

GCSE Maths Foundation - Unit 3 - Data

Hannah asked some students to vote on the best name for a shark. Here are the results:

Bruce	Polly	Sandra	Polly
Polly	Polly	Steve	Steve
Sandra	Finley	Finley	Polly
Finley	Polly	Finley	Sandra
Bruce	Sandra	Polly	Polly

(a) Complete the frequency table

Name	Tally	Frequency
Bruce		
Polly		
Finley		
Sandra		
Steve		

(b) Write down the name that is the mode

Below are some ages (in months) of a group of hamsters. Draw a stem and leaf diagram for the data.

12 21 6 9 14 31 10 7 25 18 14

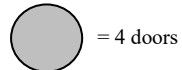
Key:

What is the median age of the hamsters?

There are only white, blue, green or red colours of front door on a street. There is a total of 24 doors. Complete the pictogram.

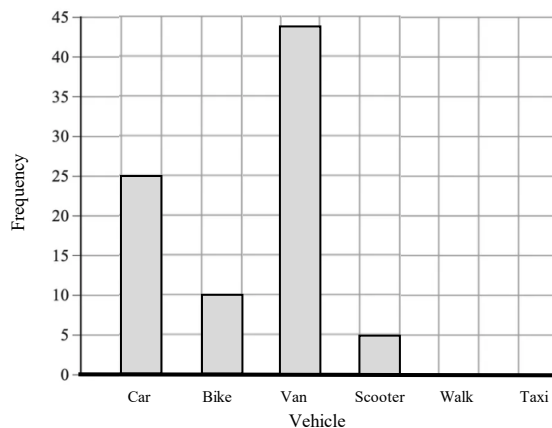
White	
Blue	
Green	
Red	

Key:



= 4 doors

The bar chart shows information about the ways in which 100 people travel to work.



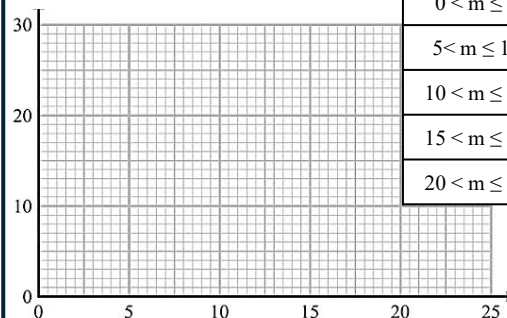
The number of people who walk is three times the number of people who travel by taxi. Complete the bar chart.

NAME:



The table shows information about the ages of some kittens in months. Draw a frequency polygon.

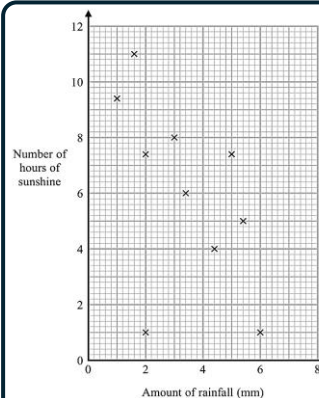
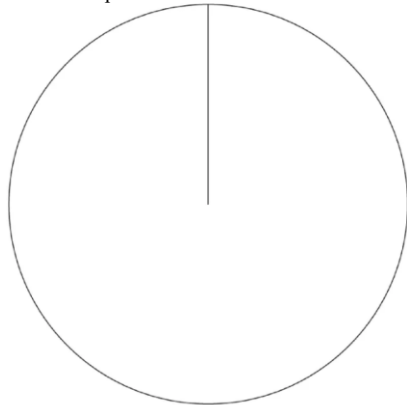
Age (months)	Frequency
$0 < m \leq 5$	7
$5 < m \leq 10$	18
$10 < m \leq 15$	25
$15 < m \leq 20$	10
$20 < m \leq 25$	2



40 people were asked their favourite flavour of ice cream. The results are shown in the table.

Flavour	Frequency
Vanilla	18
Chocolate	12
Strawberry	10

Draw an accurate pie chart to show this information.



Write down the type of correlation

State the coordinates of the outlier

(,)

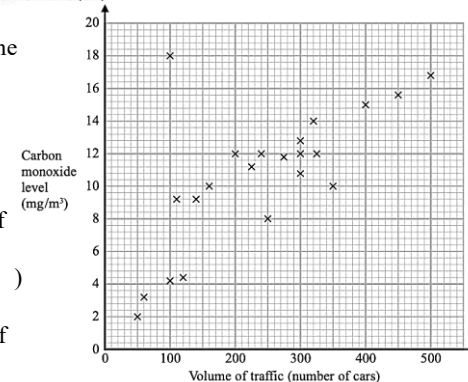
Draw a line of best fit.

Write down the type of correlation

State the coordinates of the outlier

(,)

Draw a line of best fit.



GCSE Maths Foundation - Unit 3 - Data

Miss Bailey asked 24 students where they each wanted to go on a school trip.

