, i.e. change. A **variable** takes on different numerical values; its value is not fixed. Variables are denoted usually by letters of the alphabets, such as x, y, z, l, m, n, p , etc. From variables, we form expressions. The expressions are formed by performing operations like addition, subtraction, multiplication and division on the variables. From x , we formed the expression $(4x + 5)$. For this, first we multiplied x by 4 and then added 5 to the product. Similarly, from y , we formed the expression $(10y - 20)$. For this, we multiplied y by 10 and then subtracted 20 from the product. All these are examples of expressions.

The value of an expression thus formed depends upon the chosen value of the variable. As we have already seen, when $x = 1$, $4x + 5 = 9$; when $x = 5$, $4x + 5 = 25$. Similarly, when

$$x = 15, \quad 4x + 5 = 4 \times 15 + 5 = 65;$$

when

$$x = 0, \quad 4x + 5 = 4 \times 0 + 5 = 5; \text{ and so on.}$$

Equation (4.1) is a condition on the variable x . It states that the value of the expression $(4x + 5)$ is 65. The condition is satisfied when $x = 15$. It is the solution to the equation $4x + 5 = 65$. When $x = 5$, $4x + 5 = 25$ and not 65. Thus $x = 5$ is not a solution to the equation. Similarly, $x = 0$ is not a solution to the equation. No value of x other than 15 satisfies the condition $4x + 5 = 65$.

TRY THESE



The value of the expression $(10y - 20)$ depends on the value of y . Verify this by giving five different values to y and finding for each y the value of $(10y - 20)$. From the different values of $(10y - 20)$ you obtain, do you see a solution to $10y - 20 = 50$? If there is no solution, try giving more values to y and find whether the condition $10y - 20 = 50$ is met.

4.4 WHAT EQUATION IS?

In an equation there is always an **equality** sign. The equality sign shows that the value of the expression to the left of the sign (the left hand side or LHS) is equal to the value of the expression to the right of the sign (the right hand side or RHS). In equation (4.1), the LHS is $(4x + 5)$ and the RHS is 65. In equation (4.2), the LHS is $(10y - 20)$ and the RHS is 50.

If there is some sign other than the equality sign between the LHS and the RHS, it is not an equation. Thus, $4x + 5 > 65$ is not an equation.

It says that, the value of $(4x + 5)$ is greater than 65.

Similarly, $4x + 5 < 65$ is not an equation. It says that the value of $(4x + 5)$ is smaller than 65.

In equations, we often find that the RHS is just a number. In Equation (4.1), it is 65 and in equation (4.2), it is 50. But this need not be always so. The RHS of an equation may be an expression containing the variable. For example, the equation

$$4x + 5 = 6x - 25$$

has the expression $(4x + 5)$ on the left and $(6x - 25)$ on the right of the equality sign.

In short, an equation is a condition on a variable. The condition is that two expressions should have equal value. Note that at least one of the two expressions must contain the variable.

We also note a simple and useful property of equations. The equation $4x + 5 = 65$ is the same as $65 = 4x + 5$. Similarly, the equation $6x - 25 = 4x + 5$ is the same as $4x + 5 = 6x - 25$. *An equation remains the same, when the expressions on the left and on the right are interchanged.* This property is often useful in solving equations.

EXAMPLE 1 Write the following statements in the form of equations:

- The sum of three times x and 11 is 32.
- If you subtract 5 from 6 times a number, you get 7.
- One fourth of m is 3 more than 7.
- One third of a number plus 5 is 8.

SOLUTION

- Three times x is $3x$.

Sum of $3x$ and 11 is $3x + 11$. The sum is 32.

The equation is $3x + 11 = 32$.

- Let us say the number is z ; z multiplied by 6 is $6z$.

Subtracting 5 from $6z$, one gets $6z - 5$. The result is 7.

The equation is $6z - 5 = 7$



(iii) One fourth of m is $\frac{m}{4}$.

It is greater than 7 by 3. This means the difference $(\frac{m}{4} - 7)$ is 3.

The equation is $\frac{m}{4} - 7 = 3$.

(iv) Take the number to be n . One third of n is $\frac{n}{3}$.

This one-third plus 5 is $\frac{n}{3} + 5$. It is 8.

The equation is $\frac{n}{3} + 5 = 8$.



EXAMPLE 2 Convert the following equations in statement form:

(i) $x - 5 = 9$

(ii) $5p = 20$

(iii) $3n + 7 = 1$

(iv) $\frac{m}{5} - 2 = 6$

SOLUTION (i) Taking away 5 from x gives 9.

(ii) Five times a number p is 20.

(iii) Add 7 to three times n to get 1.

(iv) You get 6, when you subtract 2 from one-fifth of a number m .

What is important to note is that for a given equation, **not just one, but many statements** forms can be given. For example, for Equation (i) above, you can say:

Subtract 5 from x , you get 9.

or The number x is 5 more than 9.

or The number x is greater by 5 than 9.

or The difference between x and 5 is 9, and so on.



TRY THESE

Write atleast one other form for each equation (ii), (iii) and (iv).

EXAMPLE 3 Consider the following situation:

Raju's father's age is 5 years more than three times Raju's age. Raju's father is 44 years old. Set up an equation to find Raju's age.

SOLUTION We do not know Raju's age. Let us take it to be y years. Three times Raju's age is $3y$ years. Raju's father's age is 5 years more than $3y$; that is, Raju's father is $(3y + 5)$ years old. It is also given that Raju's father is 44 years old.

Therefore,

$$3y + 5 = 44$$

This is an equation in y . It will give Raju's age when solved.

(4.3)

EXAMPLE 4 A shopkeeper sells mangoes in two types of boxes, one small and one large. A large box contains as many as 8 small boxes plus 4 loose mangoes. Set up an equation which gives the number of mangoes in each small box. The number of mangoes in a large box is given to be 100.

SOLUTION Let a small box contain m mangoes. A large box contains 4 more than 8 times m , that is, $8m + 4$ mangoes. But this is given to be 100. Thus

$$8m + 4 = 100$$

You can get the number of mangoes in a small box by solving this equation.

