

## 2.4 Interpreting charts and graphs

Graphs and charts are the most efficient methods for displaying information in a simple manner. Using this form of representation helps its viewer to understand and interpret the information more easily and efficiently, which otherwise could be a very difficult and tedious process. Graphs, charts and tables can be invaluable in a formal report.

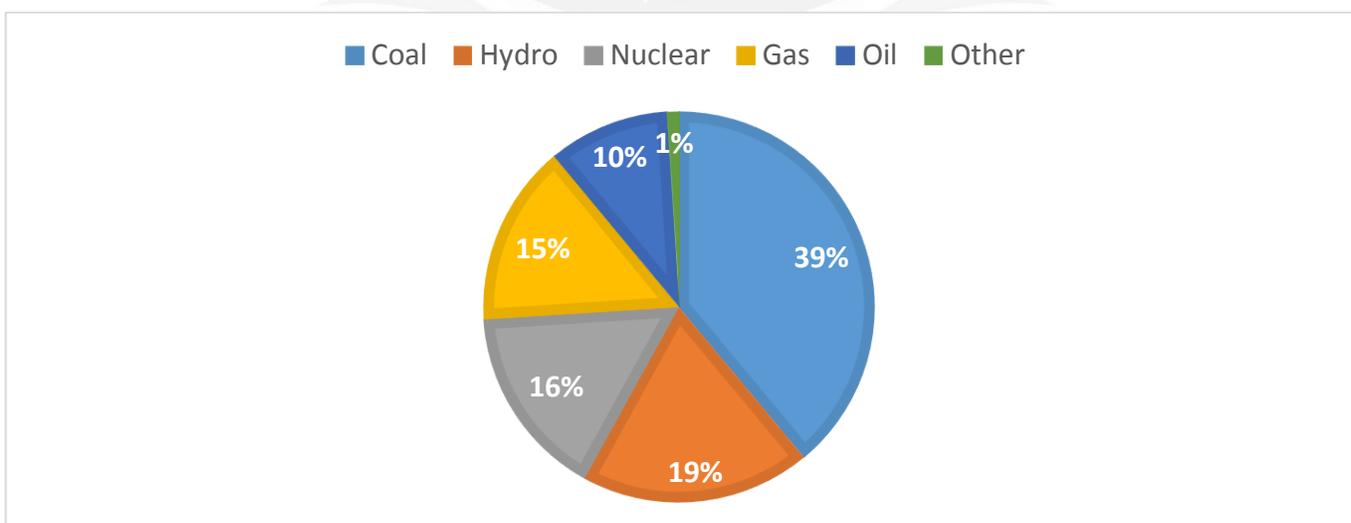
### Different types of data interpretation:

- ❖ Pie chart
- ❖ Bar chart
- ❖ Tabular column
- ❖ Flow chart

### PIE CHART

A pie chart is a way of summarizing a set of categorical data. It is a circle that is divided into segments. Each segment represents a particular category. The area of each segment is proportional to the number of cases in that category. The segments are arranged in alphabetical order and proceed in a clockwise direction. Each part is made distinct with the use of different shades or designs.

The following pie chart shows the available worldwide sources of electricity. Write a paragraph explaining the chart

