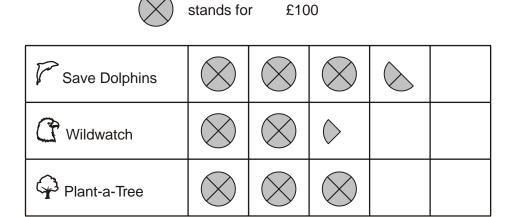
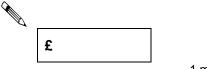
1. Park School collects money for three charities.

This pictogram shows how much they have collected.



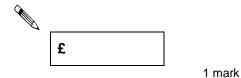
How much more have they collected for Save Dolphins than Plant-a-Tree?



1 mark

The target for Wildwatch is £500

How much **more** money do they need to collect for Wildwatch?

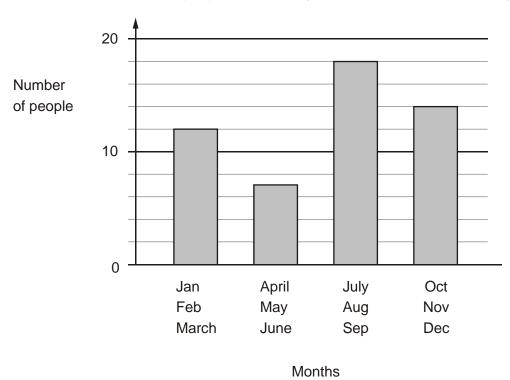


How much money have they collected altogether, rounded **to the nearest hundred pounds**?

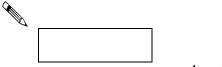


#### 2. Class 6 did a survey of birthday dates.

This chart shows the number of people with birthdays in each three months of the year.



From the chart, how many people have a birthday before July?

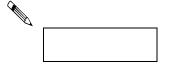


1 mark

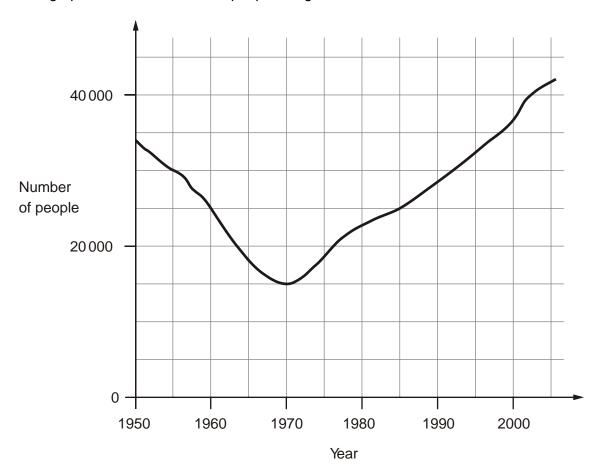
Nobody has a birthday in October.

Six people have a birthday in November.

How many people have a birthday in December?



3. This graph shows the number of people living in a town.

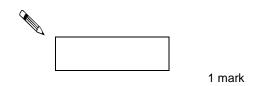


Look at the graph.

How many people lived in the town in 1985?



In which year was the number of people the same as in 1950?



Find the year when the number of people first went below 20 000

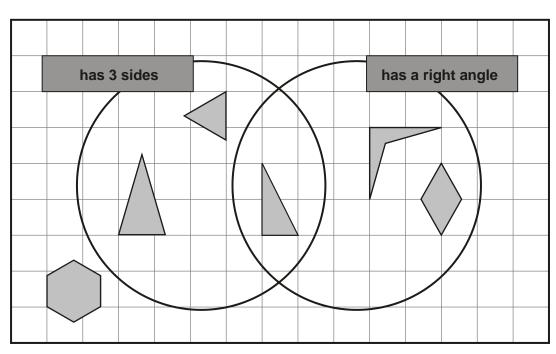


1 mark

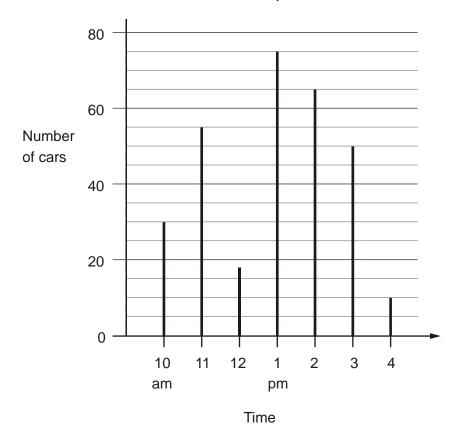
**4.** Here is a diagram for sorting shapes.

