

## Tables

### Data Can be Organised in a Table

Tables are a handy way of organising and presenting data neatly.

#### EXAMPLE:

Pirates Max, Ibrahim and Sue are digging for treasure. They make a table showing how many gold and silver coins they each find.

Use the information below to complete the table.

Pirate	Gold coins	Silver coins
Max	?	11
Ibrahim	24	?
Sue	28	16

Sue found twenty eight gold and sixteen silver coins. Max found eleven silver coins and only half as many gold coins as Sue. Ibrahim found twenty four gold coins and as many silver coins as Max and Sue put together.

Max found half as many gold coins as Sue. Sue found 28, so Max found  $28 \div 2 = 14$ .

Ibrahim found as many silver coins as Max and Sue put together.

Max found 11 and Sue found 16, so Ibrahim found  $11 + 16 = 27$ .

Pirate	Gold coins	Silver coins
Max	14	11
Ibrahim	24	27
Sue	28	16

### Timetables Often Use the 24-Hour Clock

#### EXAMPLE:

Zwayne arrives at the Rovus Space Shuttle Port at 16:50. What is the earliest time he can get to Astro?

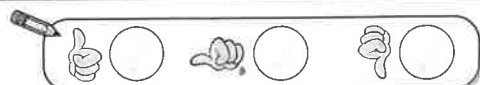
- Each column in the timetable gives you the times for one space shuttle.
- Find Rovus in the timetable and read along that row until you find the first time after 16:50. It's 16:56.
- Read down that column to the 'Astro' row. Hmm... that shuttle doesn't stop at Astro. Try the next column — the 17:11 shuttle does stop at Astro.

So Zwayne will get to Astro at 18:00. 18:00 is 6 pm.

	16:41	16:56	17:11
Rovus	16:41	16:56	17:11
Polon	16:55	17:10	17:25
Foxel	17:03	17:18	17:33
Wick	17:18	-	17:52
Astro	17:30	X	18:00
Barro	17:42	-	18:12



"I can complete, read and use information in tables and timetables."



## Worked Examples

- 1 The table below shows the lunch choices of each year group in a school. 50 Year 4 children had lunch. How many Year 4 children had pizza?

- 1) Find the Year 4 row.

Year	Pasta	Fish	Pizza
3	12	20	20
4	10	35	?
5	8	16	10
6	15	25	15

- 2) The numbers in this row must add up to 50, so subtract to find the missing number.

$$50 - 10 - 35 = 5$$

5 Year 4 children had pizza

- 2 The table shows the spelling test scores of three children. How many more marks did Bella get than Ken in week 2?

- 1) Find the week 2 row and read across until you get to Bella's and Ken's scores.

Week	Aidan	Bella	Ken
1	27	39	36
2	25	34	26

- 2) Subtract Ken's score from Bella's.

$$34 - 26 = 8$$

Bella got 8 more marks than Ken in week 2.

- 3 Barney needs to be in Edstown at 8.30 am. What is the latest time he can catch the bus from Morville?

- 1) Find the Edstown row.

- 2) Read across it until you get to the last time before 8.30 am.

- 3) Read up that column until you get to the Morville row.

Alton	05:59	07:10	07:35
Morville	06:12	07:25	07:50
Carlton	06:32	07:45	08:10
Edstown	07:00	08:13	08:40
Tenton	07:18	08:35	09:00

Last time before 8.30 am Too late

So the latest he can catch a bus from Morville is 7.25 am

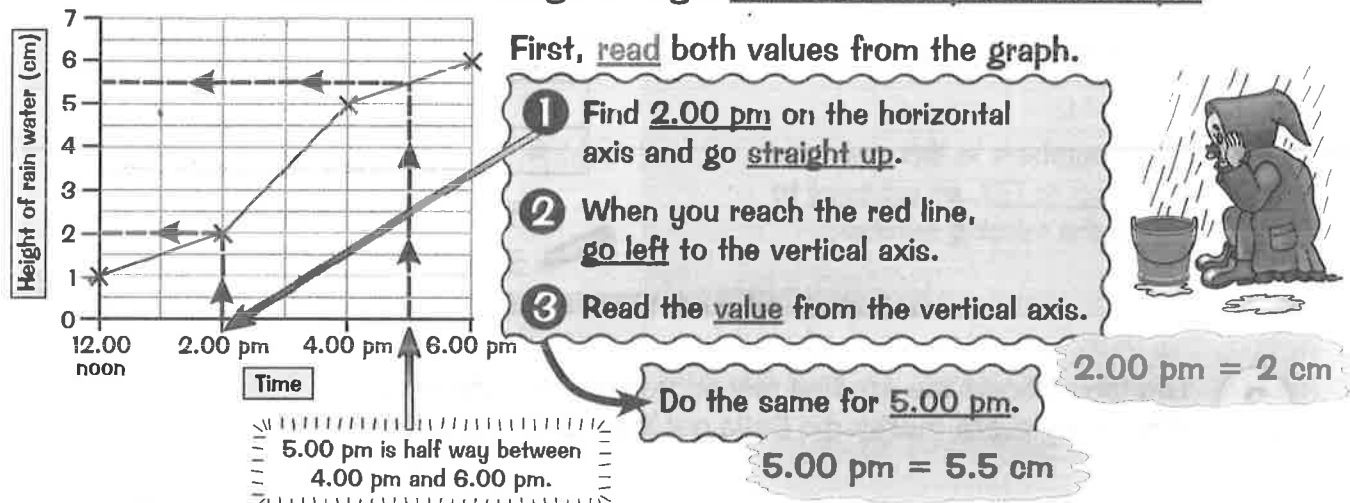
### Tables — good for organising data, and dinner...