(4.4)

EXERCISE 4.1

1. Complete the last column of the table.

S. No.	Equation	Value	Say, whether the Equation is Satisfied. (Yes/ No)
(i)	$x + 3 = 0$	$x = 3$	
(ii)	$x + 3 = 0$	$x = 0$	
(iii)	$x + 3 = 0$	$x = -3$	
(iv)	$x - 7 = 1$	$x = 7$	
(v)	$x - 7 = 1$	$x = 8$	
(vi)	$5x = 25$	$x = 0$	
(vii)	$5x = 25$	$x = 5$	
(viii)	$5x = 25$	$x = -5$	
(ix)	$\frac{m}{3} = 2$	$m = -6$	
(x)	$\frac{m}{3} = 2$	$m = 0$	
(xi)	$\frac{m}{3} = 2$	$m = 6$	



2. Check whether the value given in the brackets is a solution to the given equation or not:

(a) $n + 5 = 19$ ($n = 1$) (b) $7n + 5 = 19$ ($n = -2$) (c) $7n + 5 = 19$ ($n = 2$)

(d) $4p - 3 = 13$ ($p = 1$) (e) $4p - 3 = 13$ ($p = -4$) (f) $4p - 3 = 13$ ($p = 0$)

3. Solve the following equations by trial and error method:

(i) $5p + 2 = 17$ (ii) $3m - 14 = 4$

4. Write equations for the following statements:

(i) The sum of numbers x and 4 is 9. (ii) 2 subtracted from y is 8.

(iii) Ten times a is 70. (iv) The number b divided by 5 gives 6.

(v) Three-fourth of t is 15. (vi) Seven times m plus 7 gets you 77.

(vii) One-fourth of a number x minus 4 gives 4.

(viii) If you take away 6 from 6 times y , you get 60.

(ix) If you add 3 to one-third of z , you get 30.

5. Write the following equations in statement forms:

(i) $p + 4 = 15$ (ii) $m - 7 = 3$ (iii) $2m = 7$ (iv) $\frac{m}{5} = 3$

(v) $\frac{3m}{5} = 6$ (vi) $3p + 4 = 25$ (vii) $4p - 2 = 18$ (viii) $\frac{p}{2} + 2 = 8$

6. Set up an equation in the following cases:

- (i) Irfan says that he has 7 marbles more than five times the marbles Parmit has. Irfan has 37 marbles. (Take m to be the number of Parmit's marbles.)
- (ii) Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. (Take Laxmi's age to be y years.)
- (iii) The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7. The highest score is 87. (Take the lowest score to be l .)
- (iv) In an isosceles triangle, the vertex angle is twice either base angle. (Let the base angle be b in degrees. Remember that the sum of angles of a triangle is 180 degrees).

4.4.1 Solving an Equation

(4.5)

Consider an equality $8 - 3 = 4 + 1$

The equality (4.5) holds, since both its sides are equal (each is equal to 5).

- Let us now add 2 to both sides; as a result

$$\text{LHS} = 8 - 3 + 2 = 5 + 2 = 7 \quad \text{RHS} = 4 + 1 + 2 = 5 + 2 = 7.$$

Again the equality holds (i.e., its LHS and RHS are equal).

Thus if we add the same number to both sides of an equality, it still holds.

- Let us now subtract 2 from both the sides; as a result,

$$\text{LHS} = 8 - 3 - 2 = 5 - 2 = 3 \quad \text{RHS} = 4 + 1 - 2 = 5 - 2 = 3.$$

Again, the equality holds.

Thus if we subtract the same number from both sides of an equality, it still holds.

- Similarly, if we multiply or divide both sides of the equality by the same non-zero number, it still holds.

For example, let us multiply both the sides of the equality by 3, we get

$$\text{LHS} = 3 \times (8 - 3) = 3 \times 5 = 15, \quad \text{RHS} = 3 \times (4 + 1) = 3 \times 5 = 15.$$

The equality holds.

Let us now divide both sides of the equality by 2.

$$\text{LHS} = (8 - 3) \div 2 = 5 \div 2 = \frac{5}{2}$$

$$\text{RHS} = (4 + 1) \div 2 = 5 \div 2 = \frac{5}{2} = \text{LHS}$$

Again, the equality holds.

If we take any other equality, we shall find the same conclusions.

Suppose, we do not observe these rules. Specifically, suppose we add different numbers, to the two sides of an equality. We shall find in this case that the equality does not



hold (i.e., its both sides are not equal). For example, let us take again equality (4.5),

$$8 - 3 = 4 + 1$$

add 2 to the LHS and 3 to the RHS. The new LHS is $8 - 3 + 2 = 5 + 2 = 7$ and the new RHS is $4 + 1 + 3 = 5 + 3 = 8$. The equality does not hold, because the new LHS and RHS are not equal.

Thus if we fail to do the same mathematical operation on both sides of an equality, the equality does not hold.

The equality that involves variables is an equation.

These conclusions are also valid for equations, as in each equation variable represents a number only.

Often an equation is said to be like a weighing balance. Doing a mathematical operation on an equation is like adding weights to or removing weights from the pans of a weighing balance.

An equation is like a weighing balance with equal weights on both its pans, in which case the arm of the balance is exactly horizontal. If we add the same weights to both the pans, the arm remains horizontal. Similarly, if we remove the same weights from both the pans, the arm remains horizontal. On the other hand if we add different weights to the pans or remove different weights from them, the balance is tilted; that is, the arm of the balance does not remain horizontal.

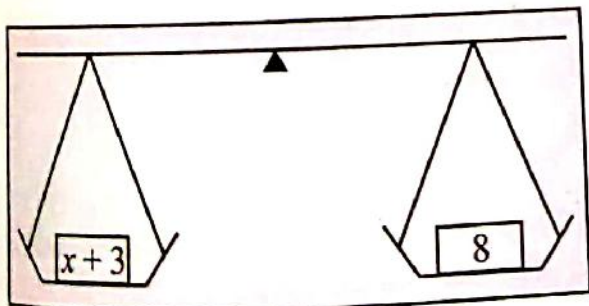
We use this principle for solving an equation. Here, of course, the balance is imaginary and numbers can be used as weights that can be physically balanced against each other. This is the real purpose in presenting the principle. Let us take some examples.

- Consider the equation: $x + 3 = 8$

(4.6)

We shall subtract 3 from both sides of this equation.

The new LHS is $x + 3 - 3 = x$ and the new RHS is $8 - 3 = 5$



Why should we subtract 3, and not some other number? Try adding 3. Will it help? Why not? It is because subtracting 3 reduces the LHS to x .