One of the shapes is in the wrong place. Put a cross  $(\mathbf{x})$  on it.





5. This chart shows the number of cars in a car park at different times on one day.



There are 80 cars in the car park when it is full.

How many **empty spaces** were there in the car park at 3pm?



1 mark

Circle all the times when the car park was less than half full.



10 am 11 am

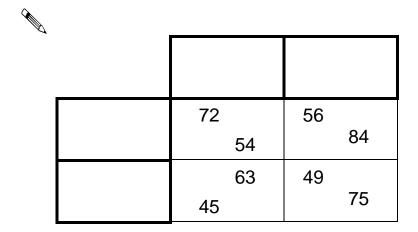
12 noon 1 pm 2 pm 3 pm

4 pm

**6.** Here are four labels.

even	multiples of 9	not even	not multiples of 9
------	----------------	----------	-----------------------

Write each label in the correct position on the sorting diagram below.

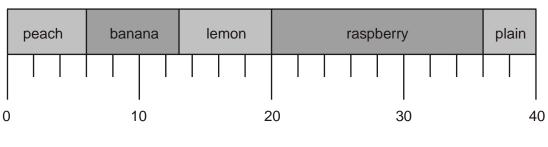


1 mark

7. 40 children each chose their favourite flavour of yogurt.

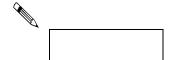
This chart shows the results.

yogurt flavour



number of children

How many children chose lemon yogurt?



How many more children chose raspberry than plain yogurt?

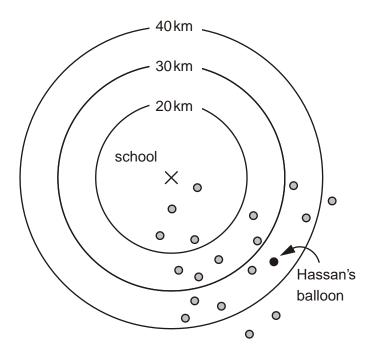


1 mark

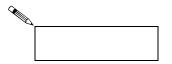
8. Class 6 launched some balloons at a school fete.



This diagram shows how far some of the balloons travelled.

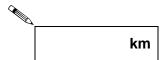


How many balloons on the diagram travelled between 20km and 30km?



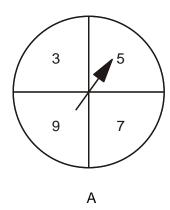
1 mark

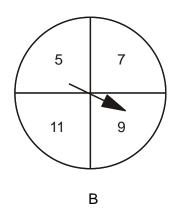
Estimate how far Hassan's balloon travelled.



1 mark

**9.** Here are two spinners, A and B.





Hassan spins the pointer on each spinner.

He adds his two scores together.

For each statement put a tick  $(\checkmark)$  to show if it is **certain**, **possible** or **impossible**.

One has been done for you.



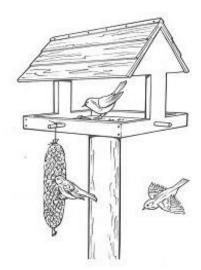
	certain	possible	impossible
The total will be more than 15		$\checkmark$	
The total will be an even number			
The total will be less than 6			
The score on A will be less than the score on B.			

2 marks

**10.** Rosie collects data about birds visiting a bird table.

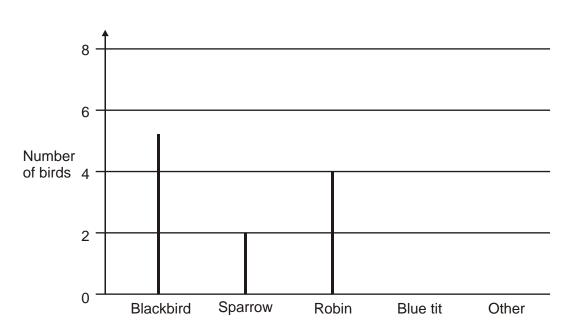
Here are her results.