With timetables, read the questions carefully. It's easy to mix up the time the person is setting off with the time they are getting to wherever they are going.

# Bar Charts, Pictograms and Line Graphs

## Line Graphs Show How Something Changes

**EXAMPLE:** Diana measured the height of rain water in a bucket every two hours one afternoon. She made a line graph of her results. Estimate the change in height between 2.00 pm and 5.00 pm.



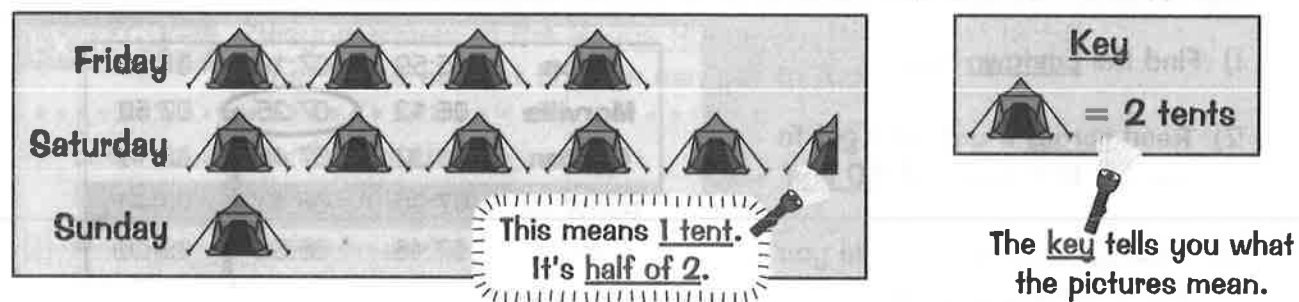
Subtract to find out the change in height between 2.00 pm and 5.00 pm.

$$5.5 \text{ cm} - 2 \text{ cm} = 3.5 \text{ cm}$$

So the change in height between 2.00 pm and 5.00 pm was 3.5 cm.

## Pictograms use Pictures to show Data

**EXAMPLE:** This pictogram shows how many tents there were at Bear Woods Campsite each night one weekend. How many more tents were there on Saturday than on Sunday?



1) Find out how many more pictures there are next to Saturday than Sunday.

There are 4½ more pictures.

2) Each picture means 2 tents, and each ½ picture means 1 tent. So there were:

$$(4 \times 2) + 1 = 9 \text{ more tents on Saturday than Sunday.}$$

Bar charts work like pictograms but they have bars instead of pictures. You'll see one on the next page.

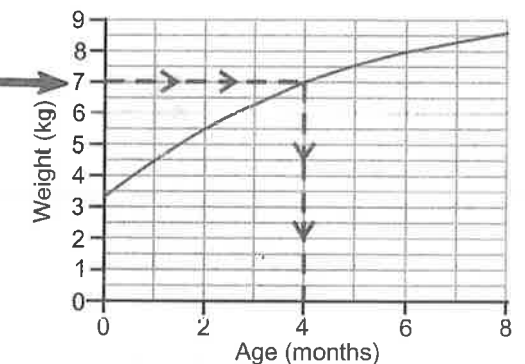
"I can solve problems using data from line graphs, pictograms and bar charts."



## Worked Examples

1 The graph below shows the weight of a baby over 8 months. How old was the baby when he reached 7 kg?

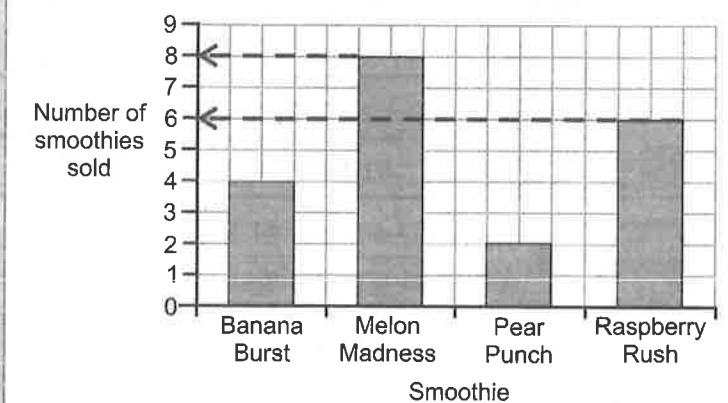
- Find 7 kg on the weight axis.
- Draw a line across until you meet the red line.
- Then go down to the 'Age' axis. This gives you the age when the baby reached 7 kg.



