



THIRD SPACE
LEARNING



HELLO!

Today we are going to revise
statistics – bar charts & pie charts



Arithmetic Warm Up

1) $50 \div 10 =$

2) $-8 + 9 =$

Revision on statistics

Today we are going to revise

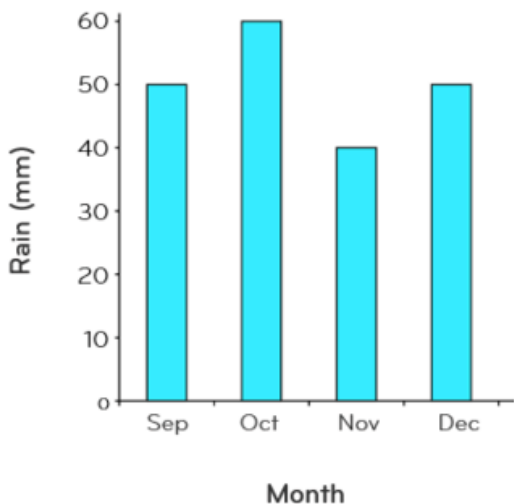


Interpreting data in bar and pie charts

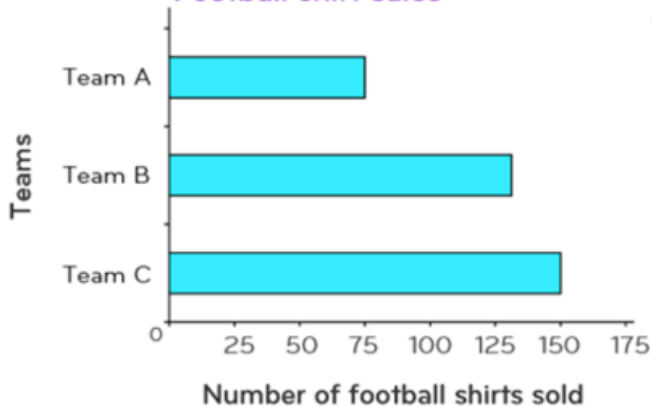


Revision: Bar charts

Total rainfall over 4 months



Football shirt sales



1. How much rain was there altogether in October and November?

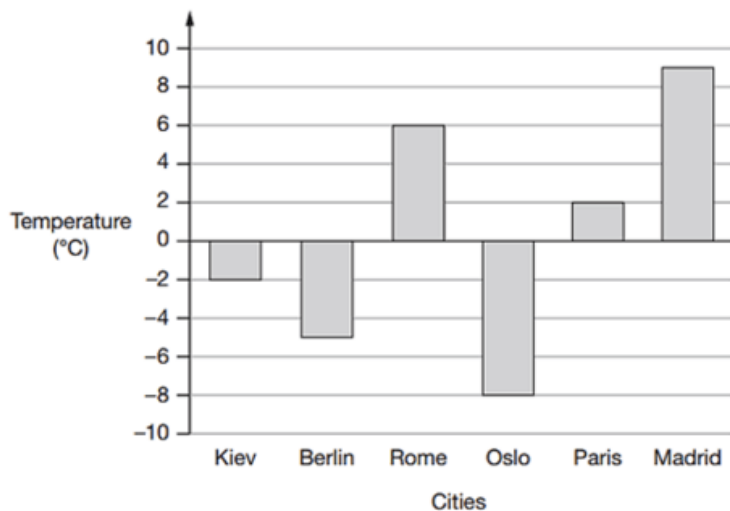
2. What is the difference between the number of shirts sold for Team A and the number shirts sold for Team C?

Question 1



Complete

This graph shows the temperature in six cities on one day in January.



1. Which city was 4 degrees **warmer** than Kiev?

2. What was the **difference** between the temperature in Oslo and the temperature in Berlin?

1. What do you **notice**?
2. What do you **know**?
3. Can you show your **working out**?
4. How could you **extend the question**?

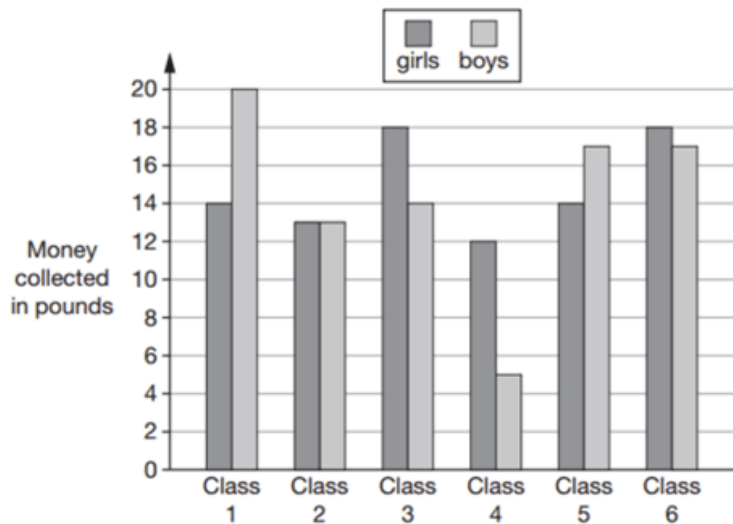


Complete

Question 2

Six classes at Winward Primary School collected some money.