Blackbird	##
Sparrow	
Robin	
Blue tit	
Other	JHT1



Draw **two** more lines to complete the graph.





1 mark

Rosie saw 20 birds altogether.

What fraction of the birds were blackbirds?

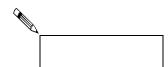




11. Five children have ticked this table to show on which days they are free to go out.

	Emma	David	Lin	Jack	Rosie
Mon		✓	✓		<b>✓</b>
Tue	✓		✓	✓	
Wed		✓			✓
Thu			✓	✓	✓
Fri	✓	✓			✓

On how many days are more than two children free to go out?

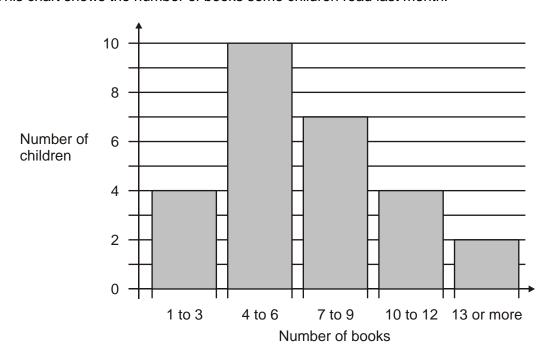


1 mark

On which days are Lin and Rosie both free to go out together?



**12.** This chart shows the number of books some children read last month.



How many children altogether read more than 9 books?



7 children read 4 books.

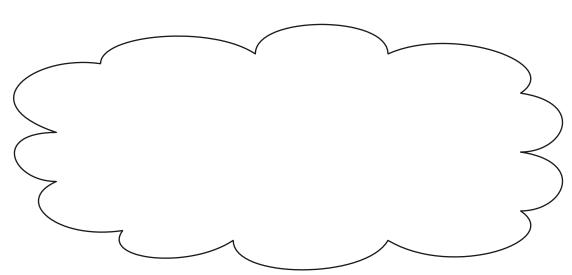
1 child read 5 books.

Lin says,

#### 'That means 2 children read 6 books'.

Explain how she can work this out from the chart.

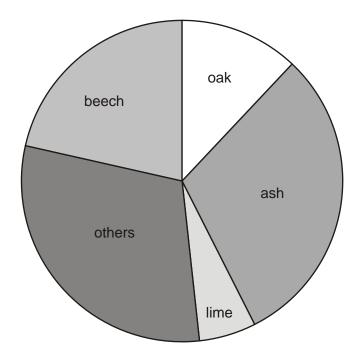




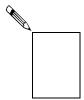
# **13.** Class 6 did a survey of the number of trees in a country park.



This pie chart shows their results.



Estimate the **fraction** of trees in the survey that are **oak** trees.



The children counted 60 ash trees.

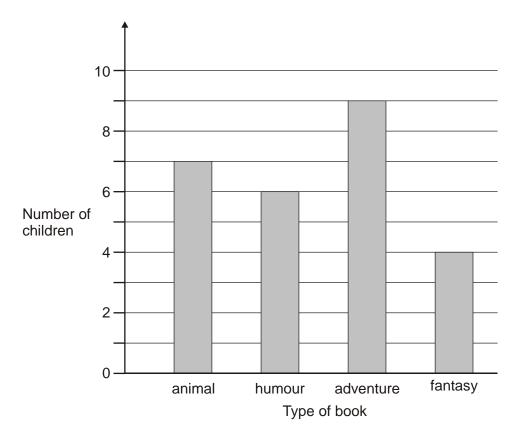
Use the pie chart to estimate the **number** of **beech** trees they counted.



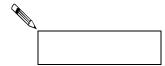
1 mark

**14.** Class 6 did a survey of their favourite types of story book.

Here are their results.



How many more children chose adventure books than fantasy books?