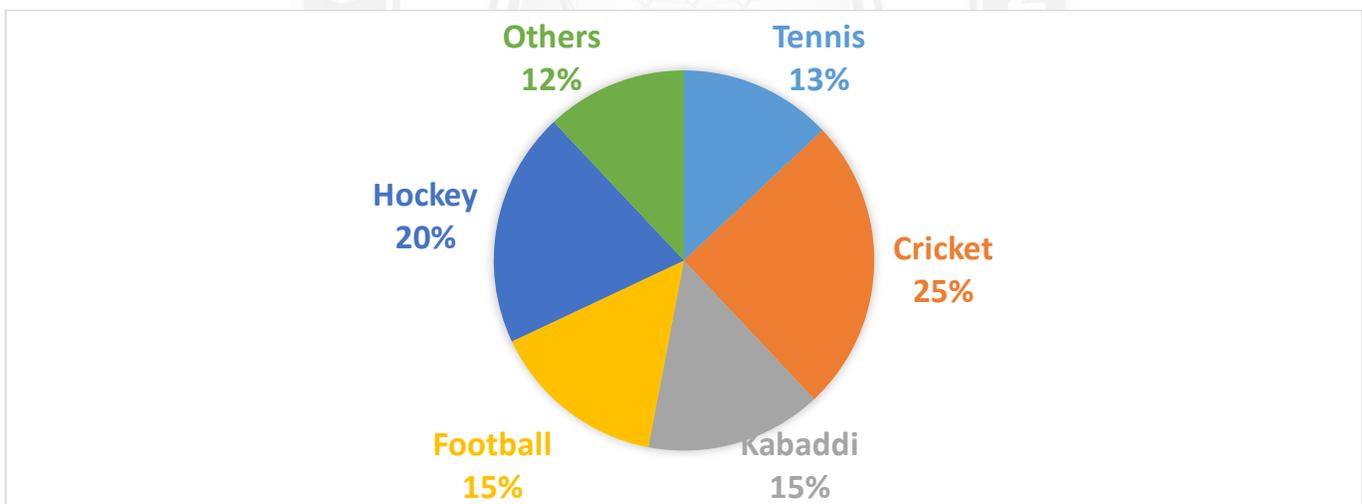


**Answer:**

The pie chart shows information about sources of electricity available worldwide and specific figures for selected countries. Overall, fossil fuels, such as coal, oil and gas are the most important sources of electricity.

The pie chart shows the main sources of electricity worldwide. Coal is the most important source, at 39%. This is followed by hydro-electric power at 19%, and nuclear power at 16%. A quarter of the world's electricity is produced from oil and gas. However, if all the fossil fuels, coal, oil and gas are added together, they account for almost two-thirds of electricity production. Other sources, such as wind power or solar power, contribute only a little towards electricity generation. In conclusion, sources of power vary greatly among countries. However, most countries worldwide rely on fossil fuels such as coal, oil, and gas.

- The Pie chart given below shows the spending of a country on various sports during a particular year. The total amount spent is hundred crores of rupees. Study the chart and interpret the data in 250 words

**Answer:**

The pie chart reveals the spending of a country on various sports during a particular year.

Overall, there are many differences in terms of sport activities. The money spent on sports over a hundred crore, how much more money was spent on hockey than on football? However, boys and girls both prefer doing the same activities: cricket, football, kabaddi, hockey, tennis.

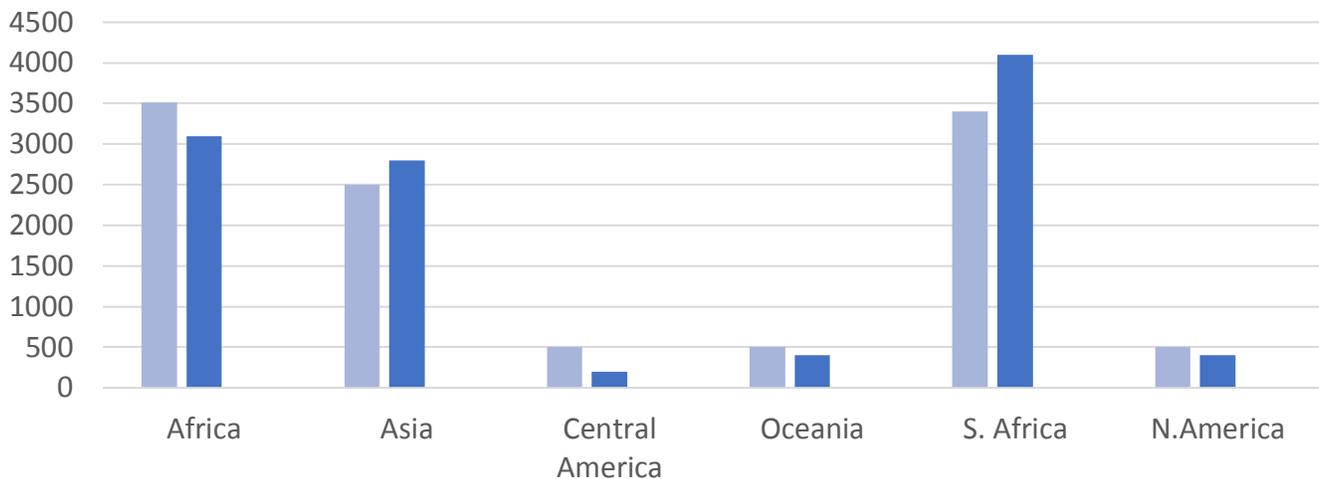
Turning to the chart, it illustrates that activities prefer playing cricket than taking other activities by 12%. Playing football comes as the third popular leisure works by fifteen percent. Compared to football, it is hockey participation followed by 20%. Then tennis and others are less preferable activities

A closer look at the chart, a similar proportion of kabaddi and football goes through 15% respectively. The percentage of cricket interested in playing hockey shows fifteen percent, while 13% is Tennis. In marked contrast, sports activities for others s12%, which is smaller than other activates, with twelve percent. Statistically, the total number of crickets represents 34%. This is twice as large as that of football, with only 15%percent. Roughly one quarter of sports like playing basketball and listening to music comes as the smallest. These activities reach the equal proportion.

