**Construction of Bar Graphs**

**Bar graph is the simplest way to represent a data.**

● In consists of rectangular bars of equal width.● The space between the two consecutive bars must be the same.● Bars can be marked both vertically and horizontally but normally we use vertical bars.● The height of bar represents the frequency of the corresponding observation.**For example,** let us observe the following data of the bar graph.

The following data gives the information of the number of children involved in different activities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | Dance | Music | Art | Cricket | Football |
| **No. of Children** | 30 | 40 | 25 | 20 | 53 |

**Steps in construction of bar graphs/column graph:**

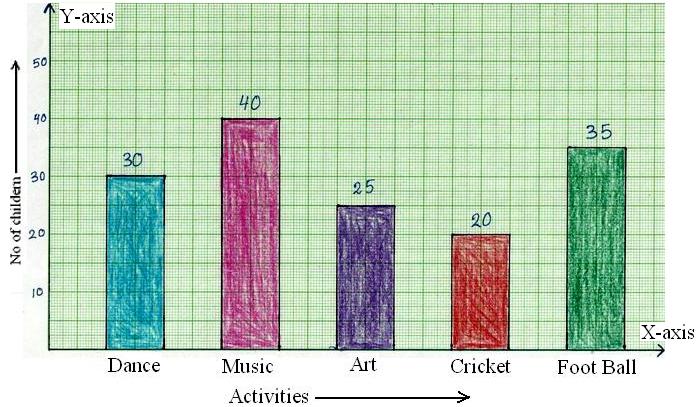
● On a graph, draw two lines perpendicular to each other, intersecting at 0.

● The horizontal line is x-axis and vertical line is y-axis.

● Along the horizontal axis, choose the uniform width of bars and uniform gap between the bars and write the names of the data items whose values are to be marked.

● Along the vertical axis, choose a suitable scale in order to determine the heights of the bars for the given values. (Frequency is taken along y-axis).

● Calculate the heights of the bars according to the scale chosen and draw the bars.



The percentage of total income spent under various heads by a family is given below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Different Heads** | Food | Clothing | Health | Education | House Rent | Miscellaneous |
| **% Age of Total Number** | 40% | 10% | 10% | 15% | 20% | 5% |

Represent the above data in the form of bar graph.