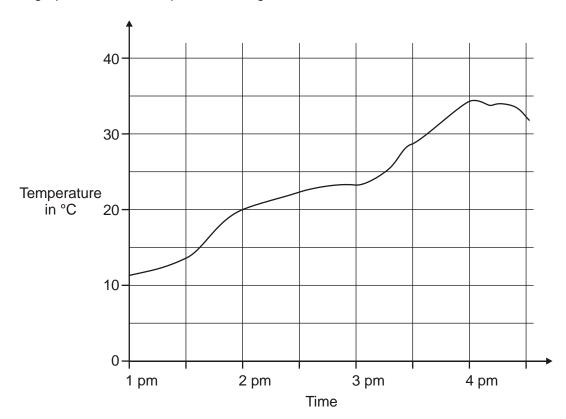
Five girls chose animal books.

How many boys chose animal books?



1 mark

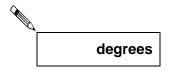
**15.** This graph shows the temperature in a greenhouse.



Use the graph to find the time when the temperature was 25°C.



Use the graph to find the difference between the temperature at 2 pm and the temperature at 4 pm.



1 mark

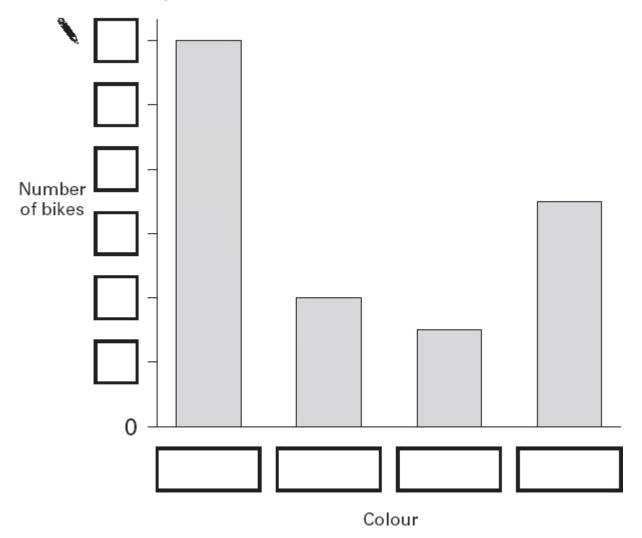
**16.** Robbie collected information about the colours of some bikes.

Here are his results.

Colour	Number of bikes	
green	4	
red	7	
blue	12	
pink	3	

This bar graph shows the information from the table.

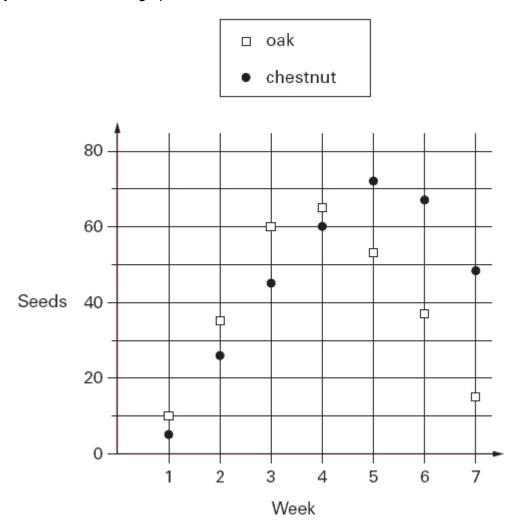
Fill in **all** the missing labels.



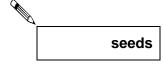
2 marks

17. Class 6 count how many seeds they find under two trees.

They show the data in a graph.

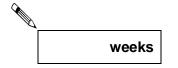


How many seeds did they find in week 3 altogether?

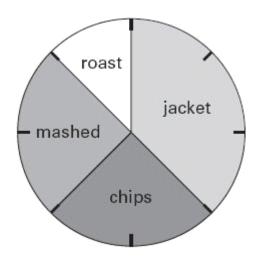


1 mark

In how many weeks did they find more than 40 chestnut seeds?



**18.** This pie chart shows how the children in Class 6 best like their potatoes cooked.



32 children took part in the survey.

Look at the four statements below.

For each statement put a tick ( ) if it is **correct**.

Put a cross ( ) if it is **not correct**.