The chart shows how much money the boys and girls collected.



- In Class 4, how much more money did the girls collect than the boys?
- How many classes collected more than £30?

- What do you notice?
- What do you know?
- Can you show your working out?
- How could you extend the question?

Revision: Interpreting pie charts

Jerry earned £300. The pie chart shows how Jerry spent his money. Find how much Jerry spent on clothing.

First, find 1%:

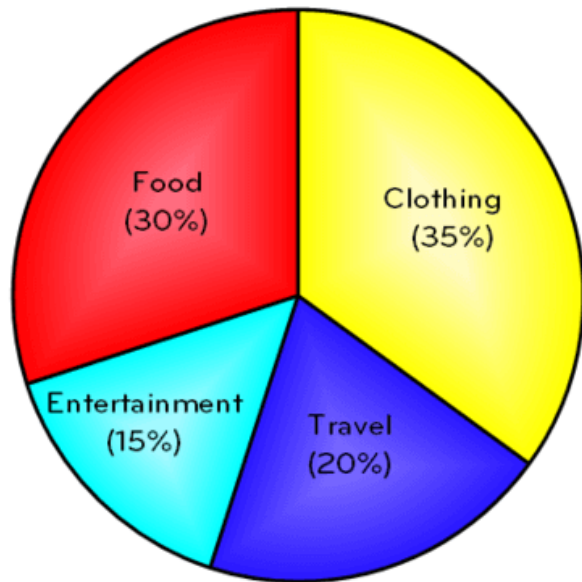
$$\begin{array}{c} \text{Total} \\ \text{money} \end{array} \nearrow \text{£}300 \div 100 = \text{£}3 \longleftarrow \begin{array}{c} \text{1\% of total} \\ \text{money} \end{array}$$

Then, find 35%:

$$\begin{array}{c} \boxed{} \\ \hline \end{array} \times \text{£}3 = \begin{array}{c} \boxed{} \\ \hline \end{array}$$

\nearrow
 \uparrow
 \longleftarrow

Per cent Jerry spent 1% of total money Amount Jerry spent



Question 3



Complete

The pie charts show the results of a school's netball and football matches.



Netball



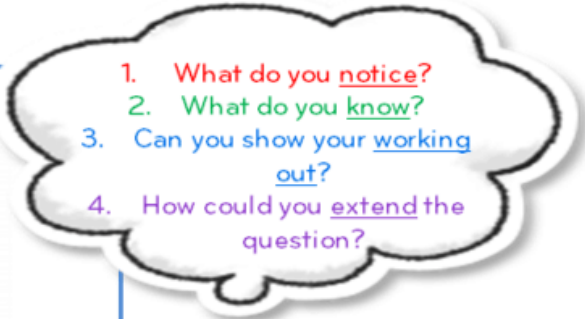
Football

The netball team played **30** games.

The football team played **24** games.

1. Estimate the percentage of games that the netball team lost.
2. David says, 'The two teams won the same number of games.'

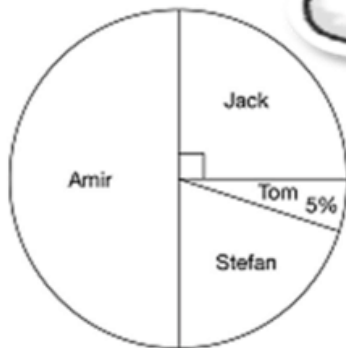
Is he correct?
Explain how you know.

- 
1. What do you notice?
 2. What do you know?
 3. Can you show your working out?
 4. How could you extend the question?



40 children predicted who would win the boys' race at sports day.

This pie chart shows their predictions.



1. What percentage of the children predicted that Stefan would win?

 %

2. 10 children predicted the winner of the race correctly.

Who won the race?
Explain how you know.

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Let's review:



Can interpret data in various forms: bar and pie charts

Draw a circle around the face which shows how you feel about what we've just been doing.



Challenge

100 girls and 50 boys were asked which kind of chocolate they like best.

These two pie charts show the results.



100 girls



50 boys

Dev says,

"The pie charts show that more girls than boys liked milk chocolate best."

Dev is correct.