Since this does not disturb the balance, we have

$$\text{New LHS} = \text{New RHS} \quad \text{or} \quad x = 5$$

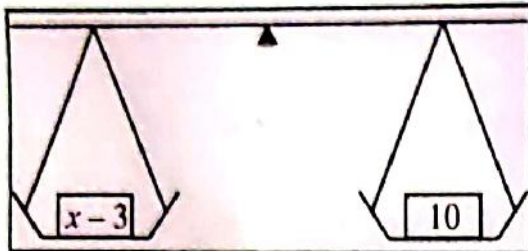
which is exactly what we want, the solution of the equation (4.6).

To confirm whether we are right, we shall put $x = 5$ in the original equation. We get
 LHS = $x + 3 = 5 + 3 = 8$, which is equal to the RHS as required.

By doing the right mathematical operation (i.e., subtracting 3) on both the sides of the equation, we arrived at the solution of the equation.

- Let us look at another equation $x - 3 = 10$ (4.7)

What should we do here? We should add 3 to both the sides. By doing so, we shall retain the balance and also the LHS will reduce to just x .



New LHS = $x - 3 + 3 = x$, New RHS = $10 + 3 = 13$

Therefore, $x = 13$, which is the required solution.

By putting $x = 13$ in the original equation (4.7) we confirm that the solution is correct:

$$\text{LHS of original equation} = x - 3 = 13 - 3 = 10$$

This is equal to the RHS as required.

- Similarly, let us look at the equations

$$5y = 35 \quad (4.8)$$

$$\frac{m}{2} = 5 \quad (4.9)$$

In the first case, we shall divide both the sides by 5. This will give us just y on LHS

$$\text{New LHS} = \frac{5y}{5} = \frac{5 \times y}{5} = y, \quad \text{New RHS} = \frac{35}{5} = \frac{5 \times 7}{5} = 7$$

Therefore, $y = 7$

This is the required solution. We can substitute $y = 7$ in Eq. (4.8) and check that it is satisfied.

In the second case, we shall multiply both sides by 2. This will give us just m on the LHS

$$\text{The new LHS} = \frac{m}{2} \times 2 = m. \quad \text{The new RHS} = 5 \times 2 = 10.$$

Hence, $m = 10$ (It is the required solution. You can check whether the solution is correct).

One can see that in the above examples, the operation we need to perform depends on the equation. Our attempt should be to get the variable in the equation separated. Sometimes, for doing so we may have to carry out more than one mathematical operation. Let us solve some more equations with this in mind.

EXAMPLE 5 Solve: (a) $3n + 7 = 25$ (4.10)

(b) $2p - 1 = 23$ (4.11)

SOLUTION

- (a) We go stepwise to separate the variable n on the LHS of the equation. The LHS is $3n + 7$. We shall first subtract 7 from it so that we get $3n$. From this, in the next step we shall divide by 3 to get n . Remember we must do the same operation on both sides of the equation. Therefore, subtracting 7 from both sides,

$$3n + 7 - 7 = 25 - 7 \quad (\text{Step 1})$$

or $3n = 18$

Now divide both sides by 3,

$$\frac{3n}{3} = \frac{18}{3}$$

(Step 2)

or

$n = 6$, which is the solution.

(b) What should we do here? First we shall add 1 to both the sides:

$$2p - 1 + 1 = 23 + 1$$

or

$$2p = 24$$

(Step 1)

Now divide both sides by 2, we get $\frac{2p}{2} = \frac{24}{2}$

(Step 2)

or

$p = 12$, which is the solution.

One good practice you should develop is to check the solution you have obtained. Although we have not done this for (a) above, let us do it for this example.

Let us put the solution $p = 12$ back into the equation.

$$\begin{aligned} \text{LHS} &= 2p - 1 = 2 \times 12 - 1 = 24 - 1 \\ &= 23 = \text{RHS} \end{aligned}$$

The solution is thus checked for its correctness.

Why do you not check the solution of (a) also?

We are now in a position to go back to the mind-reading game presented by Appu, Sarita, and Ameena and understand how they got their answers. For this purpose, let us look at the equations (4.1) and (4.2) which correspond respectively to Ameena's and Appu's examples.

- First consider the equation $4x + 5 = 65$.

(4.1)

Subtracting 5 from both sides, $4x + 5 - 5 = 65 - 5$.

i.e. $4x = 60$

Divide both sides by 4; this will separate x . We get $\frac{4x}{4} = \frac{60}{4}$

or $x = 15$, which is the solution. (Check, if it is correct.)

- Now consider, $10y - 20 = 50$

(4.2)

Adding 20 to both sides, we get $10y - 20 + 20 = 50 + 20$ or $10y = 70$

Dividing both sides by 10, we get $\frac{10y}{10} = \frac{70}{10}$

or $y = 7$, which is the solution. (Check if it is correct.)

You will realise that exactly these were the answers given by Appu, Sarita and Ameena. They had learnt to set up equations and solve them. That is why they could construct their mind reader game and impress the whole class. We shall come back to this in Section 4.7.



EXERCISE 4.2

1. Give first the step you will use to separate the variable and then solve the equation:

~~(a) $x - 1 = 0$~~

(b) $x + 1 = 0$

~~(c) $x - 1 = 5$~~

(d) $x + 6 = 2$

~~(e) $y - 4 = -7$~~

(f) $y - 4 = 4$

~~(g) $y + 4 = 4$~~

~~(h) $y + 4 = -4$~~

2. Give first the step you will use to separate the variable and then solve the equation:

~~(a) $3l = 42$~~

(b) $\frac{b}{2} = 6$

~~(c) $\frac{p}{7} = 4$~~

(d) $4x = 25$

~~(e) $8y = 36$~~

~~(f) $\frac{z}{3} = \frac{5}{4}$~~

(g) $\frac{a}{5} = \frac{7}{15}$

~~(h) $20t = -10$~~

3. Give the steps you will use to separate the variable and then solve the equation:

(a) $3n - 2 = 46$

~~(b) $5m + 7 = 17$~~

(c) $\frac{20p}{3} = 40$

(d) $\frac{3p}{10} = 6$

4. Solve the following equations:

(a) $10p = 100$

(b) $10p + 10 = 100$

(c) $\frac{p}{4} = 5$

(d) $\frac{p}{3} = 5$

(e) $\frac{3p}{4} = 6$

(f) $3s = -9$

(g) $3s + 12 = 0$

(h) $3s = 0$

(i) $2q = 6$

(j) $2q - 6 = 0$

(k) $2q + 6 = 0$

(l) $2q + 6 = 12$

जगत तारन गोल्डेन जुबली विद्यालय, प्रयागराज

(सत्र - २०२०-२१)