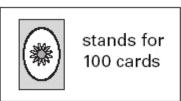
10 children like chips best.	
250/ of the children like mechad notates a heat	
25% of the children like mashed potatoes best.	
$\frac{1}{5}$ of the children like roast potatoes best.	
Ŭ	
12 children like jacket potatoes best.	

2 marks

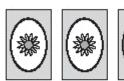
#### A shop sells different kinds of greeting cards. 19.



This pictogram shows how many they sold in a week.



Birthday cards







Thank You cards







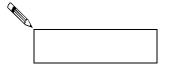


Get Well cards





Estimate how many Birthday cards were sold.



1 mark

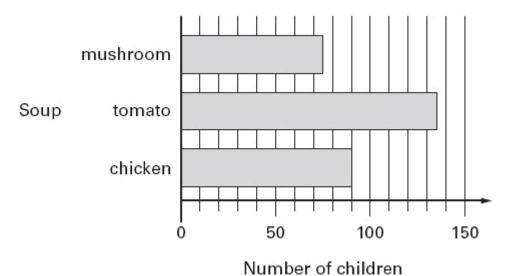
Estimate how many more Thank You cards than Get Well cards were sold.



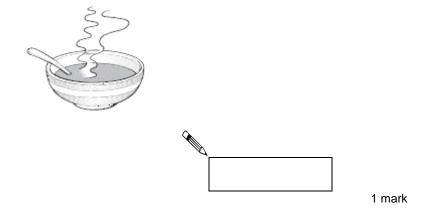
1 mark

20. All the children at Park School chose their favourite soup.

The graph shows the results.



How many more children chose chicken soup than mushroom soup?



Robbie says,

# 'More than half of the children chose tomato soup'.

Is he correct? Circle Yes or No.



Explain how you can tell from the graph.

#### **21.** On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.





There are **103** children altogether in the school.

## 27 girls choose hockey.

Write all this information in the table.

Then complete the table.



	hockey	rounders	Total
boys	22		
girls			53
Total			

2 marks





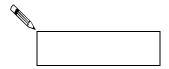


These are the prices of sandwiches, drinks and fruit.

Sand	wiches	Di	rinks	F	ruit
cheese	£1.45	milk	55p	apple	15p
tuna	£1.70	cola	45p	pear	20p
salad	£1.20	juice	65p	melon	25p

Shereen buys a **tuna** sandwich, **milk** and a **pear**.

How much does she pay?



1 mark

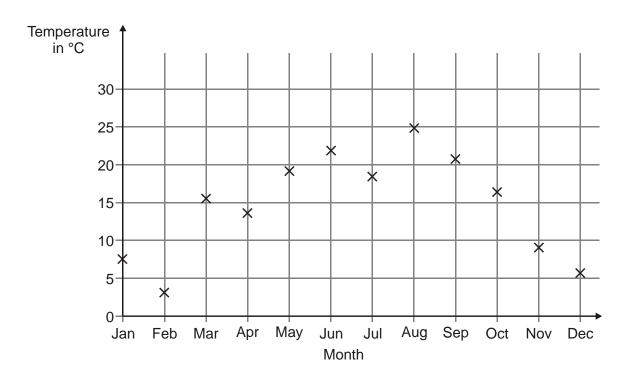
Mike has 80p to spend on a fruit and a drink.

What **two** things can he buy for exactly **80p**?

		and
4	•••••	and

**23.** Abbie takes the temperature outside at midday on the first day of each month.

The graph shows her results from January to December.



How many months on the graph show a temperature between 10°C and 20°C?



1 mark

Find the difference in temperature shown on the graph between July and August.



# **24.** Here is a sorting diagram for numbers.

Write a number less than 100 in each space.