The baby reached 7 kg when he was 4 months old.

2 The bar chart shows the number of each type of smoothie sold in a cafe one day. How many of the two most popular smoothies were sold in total?

- The height of each bar tells you how many of that smoothie were sold.
- Find the two most popular smoothies. These are the two with the tallest bars — Melon Madness and Raspberry Rush.
- Read across from the top of these bars to find out how many of each were sold.
- Add the numbers up to find the total number of these two smoothies sold.



$$\text{Melon Madness} = 8, \text{ Raspberry Rush} = 6$$

$$8 + 6 = 14$$

14 of the two most popular smoothies were sold.

## Baa, baa, bar chart...

Now and then you get a sideways bar chart, with bars that go across instead of up. Don't be put off. They work the same way — just read down to get the numbers.

## Tables

3

Use this train timetable to answer the questions below.

<b>Louville</b>	08:47	09:17	09:47	10:17
<b>Redpool</b>	10:05	10:35	11:05	11:35
<b>The Green</b>	10:17	10:47	11:17	11:47
<b>Tillom</b>	10:32	11:02	11:32	12:02
<b>The Zoo</b>	10:45	11:15	11:45	12:15
<b>Wedton</b>	11:02	11:32	12:02	12:32

Billy lives in Redpool. He wants to get the train to The Zoo in time for the lion feeding at 11:30 am. What is the latest time he can get the train?



☐ 1 mark

Melissa lives in Louville. She catches the 09:47 train. How long will it take her to get to Wedton? Give your answer in minutes.


 minutes

☐ 1 mark

4

Olivia is going from Swan Bridge to her friend's house on Misty Island. Her friend's house is a 35-minute walk from the Misty Island ferry stop.

<b>Swan Bridge</b>	10:13	10:52	11:13	11:52	12:13
<b>The Pier</b>	10:45	11:24	11:45	12:24	12:45
<b>Misty Island</b>	11:10	11:59	-	12:59	13:10

She needs to be at her friend's house at 1.15 pm. What is the latest time she can get a ferry from Swan Bridge?



☐ 1 mark

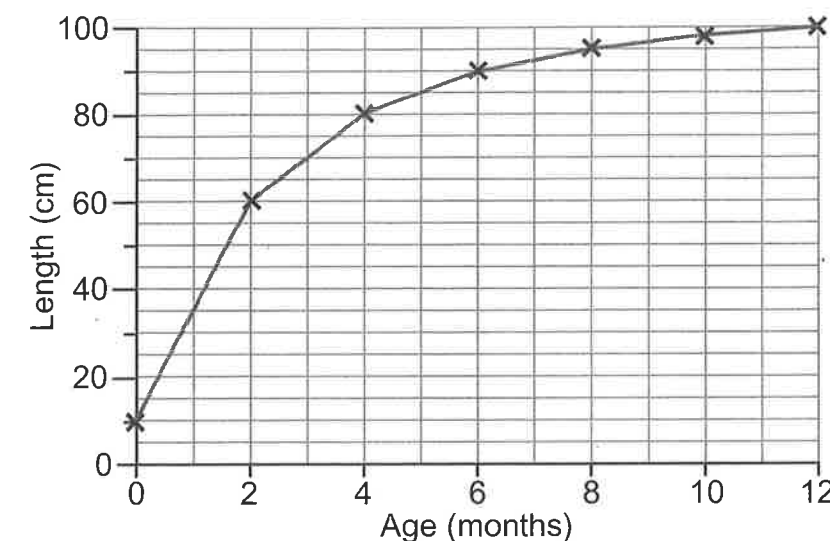
"I can complete, read and use information in tables and timetables."



## Bar Charts, Pictograms and Line Graphs

1

Sophie has a pet snake. She measures its length every 2 months and makes a line graph of the snake's growth.