कक्षा - ७

विषय-संस्कृत

पुस्तक - संस्कृत-भारती - ३

(भारतीभवन पब्लिशर्स एन्ड डिस्ट्रीब्यूटर्स)

पाठ संख्या -३ जयतु भारतम्

(ASSIGNMENT NO. 3)

कार्य-पत्र संख्या - ३

प्रिय विद्यार्थियों,

प्रदत्त **कार्य-पत्र संख्या -३ (Assignment no.-3)** से संबंधित प्रश्नों के उत्तर संस्कृत उत्तरपुस्तिका में लिखो-

१. रामायण एवं महाभारत महाकाव्यों के रचनाकारों के नाम लिखो।
२. 'मुनि' शब्द रूप याद करके लिखो।
३. 'गम्' धातु का लट् लकार, लृट् लकार, लङ् लकार, लोट् लकार एवं विधिलिङ् लकार कण्ठस्थ करके लिखो।
४. भारतवर्ष की कोई पाँच विशेषताएँ संस्कृत में लिखो।
५. भारत का राष्ट्रगान एवं राष्ट्रीय गीत क्या है? इन दोनों के रचयिता कौन हैं? (राष्ट्रगान एवं राष्ट्रीय गीत की संक्षिप्त जानकारी भी दीजिए।)

REFERENCE YOU TUBE VIDEO LINK: https://youtu.be/AuXFr11d_xl

जयतु भारतम्

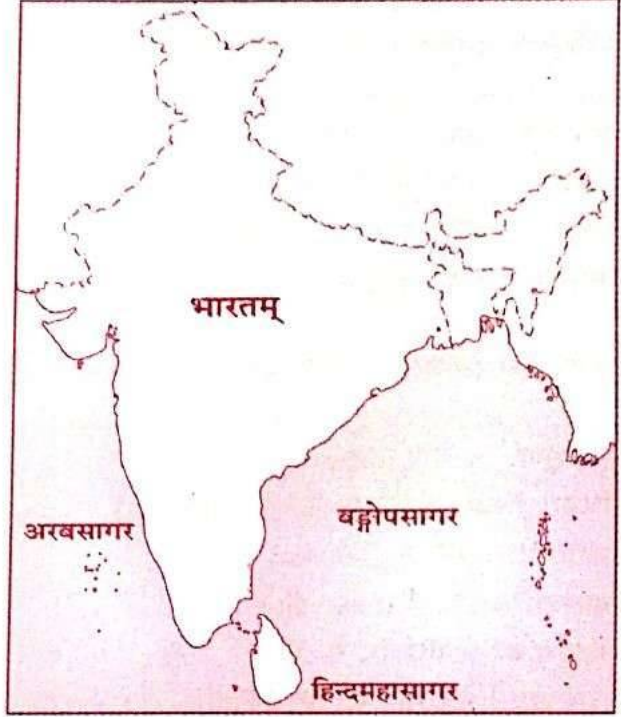
भारतम् अस्माकं देशः अस्ति। अस्य उत्तरदिशायां पर्वतराजः हिमालयः मुकुटमणिः इवास्ति। दक्षिणदिशायां हिन्दमहासागरः भारतस्य चरणौ प्रक्षालयति। पूर्वदिशायां बङ्गोपसागरः पश्चिमदिशायाम् अरबसागरश्च स्तः।

अत्र गङ्गा, यमुना, नर्मदादयः नद्यः प्रवहन्ति। हरितानि कृषिक्षेत्राणि, सुदीर्घाः पर्वतमालाः, विशालानि वनानि प्रभूताः खनिजपदार्थाः चास्य देशस्य समृद्धिं प्रकटयन्ति।

अस्मिन् देशे विविधाः भाषाः सन्ति। जनानां वेशभूषाः अपि भिन्नाः भिन्नाः भवन्ति। तेषां भोजनानि आवासाः उत्सवाः च विविधाः भवन्ति। किन्तु सर्वे एकत्र भ्रातृभावेन तिष्ठन्ति।

भारतं बहुप्राचीनः देशः अस्ति। अत्र हि विश्वप्रसिद्धाः वेदाः, पुराणानि, रामायणम्, महाभारतम्, आयुर्वेदादयः ग्रन्थाः रचिताः आसन्। अस्मिन् देशे वाल्मीकि-कालिदासादयः महाकवयः आसन्। पद्मिनी-लक्ष्मीबाईसमानाः वीराङ्गनाः गान्धी-सुभाषादयः राष्ट्रनायकाः चासन्। आर्यभट्ट-जगदीशचन्द्रबसु-सदृशाः वैज्ञानिकाः, विवेकानन्द-दयानन्दतुल्याः संस्कारकाः अपि अत्रैव अभवन्। इदानीम् अपि भारतीयाः विविधेषु क्षेत्रेषु अग्रेसराः सन्ति। भारते अनेके मुनयः अभवन्। तेषां मुनीनाम् अध्यात्मविद्यायां निविष्टं ज्ञानम् आसीत्।

'सत्यमेव जयते' भारतस्य आदर्शवाक्यम् अस्ति। अस्य राष्ट्रियः ध्वजः 'त्रिरङ्गम्' अस्ति। 'जनगणमन' एतस्य राष्ट्रगानं 'वन्दे मातरम्' राष्ट्रगीतं च अस्ति। भारतस्य राजधानी 'दिल्ली' अस्ति। भारते अनेकतायाम् एकता अस्ति। एतत् भारतवर्षं विश्वे जयतु।



शब्द-संग्रह (Word List)

जयतु (जि) = विजयी हो (be victorious)
 मुकुटमणिः = मुकुट की मणि
 (the gem of the crown)
 इवास्ति (इव + अस्ति) = जैसा है (is like)
 प्रक्षालयति (प्र-क्षाल्) = धोता है (washes)
 नर्मदादयः (नर्मदा + आदयः) = नर्मदा आदि
 (Narmada, etc.)
 प्रवहन्ति (प्र-वह) = बहती हैं (flow)
 सुदीर्घाः = बहुत लम्बी (very long)
 प्रभूताः = बहुत अधिक (ample)
 समृद्धिम् (सम् + ऋद्धिम्) = सम्पन्नता को
 (prosperity)
 प्रकटयन्ति (प्र-कट्) = प्रकट करते हैं
 (reveal)
 वेशभूषाः = वेश (dresses)
 भिन्नाः भिन्नाः = अलग-अलग (different)
 आवासाः = मकान (houses)
 उत्सवाः = उत्सव (festivals)
 भ्रातृभावेन = भाईचारे के साथ
 (with brotherhood)