**BAR CHART**

A bar chart is evenly spaced bar extending horizontally or vertically. It can present the relationship of numbers in two or three dimensions.

**Tropical Deforestation by region, 1990-2000&2000-2005**  
**In thousands of hectares per year Data score**

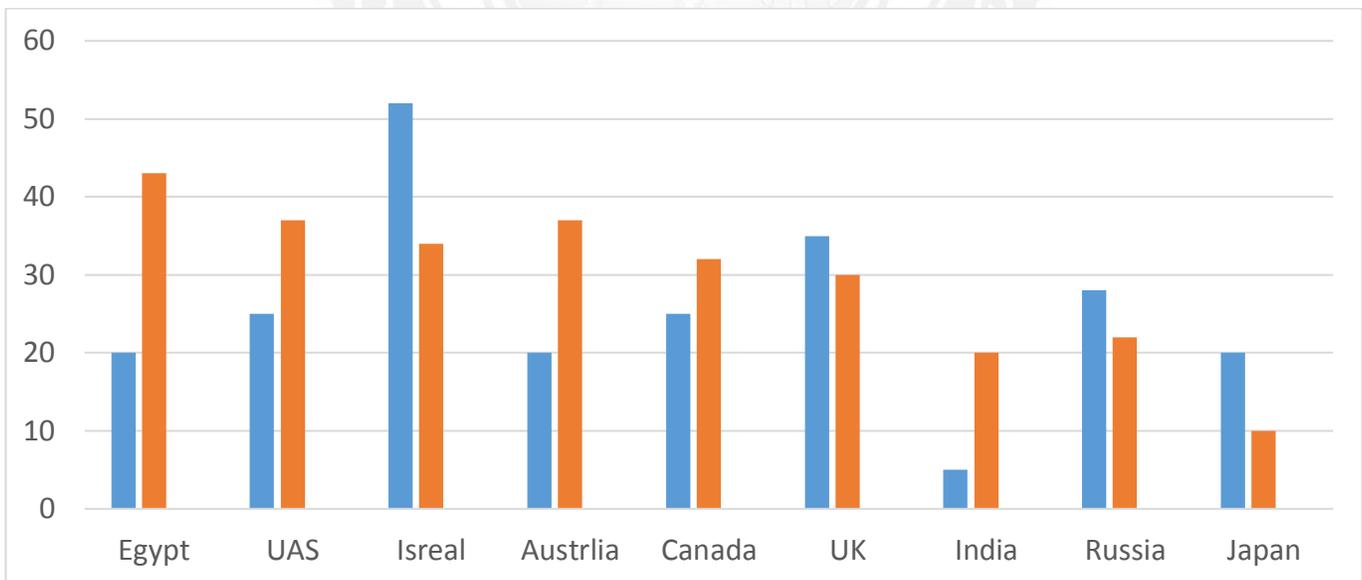


**Answer:**

This bar chart gives details about the deforestation occurred in different countries during two time zones. In the bar chart, the range at which the deforestation that took place between 1999 – 2000 and 2000 – 2005 in various countries is given. In the first time zone, three thousand and six hundred hectares of forest were cleared in Africa. Two thousand and five hundred hectares were cleared in Asia. Four hundred and eighty hectares of forest were cleared in Central America whereas five hundred hectares were destroyed in Oceania. In

contrast, three thousand and eight hundred hectares were cleared in South Africa. The deforestation activity in North America was noted to be four hundred and eighty hectares. Thus, the study for the year 1999 – 2000 shows that compared to Africa, Central and North America and Oceania are noted to be better while the deforestation in Asia seems to be equal to the African countries. In the time zone between 2000 – 2005, it is noted that except for Asia and South Africa, all the other countries had tried to reduce their deforestation activity. Africa is found to have reduced to three thousand and two hundred hectares – four hundred hectares less than the previous time zone. Asia is observed to have increased its destruction activity by three hundred and fifty hectares raising the total to two thousand eight hundred and fifty hectares. In Central America, only two hundred and fifty hectares were destroyed and in Oceania, four hundred hectares were destroyed, South Africa is seen to have increased the destruction to four thousand and two hundred – four hundred hectares increase. In North America, three hundred hectares only saw deforestation Thus, it is noted that most countries have understood the ill effects of deforestation and have tried to reduce this activity. All the countries should try to follow this trend and make our earth a beautiful place to live in.

**Look at the following bar chart, which describes the total expenditure on education and defense incurred by different countries. Write a paragraph describing the chart in not more than 200 words.**



**Answer:**

The given bar chart describes the total expenditure on education and defense incurred by different countries.

