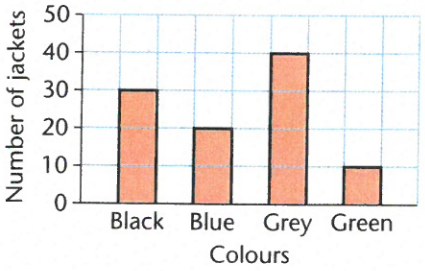
TARGET To interpret and present continuous data.

DISCRETE DATA

Discrete means separate. Discrete data is organised in separate categories. e.g. colours, countries, favourite drinks, etc. Discrete data is often presented in a bar chart.

The colours of 100 jackets sold in a menswear shop.

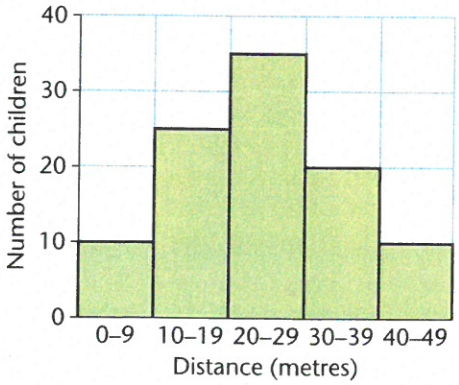


Each colour is a discrete category. This is shown by having gaps between the bars.

CONTINUOUS DATA

With continuous data each category is not separate but runs into the next one. Continuous data often consists of measurements organised into ranges of values, e.g. heights, weights, distances, times, etc. It can be presented in a type of bar graph called a histogram.

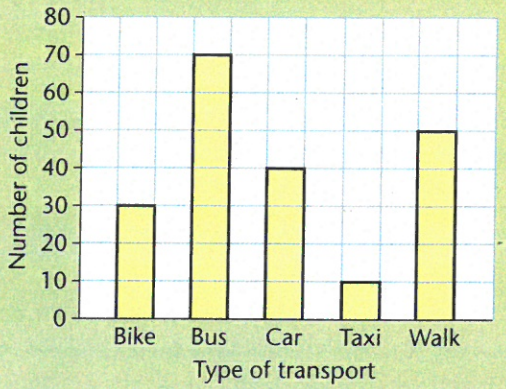
The distances thrown by 100 children in a cricket ball throwing competition.



The ranges are continuous. This is shown by having no gaps between the bars.

A

This bar chart shows how the children in a village school travel to school each morning.



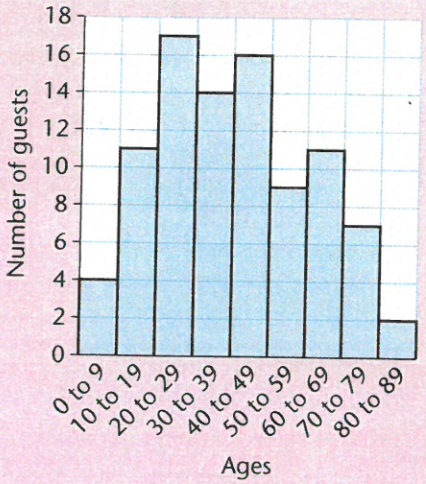
1. What is the value of one division?
2. How many children come to school by bike?
3. How many more children come to school by bus than by car?
4. Which form of transport is used by the least children?
5. How did 50 of the children come to school?
6. How many children are there in the school altogether?
7. This table shows the number of people using a swimming pool in one day.

Pool users	Number of users
Boys	75
Girls	60
Men	55
Women	100

Draw a bar chart labelled in tens to show the information in the table.

B

This bar graph shows the ages of the guests at a wedding.



1. How many of the guests were:
   a) in their seventies
   b) under 10?

2. How many more of the guests were in their 20s than their 30s?

3. How many fewer of the guests were in their 50s than their 60s?

4. How many of the guests were:
   a) 60 or over
   b) under 20?

5. How many guests were at the wedding altogether?

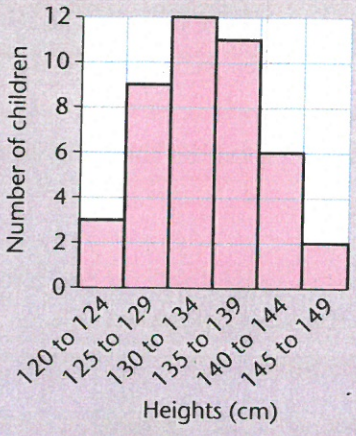
6. This table shows the turnover (total sales) of a cafe in its first six months of trading.

Month	Turnover (£)
March	3000
April	2500
May	4000
June	5500
July	7500
August	9000

Draw an histogram labelled in 1000s to present the data in the table.

C

This bar graph shows the heights of the children in Year 4.



1. How many of the children are:
   a) less than 130 cm tall
   b) more than 139 cm tall?

2. How many more children are between 130 and 134 cm tall than are between 135 and 139 cm tall?

3. How many more of the children are in the 140–144 cm range than are in the 145–149 cm range?

4. How many children are there in Year 4 altogether?

5. This table shows the weights of two hundred 18 year old men applying to join the army.

Weight (kg)	Men
50–59	35
60–69	55
70–79	70
80–89	25
90–99	10
100–109	5

Draw an histogram labelled in 10s to show the data in the table.