रचिताः (रच) = रचे गए (composed)
 कालिदासादयः (कालिदास + आदयः) =
 कालिदास आदि (Kalidasa, etc.)
 समानाः/सदृशाः/तुल्याः = जैसे (like)
 वीराङ्गनाः (वीर + अङ्गनाः) = वीर नारियाँ
 (brave women)
 राष्ट्रनायकाः = देश के नेता
 (national leaders)
 संस्कारकाः (सम् + कारकाः) =
 सुधारकगण (reformers)
 अत्रैव (अत्र + एव) = यहीं (only here)
 अग्रेसराः = अग्रणी (leaders)
 अध्यात्मविद्यायाम् = अध्यात्मविद्या में
 (in spiritual knowledge)
 निविष्टम् (नि-विश्) = प्रौढ़, पूर्ण
 (profound)
 सत्यमेव (सत्यम् + एव) = सत्य ही
 (truth alone)
 आदर्शवाक्यम् = आदर्श वाक्य (motto)
 अनेकतायाम् = अनेकता में (in diversity)

• पढ़ें और समझें (Read and understand)

◇ सन्धि—दो ध्वनियों के मेल से शब्द में उत्पन्न विकार को सन्धि कहते हैं। यथा—

कालिदास + आदयः = कालिदासादयः

सन्धि के तीन भेद हैं—

(i) स्वर सन्धि, (ii) व्यञ्जन सन्धि और (iii) विसर्ग सन्धि

स्वरों के मेल से होनेवाले ध्वनि-परिवर्तन को 'स्वर सन्धि' कहते हैं। स्वर सन्धि के पाँच भेद होते हैं। उनमें से एक है— 'दीर्घ सन्धि'।

दीर्घ सन्धि में समान स्वर मिलकर दीर्घ हो जाते हैं। यथा—

अ/आ + अ/आ = आ

हिम + आलयः = हिमालयः

च + अस्य = चास्य

च + आसन् = चासन्

इव + अस्ति = इवास्ति

◊ शब्द— शब्दों के अन्त में आनेवाले स्वरों के आधार पर ही शब्दों (पुँलिङ्ग, स्त्रीलिङ्ग या नपुंसकलिङ्ग) को 'अकारान्त', 'आकारान्त', 'इकारान्त' आदि कहते हैं। यथा—

1. अकारान्त पुँलिङ्ग — देश, महासागर
2. अकारान्त नपुंसकलिङ्ग — वन, पुष्प
3. आकारान्त स्त्रीलिङ्ग — नर्मदा, वीराङ्गना
4. इकारान्त पुँलिङ्ग — मणि, कवि, मुनि
5. इकारान्त स्त्रीलिङ्ग — समृद्धि, शान्ति
6. ईकारान्त स्त्रीलिङ्ग — नदी, राजधानी

जिस प्रकार सभी अकारान्त पुँलिङ्ग शब्दों के रूप एक समान चलते हैं, उसी प्रकार हर वर्ग के शब्दों के रूप आपस में प्रायः समान ही चलते हैं।

पाठ में आपने इकारान्त पुँलिङ्ग शब्द 'कवि', 'मणि' और 'मुनि' के प्रयोग देखे। इन शब्दों के रूप एक समान चलते हैं। (रूप के लिए परिशिष्ट देखें।)

अभ्यास

1. संस्कृत में उत्तर दें। (Answer in Sanskrit.)

- (क) भारतस्य उत्तरदिशायां कः अस्ति? भारतस्य उत्तरदिशायां पर्वतश्रृङ्खलाः हिमालयः अस्ति।
- (ख) अस्माकं देशः कः ?
- (ग) भारतस्य राजधानी का?
- (घ) भारतस्य आदर्शवाक्यं किम्?

2. सन्धि-विच्छेद करें। (Disjoin the sandhis.)

इवास्ति, नर्मदादयः, चासन्, वीराङ्गनाः, चास्य

3. इकारान्त पुँलिङ्ग 'मुनि' शब्द के रूप तृतीया और षष्ठी विभक्तियों में लिखें।

(Decline [write the forms of] the इ-ending masculine word 'मुनि' in the 3rd and 6th case-endings.)

4. पाठानुसार उचित नामों से रिक्त स्थानों की पूर्ति करें।

(Fill in the blanks with suitable names according to the lesson.)

- (क) भारतस्य द्वौ राष्ट्रनायकौ गान्धी बुभाषः
- (ख) भारतस्य द्वौ ग्रन्थौ
- (ग) भारतस्य द्वे वीराङ्गने
- (घ) भारतस्य द्वौ संस्कारकौ

(ड) भारतस्य आदर्शवाक्यम्

(च) भारतस्य राष्ट्रगीतम्

5. निम्नलिखित शब्दरूपों के लिङ्ग, विभक्ति एवं वचन पहचानें।

(Identify the gender, case-ending and number of each of the following word forms.)

	लिङ्ग	विभक्ति	वचन
(क) मणिः	पुंलिङ्ग	प्रथमा	एकवचन
(ख) पूर्वदिशायाम्
(ग) महाकवयः
(घ) देशे
(ङ) क्षेत्रेषु
(च) मुनीनाम्

6. निम्नलिखित शब्दों के अर्थ लिखें। (Write the meanings of the following words.)

सुदीर्घाः, पर्वतराजः, संस्कारकाः, कवीनाम्, प्रक्षालयति

7. संस्कृत में अनुवाद करें। (Translate into Sanskrit.)

(क) भारत हमारा देश है। (India is our country.)

(ख) कालिदास एक महान कवि थे। (Kalidasa was a great poet.)

(ग) भारत की राजधानी दिल्ली है। (Delhi is the capital of India.)

(घ) भारत की दक्षिण दिशा में हिन्दमहासागर है। (The Indian Ocean is to the south of India.)

(ङ) यहाँ गङ्गा नदी बहती है। (The river Ganges flows here.)