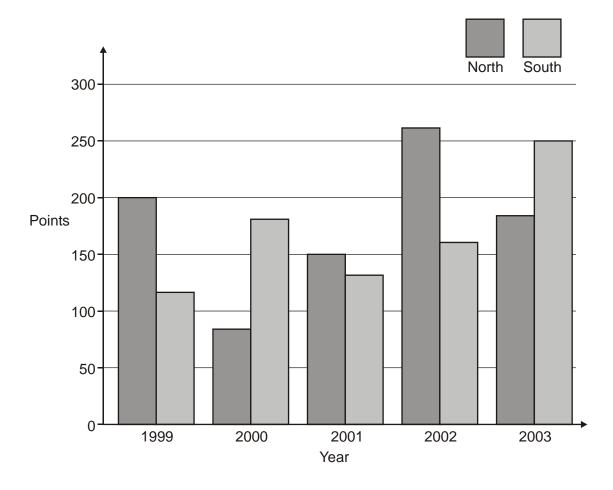
	even	not even
a square number		
not a square number		

2 marks

#### **25.** A school has a quiz each year.

There are two teams.

Here are their results.

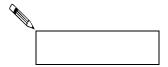


In which year did North beat South by 100 points?



1 mark

In which year did South beat North by the greatest amount?



**26.** This table shows how many journeys a taxi driver made on five days and how much money he collected.

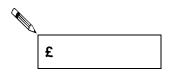
	number of journeys	money collected
Monday	23	£85
Tuesday	36	£112
Wednesday	18	£69
Thursday	31	£124
Friday	35	£109

How much money did he collect on the day that he made the most journeys?



1 mark

How much more money did he collect on Monday than on Wednesday?



1 mark

**27.** Some children ran in two races on sports day.

Here are their times.

	100m race	800m race
Elise	15.9 seconds	3 minutes 02 seconds
Jake	19.7 seconds	2 minutes 58 seconds
Teri	16.8 seconds	3 minutes 01 seconds
Neil	17.1 seconds	2 minutes 59 seconds
Barry	18.4 seconds	2 minutes 57 seconds

Who finished the 100m race in second place?



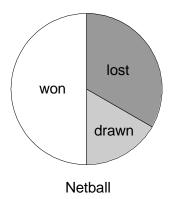
1 mark

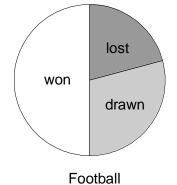
In the 800m race, how many seconds did Barry finish ahead of Elise?



1 mark

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

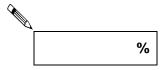




The netball team played **30** games.

The football team played 24 games.

Estimate the percentage of games that the **netball team lost**.



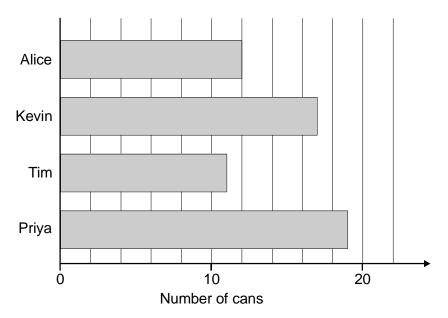
David says,

#### 'The two teams won the same number of games'.

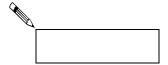
Is he correct?	^		
Circle Yes or No.		Yes / No	
Explain how you know.			

29. Some children collect cans for recycling.

Here is a chart of how many cans they collect in the first week.



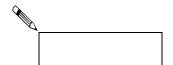
How many cans has Kevin collected?



1 mark

Alice's target is to collect 30 cans.

How many **more** cans does Alice need to reach her target?



1 mark

**30.** Here is a diagram for sorting numbers.

Write **one number** in each white section of the diagram.



	less than 1000	1000 or more
multiples of 20		
not multiples of 20		

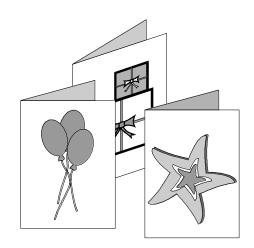
2 marks

## **31.** A shop sells greetings cards.

Each card has a price code on it.

These are the codes.

code	price
AA	75p
BB	£1.15
CC	£1.55
DD	£1.70
EE	£1.99



Tina buys two cards.

One card has code **AA** on it. The other card has code **DD** on it.

How much does Tina pay?