Of the countries given in the bar chart, Egypt spends the highest of nearly 43% on defense, whereas Japan spends just 10% of its total expenditure on defense. The United States and Israel spend approximately 37% and 34%, respectively, of their total expenditure on defense and thus hold the second and third places respectively. On the other hand, Australia 36%, Canada 34%, United Kingdom 30% and India 20% spend on defense. Next comes USSR which spends 22% for the same.

As far as expenditure on education is concerned Israel occupies the top position as 52% of expenditure is spent on education. In contrast India disperses the least of just 5% on education, while Egypt, Australia and Japan spend 20% of expenditure for education. USA and Canada show similarities in the allotment of expenditure on education i.e., Both the countries spare 25% of their total expenditure economy

**TABULAR COLUMN**

Tables give a systematic and orderly arrangement of items of information. Tables eliminate the tedious words, phrases and sentences that can instead be put at the top of the column or at the sides of rows in the tables.

**Registered Motor Vehicles in Metropolitan Cities (in thousands)**

YEAR	KOLKATTA	CHENNAI	MUMBAI	TOAL (K+C+M)	NEW DELHI
1986	339	228	480	1047	961
1991	475	544	629	1648	1813
1994	545	689	608	1842	2239
1998	664	975	860	2499	3033

**Answer:**

Well, there's a good reason for it. Most of India's major cities now are home to more than a million vehicles, all of which contribute to traffic congestion, high road accidents and pollution, according to a Barclay's report titled 'Megatrends: Accelerating urbanization in India'.

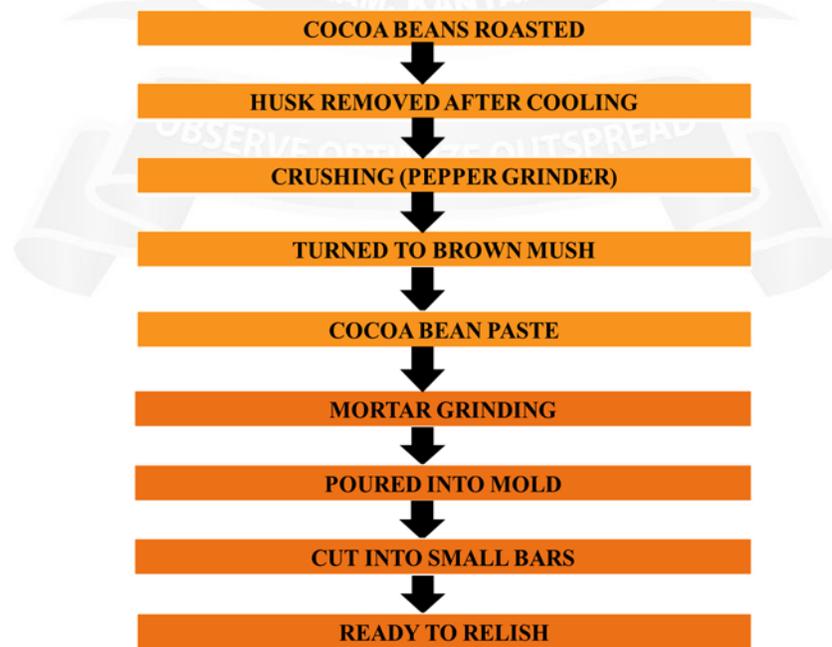
In the report, the company's equity strategy team notes that India's transportation infrastructure is unable to keep up with the country's rapid urbanization rates.

A growing urban population means rising incomes, which translates into a burgeoning number of vehicles on the road. However, the pace of road network expansion has been slow and the state of public transportation is poor, leading to a host of problems for Indian cities.

In 1998, Delhi had the maximum number of cars in the country at 961, followed by Kolkata (339), Chennai (228), Hyderabad (3.3 million) and Mumbai (480). Surprisingly, Mumbai doesn't make the cut, coming in sixth with a little over 2 million cars.

**FLOW CHART INTO PROCESS**

A flow chart is a pictorial representation describing a process using connecting lines and a set of conventional symbols.



**Answer:**

Chocolate is a known favorite among people of all age group. The process of preparing chocolate is an age-old method. The main ingredients required for the preparation of chocolate is cocoa. Initially the cocoa beans are first roasted in a temperature of 300 degree for 30 minutes.

Then these cocoa beans are felt for cooling. Then the husk from these beans is removed. The cocoa beans are made into small pieces which are crushed using pepper grinder. Next these crushed particles are turned into brown mush. After which the cocoa bean paste is made ready.

Then this coca bean paste is heated in large pan which is then grinded through mortar grinding. Next sugar, milk and flavor is added which is poured into mold of desired shape and size. At last this is left to cool which is cut into small bars. Finally, they ready to serve and eat.