(च) भारतीय विभिन्न क्षेत्रों में अग्रणी हैं। (Indians are leaders in various fields.)



(पाठ संख्या - ३)

जयतु भारतम्
(भारत की जय हो)

१. भारतम् - - - - - स्तः ।

अनुवाद - भारत हमारा देश है। इसकी उत्तर दिशा में पर्वतराज हिमालय मुकुट सदृश है। दक्षिण दिशा में हिन्द महासागर भारत माता के चरणों को धोता है। पूर्व दिशा में बंगाल की खाड़ी और पश्चिम दिशा में अरबसागर है।

२. अत्र गङ्गा - - - - - प्रकटयन्ति ।

यहाँ गङ्गा, यमुना, नर्मदा इत्यादि नदियाँ बहती हैं। हरे-भरे खेत के मैदान, ऊँची पर्वतमालाएँ और विशाल वन, खनिज पदार्थ इत्यादि इस देश की समृद्धि को प्रकट करते हैं।

३. अस्मिन् - - - - - तिष्ठन्ति ।

अनुवाद - इस देश में कई भाषाएँ हैं।
लोगों की वेशभूषाएँ भी अलग-
अलग होती हैं। उनके भोजन, आवास
एवं उत्सव भी अलग-अलग होते हैं। किन्तु
सब लोग एकत्र होकर भातभाव से
(भाईचारे से / प्रेम / स्नेहपूर्वक) रहते हैं।

8. भारत - - - - - आसीत् ।

भारत बहुत प्राचीन देश है। यहाँ विश्वप्रसिद्ध
वेद, पुराण, रामायण महाभारत आयुर्वेद
(से सम्बन्धित) इत्यादि ग्रन्थ लिखे गए
थे। हमारे देश में बाल्मीकि, कालिदास
इत्यादि महाकवि हुए। वीराङ्गना, शोभा लक्ष्मीबाई
गान्धी, सुभाष इत्यादि राष्ट्रनायक हुए।
आर्यभट्ट, जगदीशचन्द्रबसु सहस्र वैज्ञानिक,
विवेकानन्द, दयानन्द जैसे सुधारक भी
यहाँ हुए। इस समय भारतीय कई क्षेत्रों में
अग्रसर हैं। भारत में अनेक मुनि हुए।
उन मुनियों को जात्यात्म विद्या का पूर्ण
ज्ञान था।

'सत्यमेव जयते' - - - - - जयतु ।

अनुवाद - 'सत्यमेव जयते' भारत का
आदर्शवाक्य है। भारत का राष्ट्रीय ध्वज
'तिरंगा' है। 'जनगणमन' यहाँ का
राष्ट्रगान और 'वन्दे मातरम्' राष्ट्रगीत
है। भारत की राजधानी दिल्ली है।
भारत में अनेकता में एकता है।
यह भारतवर्ष विश्वविजयी है।

अभ्यास

9. संस्कृत में उत्तर दें —

(क) भारतस्य उत्तरदिशायां पर्वतराजः हिमालयः अस्ति।

(ख) भारतम् अस्माकं देशः अस्ति।

(ग) भारतस्य राजधानी 'दिल्ली' अस्ति।

(घ) 'सत्यमेव जयते' भारतस्य आदर्शवाक्यम् अस्ति।

2. इव + अस्ति, नर्मदा + आदयः

(च) वन्दे मातरम्

सं.	शक्तिः	लिङ्गः	विभक्तिः	वचनः
१.	(क) शक्तिः	पुल्लिङ्ग	प्रथमा	एकवचन
	(ख) पूर्वदिशायाम्	स्त्रीलिङ्ग	सप्तमी	एकवचन
	(ग) महाकवयः	पुल्लिङ्ग	प्रथमा	बहुवचन
	(घ) देशे	पुल्लिङ्ग	सप्तमी	एकवचन
	(ङ) क्षेत्रेषु	पुल्लिङ्ग	सप्तमी	बहुवचन
	(च) मुनीनाम्	पुल्लिङ्ग	षष्ठी	बहुवचन

६. सुदीर्घः — बहुत लम्बी

पर्वतराजः — पर्वतों का राजा

संस्कारकाः — सुधारक (सुधार करने वाले)

कवीनाम् — कवियों का

च + आसन्

वीर + अङ्गनाः

च + अस्य

३. 'मुनि' (इकारान्त पुल्लिंग शब्द)

	एकवचन	द्विवचन	बहुवचन
तृतीया विभक्ति	मुनिना	मुनिभ्याम्	मुनिभिः
षष्ठी विभक्ति	मुनेः	मुनेभ्यः	मुनीनाम्

४. (क) गान्धी सुभाषः

(ख) रामायणम् महाभारतम्

(ग) पद्मिनी लक्ष्मीबाई

(घ) विवेकानन्दः दयानन्दः

(ङ.) सत्यमेव जयते

प्रक्षालयति → छोटा है

७. संस्कृत में अनुवाद →

(क) भारतम् अस्माकं देशः अस्ति ।

(ख) कालिदासः एकः महाकविः आसीत् ।

(ग) भारतस्य राजधानी 'दिल्ली' अस्ति ।

(घ) भारतस्य दक्षिणदिशायाम् हिन्द महासागरः
अस्ति ।

(ङ) अत्र गङ्गा नदी प्रवहति ।

(च) भारतीयाः विविधेषु क्षेत्रेषु अग्रेसराः सन्ति ।

आवश्यक निर्देश →

इस सम्पूर्ण पाठ को अपनी संस्कृत-उत्तर पुस्तिका
में लिख लें एवं कठस्थ/पुनरावृत्ति भी
करते रहें ।

Shri. Singh

समाप्त

REFERENCE YOU TUBE VIDEO LINK:

https://youtu.be/AuXFr11d_xl



**J.T. GOLDEN JUBILEE SCHOOL,
PRAYAGRAJ.**

SESSION: 2020-2021

CLASS: VII

SUBJECT: SOCIAL SCIENCE

SUBJECT TEACHER: ASHU RAI

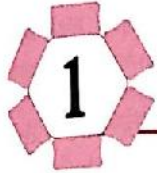
ASSIGNMENT III

STUDY MATERIAL

CIVICS

LESSON 1: DEMOCRACY

Thoroughly go through the chapter given below.