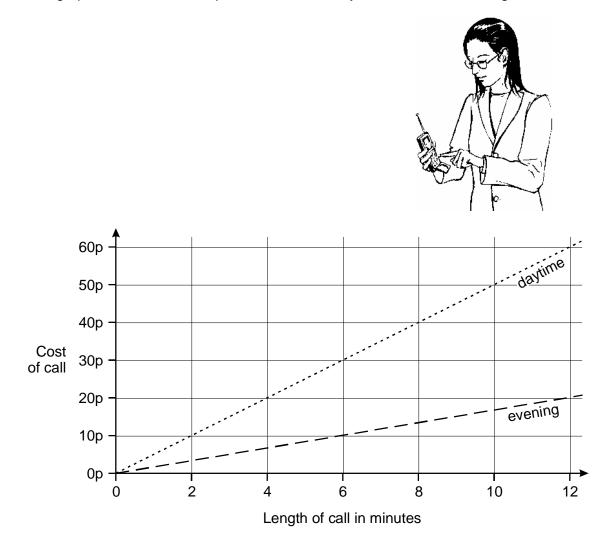
Omar buys a card. He pays with a £2 coin.

He gets 45p change.

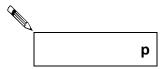
What is the code on his card?



#### **32.** This graph shows the cost of phone calls in the daytime and in the evening.



How much does it cost to make a 9 minute call in the daytime?



1 mark

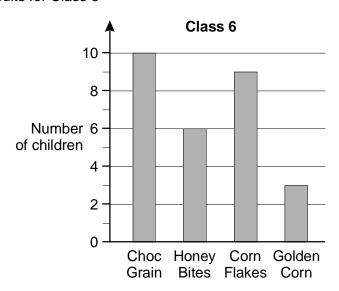
How much **more** does it cost to make a **6 minute** call in the **daytime** than in the **evening?** 



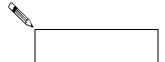
1 mark

**33.** Tom does a survey of children's favourite breakfast cereals.

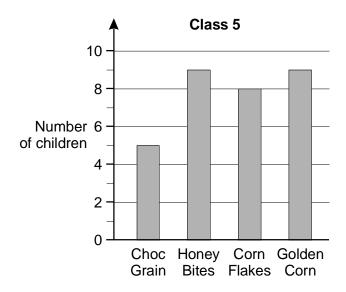
These are the results for Class 6



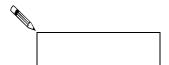
How many more children in Class 6 prefer Choc Grain than Golden Corn?



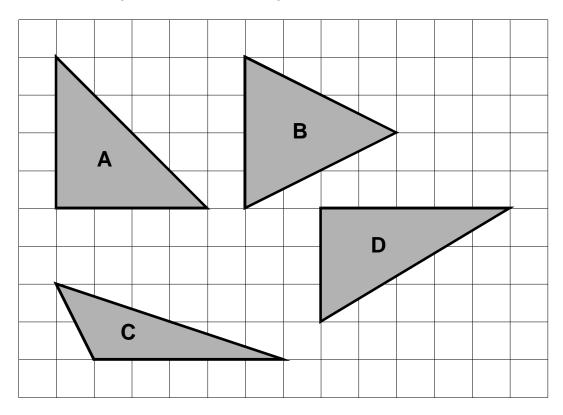
These are the results for Class 5



How many children in both classes like Honey Bites best?



**34.** Here are four triangles drawn on a square grid.



Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.



7	has a <b>right</b> angle	has an <b>obtuse</b> angle	has 3 <b>acute</b> angles
is isosceles	A		
is <b>not</b> isosceles			

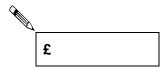
2 marks



The table shows the cost of coach tickets to different cities.

		Hull	York	Leeds
Adult	single	£12.50	£15.60	£10.25
	return	£23.75	£28.50	£19.30
Child	single	£8.50	£10.80	£8.25
Crilla	return	£14.90	£17.90	£14.75

What is the total cost for a **return** journey to York for one adult and two children?

