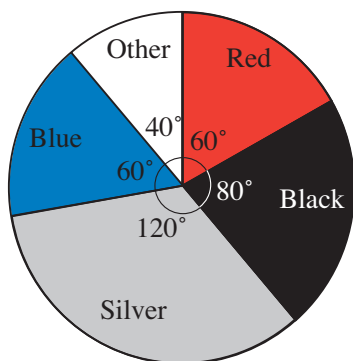


Data Presentation

Essential information

Pie chart - used to illustrate *discrete* data.

For example, colours of cars recorded in a survey:



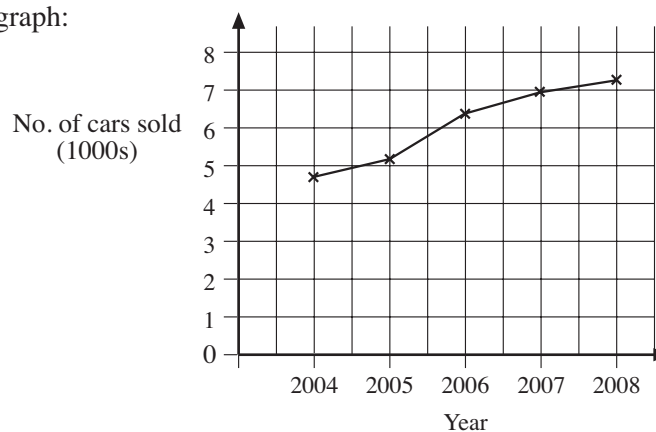
Colour	Number of cars	Proportion of total number	Angle ($\times 360^\circ$)
Red	15	$\frac{15}{90}$	60°
Black	20	$\frac{20}{90}$	80°
Silver	30	$\frac{30}{90}$	120°
Blue	15	$\frac{15}{90}$	60°
Other	10	$\frac{10}{90}$	40°
Total	90	$\frac{90}{90} = 1$	360°

Line graph - used to illustrate *trends* in data.

For example, numbers of cars sold per year:

Year	2004	2005	2006	2007	2008
No. of cars sold (1000s)	4.7	5.1	6.3	6.9	7.3

Data shown on a line graph:



Data Presentation

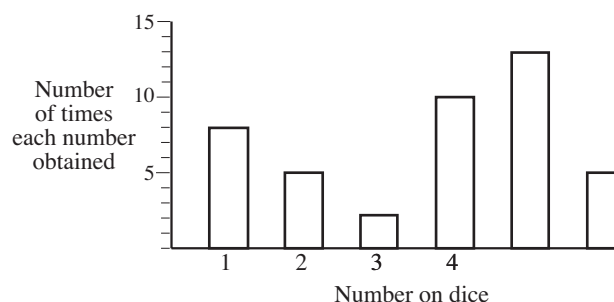
Essential information

Pictogram - a pictorial representation of data. For example,

if  represents 10 balls,
 then  will represent 5 balls, etc.

Bar chart - here the frequency of each event is illustrated on the y-axis. For example,

Bar chart showing the number of times each number, 1 - 6, was obtained when a dice was thrown



Stem and leaf plot - used to illustrate *numerical* data, providing a quick view of the characteristics of the data.

For example, the ages of the 15 teachers in a small school are:

27, 32, 28, 24, 37, 41, 50, 29, 25, 40, 55, 24, 33, 45, 29

The stem and leaf plot for this data is

```

2 | 4, 4, 5, 7, 8, 9, 9
3 | 2, 3, 7
4 | 0, 1, 5
5 | 0, 5
  
```

Histogram (or frequency graph) - used to illustrate *continuous* data.

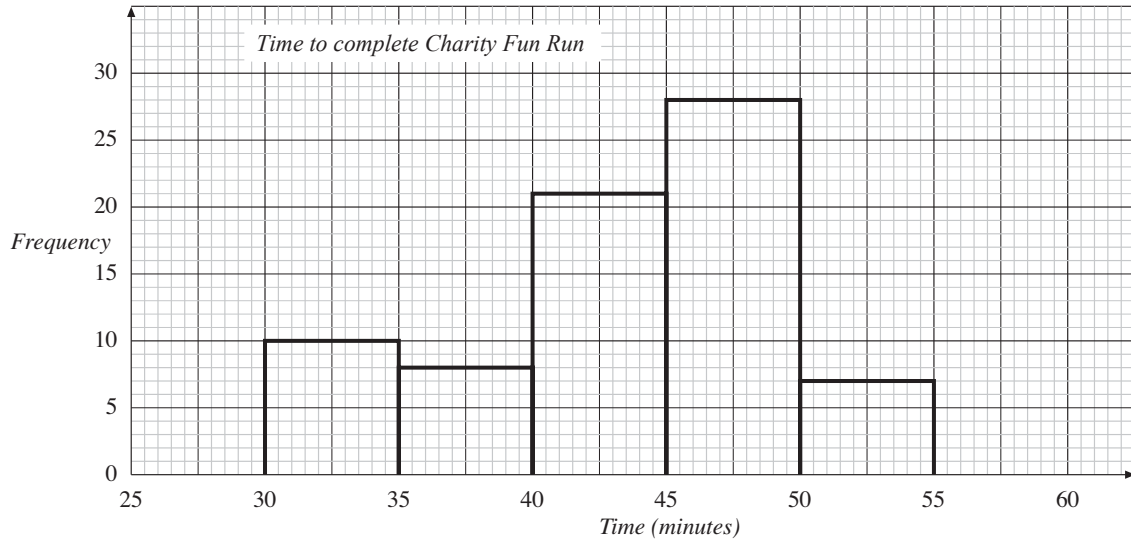
For example, times taken for competitors to complete a Charity Fun Run:

Time (mins)	Frequency
25 - 30	0
30 - 35	10
35 - 40	8
40 - 45	21
45 - 50	28
50 - 55	7
55 - 60	0

Data Presentation

Essential information

Data shown on a histogram:



Pictogram

- a pictorial representation of data. For example,
 if  represents 10 balls,
 then  will represent 5 balls, etc.

Bar chart

- here the frequency of each event is illustrated on the y-axis. For example,

Bar chart showing the number of times each number, 1 - 6, was obtained when a dice was thrown