Democracy

In any society, the interests and problems of a vast number of its members can not be the same. The clash of interests among people or groups causes conflict and lawlessness. In such a situation, might can be the right. So, to restore law and order, to ensure co-operation among the people, to make collective decisions and to get things done, a need for a political organisation was felt. This political organisation is known as government.

There are three main types or forms of government which exist in the world today. These important systems of power are Democracy, Monarchy and Dictatorship.

DEMOCRACY

The word 'democracy' has been derived from the Greek Word 'demokratia' which means 'demos', 'the people' + 'kratia-'power or rule'. Thus, democracy is a form of government in which people have a voice in the exercise of power, typically through elected representatives.

In simple words, democracy means a rule by the common people. It is a form of government in which people elect their own representatives. People are supreme. No body or institution is above them. The government is answerable to the people and only the people can change it through constitutional provisions. It is the people who give the government the power to make decisions and enforce laws. They do this through elections



Indian Prime Minister with some Cabinet Ministers

in which electors vote for a government from a range of political parties. In fact, people vote for particular persons or candidates and elect them. These elected persons form the government by this system, the government is directly responsible to the people. It has to explain its actions and defend its decisions to the people. Most countries in the world today have a democratic form of government. For example, India, U.S.A. etc.

MONARCHY

The word 'monarchy' has been derived from the Greek word 'monarkhia' which means 'the rule of one'. It is a government by a sovereign head of state, especially a king, queen or emperor.



Queen-Elizabeth-II

In a monarchy, the head of the royal family is the head of the nation. The monarch or the king or queen is succeeded by his or her closest relative (mostly the eldest son) in hereditary succession. In this system, the monarch takes decisions and runs the government with the help of a small group of ministers or advisors. The kings or the queens don't have to explain their actions, neither do they have to defend their

decisions in front of anybody. Morocco, Saudi Arabia and Jordan have a monarchical form of government.

Dictatorship

In a dictatorship, people have no rights and all the powers rest in the hands of one man. That is, there is a single ruler with absolute powers. Most dictators gain power either through a military takeover or by seizing leadership from an existing ruler. In this system, citizens cannot raise any question about the government and its method of functioning. A citizen is not the master of his fate and is always at the mercy of the dictator. General Parvez Musharaff of Pakistan and Saddam Hussain of Iraq were examples of dictators. A dictator is a ruler who has complete power over a country and the power has been gained by force.

Origin of Democracy

The origin of democracy can be traced back to ancient Greece. The word 'democracy' is of Greek origin. It is as old as the ancient Greek civilisation. The earliest democratic system emerged in the Greek city of Athens where all the adult male population formed an assembly and participated in the decision-making process directly.

In the Roman Republic also, there were some elements of representative democracy. Some public posts were filled by elections.



The Panchayat system in villages

Remarkably, one of the earliest instances of democracy were found in ancient India. Sometime before the 6th century BC, the Mahajanapad of Vaishali (presently in Bihar, India) was the world's first republic. The democratic Sangha, Gana and Panchayat systems were present in some of these republics. The Panchayat System is still in practice in Indian villages.

Modern democracy is quite different from the democracy that prevailed in the ancient period. Britain is regarded as the first modern democracy.

After the civil war in the 17th century, the royal absolutism came to an end and the power was transferred from the king to the two houses of Parliament. These houses were the House of Lords and the House of Commons which had an elected chamber. Earlier the right to vote was based on the ownership of property. It was only with the implementation of Equal Franchise Act, 1928 that women secured the right to vote. The Universal Adult Suffrage was achieved much later. France became a republic after the French Revolution, 1787. The United States of America remained a partial democratic country from 1787 to 1965 because the right to vote was limited to very few people.

The First World War (1914-19) was announced to be fought to make the world safe for democracy. The end of the war witnessed a great popularity for democracy. Similarly, after the Second World War (1939-45), democracy as a form of government, became the norm in most countries. Moreover, new waves of democracy spread over Europe in the 1970s and late 1980s when representative governments were set up in the nations of Southern, Central and Eastern Europe respectively.

Why Democracy and The Key Elements of Democracy

The following are the significant elements that continue to make democracy popular in the contemporary world.

Formal Equality

Equality and justice are the central theme of democracy. Both these terms are inseparable. Equality is the precondition that ensures justice for all the people of a society or country. In democracy, everybody is given an equal status. No discrimination is done on the basis of caste, religion, colour, race, etc. Every individual has equal political, economic and



Equality in society

civil rights. Whether it is the President of the country or a common man, all are subject to the same laws. In a democracy, all adult people are given right to vote. The value of each vote is equal, whether it is of the rich or the poor.)

Decision-making Mechanisms

People participate in the decision-making process in a democracy. But they do not participate in it directly. Instead, they choose their representatives through an election process. These



Legislative Assembly

representatives take decisions on behalf of the entire population. While making decisions, they certainly keep in mind the voices and interests of the people. The regular elections restrict the power of the government and increase people's participation in the decision-making mechanisms. This is because, if the people are not satisfied with the working of the government, they may not vote for it at the time of re-election and make it lose.

Accommodation of Differences

Differences or conflicts may arise when people of different regions, religions, languages, castes, cultures, genders and economic backgrounds do



Police—managing Conflicts

not value one another. They arise when a group of people feel that they are superior while some other groups feel that they are being discriminated against. Thus, differences often create conflicts that lead to violence and loss of lives and property.

But these differences can be settled by developing a tolerant attitude. Democracy provides a peaceful solution to this problem because it gives equal opportunity to all individuals before the law of land. It shows a way to deal with differences and conflicts.

Moreover, in a democracy, decisions are taken by the majority party or parties. The other parties together form the opposition. But, it does not mean that only the will of the majority will be taken into consideration. A democratic government tries to accommodate minority opinion also in order to enjoy the support of the people.

Enhancing Human Dignity

Democracy enhances human dignity because it is a rule by the people themselves. The basic idea of a democracy is that people rule themselves by participating in the making of these rules. That is, people have the power to elect their rulers.

Democracy aims to achieve social, political and economic equality. It gives equal status and opportunities to all its citizens irrespective of whether they are rich or poor. A democratic government makes special provisions for the socially or economically weaker sections. A large number of such welfare schemes have been implemented to bridge the gap between the rich and the poor. This overall enhances human dignity.



Welfare Programmes

Universal Adult Franchise

It means that all adults in the country have the power to vote. This is an essential feature of a democracy. No government can claim itself to be a democratic government without allowing all eligible adults to vote.