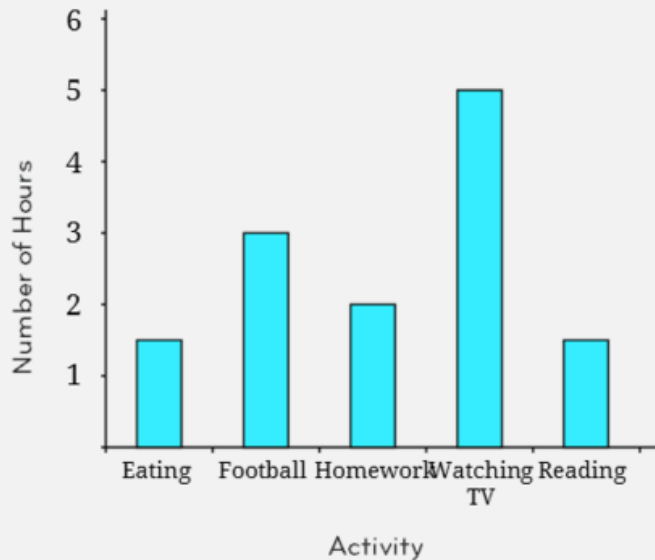
Explain how you know.

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

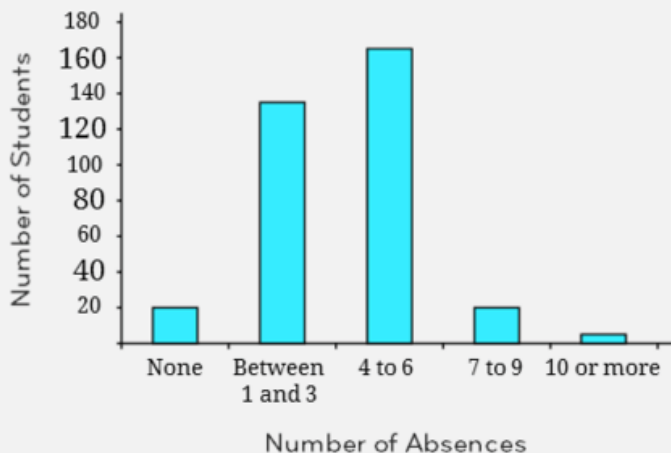
Bar charts with intervals

Bar charts can have different intervals depending on the numbers involved.