Here are the results.

museum	castle	castle	farm
farm	castle	farm	farm
castle	farm	castle	castle
castle	farm	castle	museum
museum	farm	castle	museum
museum	museum	castle	castle

(a) Complete the frequency table.

Place	Tally	Frequency
castle		
farm		
museum		

(2)

(b) Write down the place that is the mode.

(1)

The stem and leaf diagram below gives information about the ages of people in a social club.

3	1	4	5			
4	0	2	2	5	6	
5	0	1	7	7	8	9
6	3	4	5	9		
7	0	4				

Key: 4|2 represents 42 years

Find the range of these ages.

..... years (2)

There are only apple, cherry pear and plum trees in an orchard. There is a total of 30 trees. Complete the pictogram.

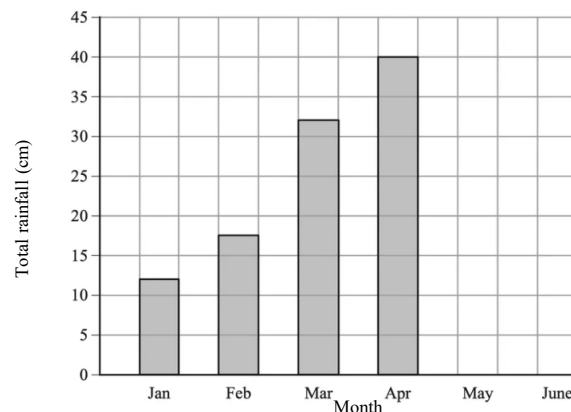
Apple	☐	☐	☐
Cherry	☐	☐	
Pear	☐	☐	
Plum			

Key:

☐ represents 4 trees

(3)

The bar chart shows information about the total rainfall each month for four months in a city.



(a) In May, the total rainfall was 35cm. In June, the total rainfall was 20cm. Use this information to complete the bar chart.

(2)

(b) Rupa thinks Feb had rainfall of 15.5cm. Explain why Rupa is wrong

(1)

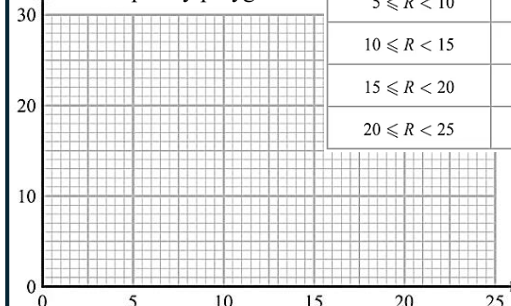
NAME:



The table shows information about daily rainfall in a town for 60 days.

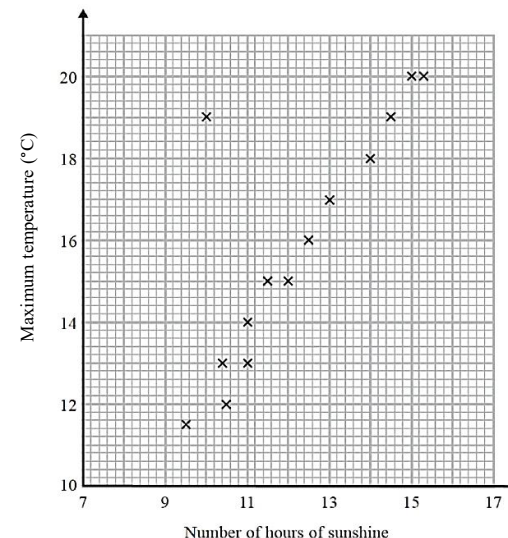
Draw a frequency polygon.

Rainfall (R mm)	Frequency
$0 \leq R < 5$	8
$5 \leq R < 10$	24
$10 \leq R < 15$	13
$15 \leq R < 20$	11
$20 \leq R < 25$	4



(2)

The scatter graph shows information about the maximum temperature and the number of hours of sunshine in fourteen British towns on one day.



(a) One of the points is an outlier. Write down the coordinates of this point.

(1)

(b) For all other points, write down the type of correlation.

(1)

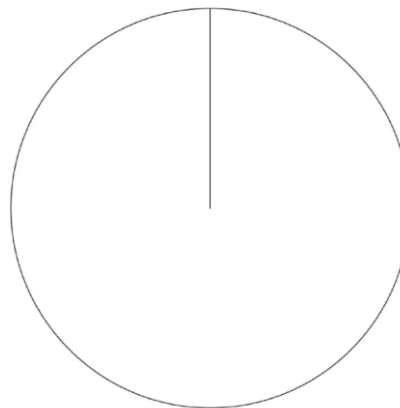
(c) On the same day in another British town, the maximum temperature was 16.4°C . Estimate the number of hours of sunshine in this town on this day.

(2)

Year 9 students were asked to choose one language to study. The table shows information about their choices.

Language	Number of students
French	56
Spanish	40
German	24

Draw an accurate pie chart to show this information.



(3)