How long was Sophie's snake when she first measured it?


 cm

☐ 1 mark

Estimate the length of Sophie's snake when it was 5 months old.


 cm

☐ 1 mark

Estimate how old Sophie's snake was when it was 70 cm long.


 months

☐ 1 mark

How much did Sophie's snake grow between 4 and 12 months old?


 cm

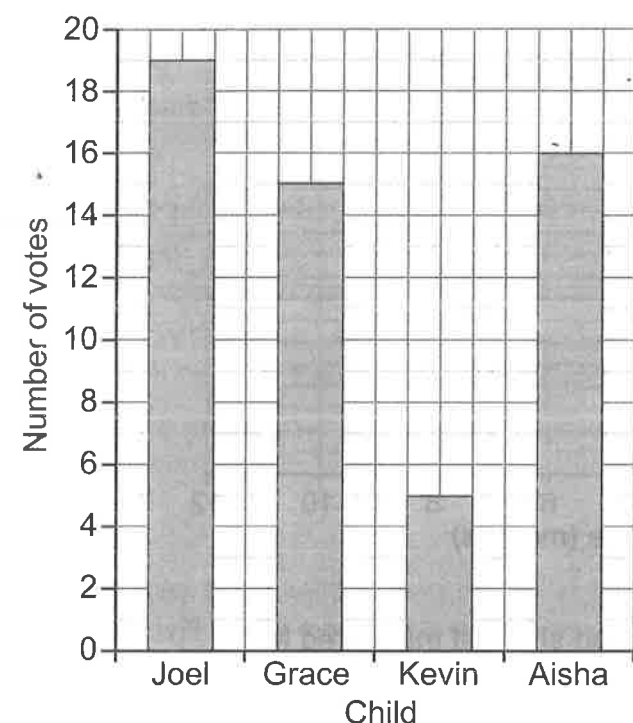
☐ 1 mark



## Bar Charts, Pictograms and Line Graphs

2

Year 6 are voting for a new school council member. A table and a bar chart are used to show the results.



Child	Votes
Joel	19
Grace	
Kevin	
Aisha	16

Use the bar chart to complete the table.

1 mark

Who got the second highest number of votes?





1 mark

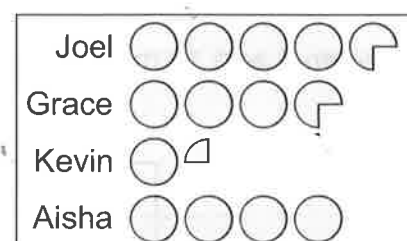
How many Year 6 children voted in total?





1 mark

This pictogram shows the results of the vote. Complete the key.



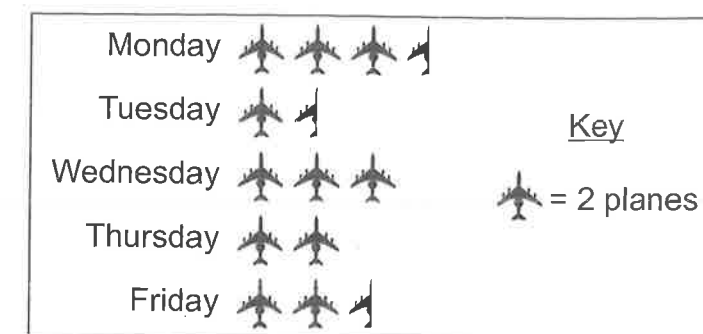
Key: =  votes

1 mark

## Bar Charts, Pictograms and Line Graphs

3

Anna makes a pictogram of the number of planes that flew over her school each day one week.



How many planes flew over her school on Friday?





1 mark

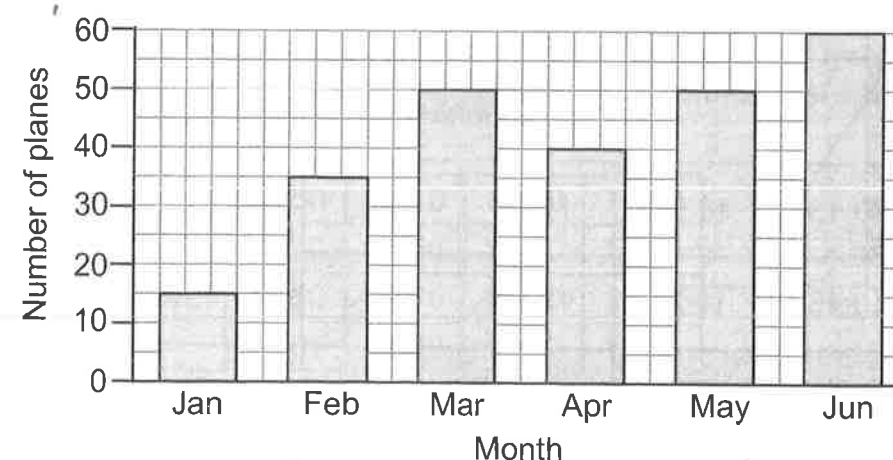
How many more planes flew over her school on Monday than on Tuesday?





1 mark

Anna also makes a bar chart of the number of planes which flew over her school each month from January until June.



How many planes flew over in total during January and February?





1 mark

"I can solve problems using data from line graphs, pictograms and bar charts."