Bar chart to show amount of time spent doing certain activities over one weekend

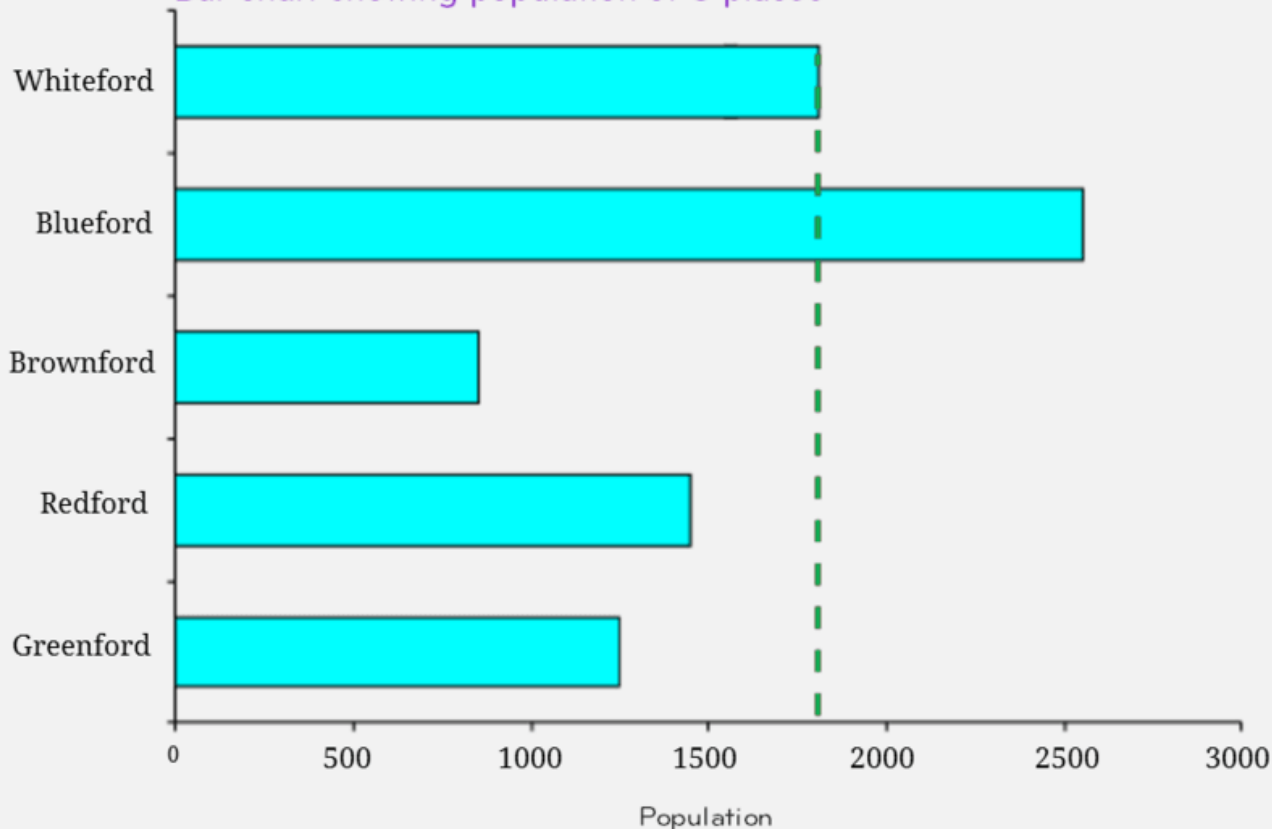


Bar chart to show the number of absences from school over a year



Bar charts with different intervals

Bar chart showing population of 5 places



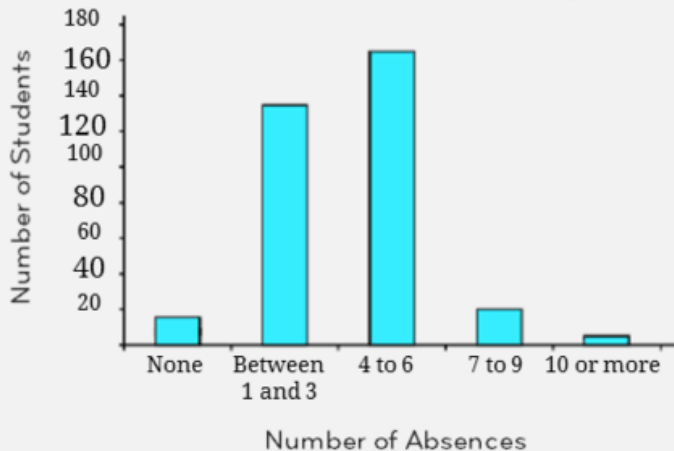
Frequency

The frequency tells us the number of times an event happens or a particular result comes up, usually within a period of time.

When we count the number of students who had between 1 and 3 absences over a year, we are finding the frequency of that event happening.

1. What range of absences has the highest frequency?
2. What range of absences has the lowest frequency?
3. How many students had no absences?

Bar chart to show the number of absences from school over a year

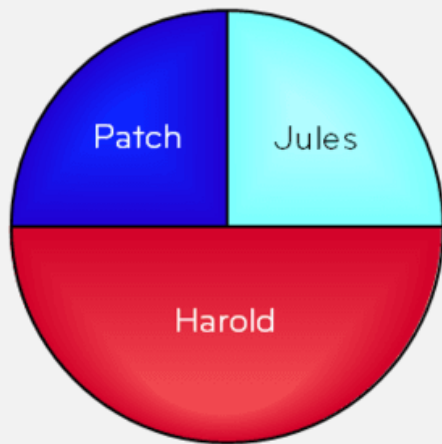


Interpreting pie charts

28 students were asked to vote for one of three choices for the name of their class pet.

The results are shown in this pie chart.

The category 'Patch' takes up $\frac{1}{4}$ of the whole.
So, you know $\frac{1}{4}$ of the class voted for Patch.



What fraction of the class chose Jules?

What fraction of the class chose Harold?

Which name got the most votes?

The pie chart shows the whole, divided into parts

Interpreting pie charts

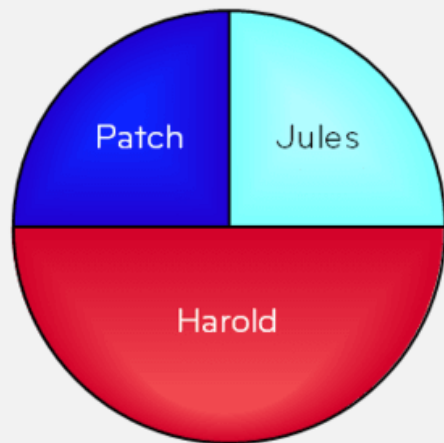
$\frac{1}{4}$ of the class voted for Patch. There were 28 students altogether.

To find the number of students who voted for Patch,
you can find $\frac{1}{4}$ of 28.

$$28 \div 4 = \square$$

Total number of students Number of quarters in 1 whole

Value of $\frac{1}{4}$ of 28



How can you use this to also find how many students voted for Jules?

Interpreting pie charts

$\frac{1}{2}$ of the class voted for Harold.
There were 28 students altogether.

Check your work by checking your three totals add to 28.

To find the number of students who voted for Harold, you can find $\frac{1}{2}$ of 28.

$$28 \div 2 = \boxed{} \quad \text{Value of } \frac{1}{2} \text{ of } 28$$

Total number of students Number of halves in 1 whole