In the earliest democracies of the world, only men who had a certain amount of property and education were allowed to vote by the governments. The women, the poor and uneducated persons were not allowed to vote.

In India, the voting age is 18 years. All citizens of India who have attained the age of 18 years or above, can vote whether they are men or women, rich or poor, educated or uneducated.



People in queue to vote

Elections

Regular elections are an essential feature of a democracy. The Election Commission of India is an autonomous constitutional authority which conducts elections in India. Elections are held at periodic intervals. In India, elections are held after every 5 years. For elections, the state is divided into small divisions known as electoral constituencies. People elect one leader or representative from each constituency. The official list that contains



A woman casting her vote

the names of all the qualified voters or people in a district who are entitled to vote, is known as the electoral roll or the voter's list. Through voting in elections, people elect leaders to represent them. These representatives form the government.

They take decisions on behalf of the entire population. If the government wants to continue to be in power, then its members have to be re-elected by the people. Again at the time of re-election, people can feel their power in a democracy. If the people are not satisfied with the working of the government, they may not vote for it and make it lose. Thus, regular elections restrict the power of the government and increase people's participation in a democracy.

Political Parties

A political party is an organisation of people who have similar views or a set of beliefs on political issues. They aim to contest and win elections and capture political power so that they can form a government. To win the elections, political parties need to win the support of the people. There are many political parties in India.



Symbols of Various Political Parties

If any party wins more than half of the seats in the legislature, it can form a government. The party that forms the government is called the ruling party. While the other parties are known as the opposition parties.

Coalition Governments

If no single party wins a clear majority, two or more parties may join together to obtain majority. That is, their collective strength in the assembly would provide the required majority to form a government. This type of government is called a coalition government. This is a post-poll alliance. The present NDA government at the centre led by Prime Minister Narendra Modi is a coalition government. However, the B.J.P. has got absolute majority in the Lok Sabha.

IMPORTANT POINTS

- Democracy is a form of government in which people elect their own representatives.
- Most countries in the world today have a democratic form of government.
- In a monarchy, the head of the royal family is the head of the nation.
- In a dictatorship, people have no rights and all the powers rest in the hands of one man.
- The Mahajanapad of vaishali was the world's first republic.
- Britain is regarded as the first modern democracy.
- Equality and justice are the central theme of a democracy.
- People participate in the decision-making process in a democracy through elections. They choose their representatives who take decisions on behalf of the entire population.
- Conflicts may arise when people of different regions, religions, languages, castes, cultures, genders and economic backgrounds do not value each other. Democracy provides a peaceful solution to this problem because it gives equal opportunities to all individuals before the law of land.
- Democracy enhances human dignity because it is a rule by the people themselves.
- Universal Adult Franchise means that all adults in a country are allowed to vote.
- Regular elections are an essential feature of a democracy.
- A political party is an organisation of people who have similar views or set of beliefs on political issues.
- If no single party wins a clear majority, two or more parties together form the government. This type of government is called a coalition government.



EXERCISES

I. Multiple Choice Questions (MCQs)

Choose the correct option from the following :

1. Which one of the following systems refer to a rule by the common people ?
(a) Monarchy (b) Dictatorship (c) Democracy (d) None of these
2. In a monarchy, the head of the nation is the
(a) leader of people's representatives
(b) single ruler who gains power generally through a military take over
(c) head of the royal family
(d) none of these
3. The Mahajanapad of Vaishali was the world's
(a) first republic (b) third republic (c) first monarchy (d) first dictatorship
4. Which one of the following factors is the central theme of a democracy ? **HOTS**
(a) Equality (b) Discrimination (c) Non-violence (d) None of these
5. Which of the following institutions is/are the features of democratic institutions ? **HOTS**
(a) Universal Adult Franchise (b) Elections
(c) Political parties (d) All of these
6. Universal Adult Franchise means, that all adults in the country are
(a) allowed to do business (b) allowed to vote
(c) allowed to make political parties (d) allowed to contest elections

II. Very Short Answer Type Questions

1. Define democracy.
2. What do you mean by monarchy ?
3. What is dictatorship ?
4. Mention any two key elements of a democracy. **HOTS**
5. What do you understand by Universal Adult Franchise ?

III. Short Answer Type Questions

1. 'Democracy means rule by the Common people'. Justify this statement. **HOTS**
2. What are the main features of a monarchy ?
3. Write a brief note on Universal Adult Franchise.
4. Why do you think that equality is the central theme of a democracy ? **HOTS**
5. What do you know about a coalition government ?

IV. Long Answer Type Questions

1. What are the key elements of a democracy ?
2. What is the role of election in a democracy ? Explain. **HOTS**
3. Discuss the role of political parties as a democratic institution.

V. Match Column-A with Column-B

Column A

1. Monarchy
2. Democracy
3. Regular Elections
4. Origin of Democracy
5. Political Party

Column B

- (a) Equality
- (b) Feature of Democracy
- (c) People with similar views on political issues
- (d) Royal Family
- (e) Ancient Greece

MORE TO EXPLORE

Picture Study

Look at these pictures and answer the following questions.

- (i) Identify these persons.
- (ii) From which countries do they belong ?
- (iii) Mention some features of their governments.



Web Link

For more information log on to the following link :

- <http://en.wikipedia.org/wiki/Democracy-in-India>

Given below is the link for tutorial.

. To access the video, tap the following link:

<https://youtu.be/Vf2mnEGtpDc>

Open the given link in You Tube and thoroughly go through it.

CIVICS ASSINGMENT

Do the given assignment in your S.ST notebook.

1. Define the following terms: -

- (i) Democracy
- (ii) Monarchy
- (iii) Dictatorship
- (iv) Coalition Government
- (v) Universal Adult Franchise

2. Match the following:

Monarchy	Saddam Hussain
Dictatorship	India
Democracy	Saudi Arabia

3. Give very short answers: -

- (i) Name the authority that conducts 'elections' in India.
- (ii) After how many years elections are held in India.
- (iii) Name the world's first republic.
- (iv) What is the voting age in India.

4. Draw the symbol of five political parties of India.

5. What do you understand by the term all persons are equal before law? Why do you think it is important in democracy.

6. Suppose you are contesting elections from an 'assembly constituency'. Prepare a short speech which you intend to give to the voters.

-----X-----X-----X-----X-----