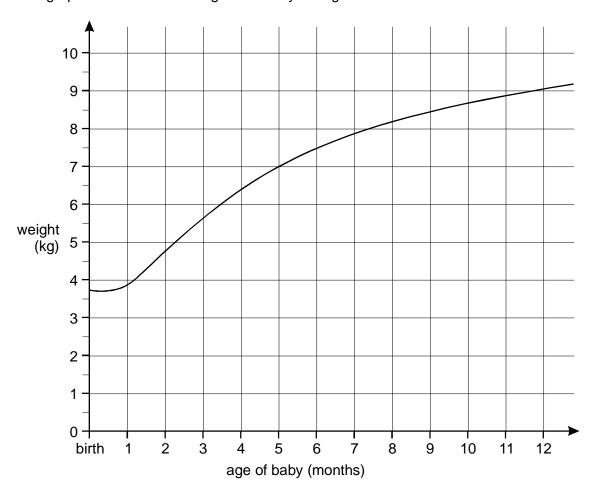


1 mark

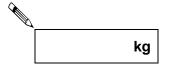
How much **more** does it cost for two adults to make a **single** journey to Hull than to Leeds?



**36.** This graph shows how the weight of a baby changed over twelve months.

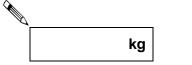


From the graph, what was the weight of the baby at 10 months?



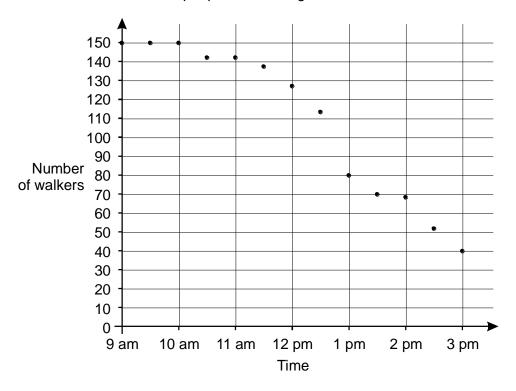
1 mark

How much **more** did the baby weigh at 5 months than at birth?



### **37. 150 people** take part in a walk.

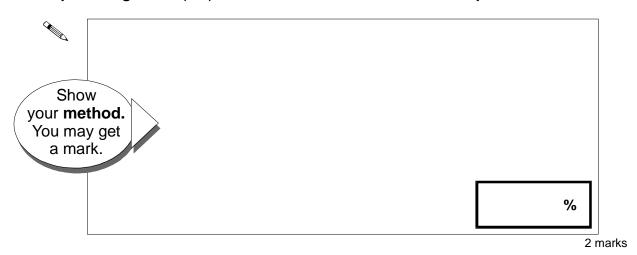
This chart shows the number of people still walking at different times.



Use the chart to estimate the **time** when **two-thirds of the people** are still on the walk.

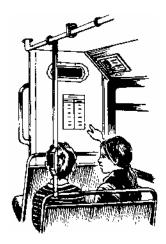


What percentage of the people who started are still on the walk at 3pm?



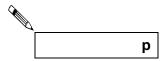
**38.** This table shows the increase in bus fares.

Bus Fares			
old fare	new fare		
42p	48p		
52p	57p		
60p	72p		
75p	85p		
90p	£1.05		
£1.20	£1.28		



Sohan's **new** bus fare is **72p**.

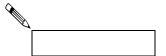
How much has his bus fare gone up?



Millie says,

### 'My bus fare has gone up by 10p'.

How much is Millie's new bus fare?

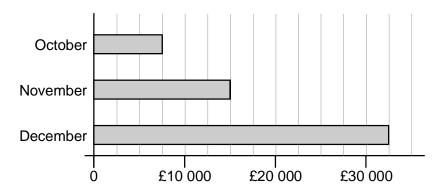


1 mark

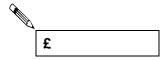
39.



This chart shows the amount of money spent in a toy shop in three months.



How much more money was spent in the shop in December than in November?

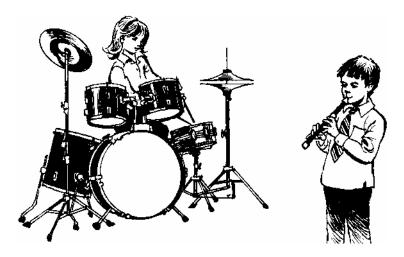


Stepan says,

# 'In November there was a 100% increase on the money spent in October'.

	Is he correct?		
	Circle Yes or No.	Yes / No	
	Explain how you can tell from the chart.		
•			
		1	mark

40.



This chart shows the musical instruments some children play.

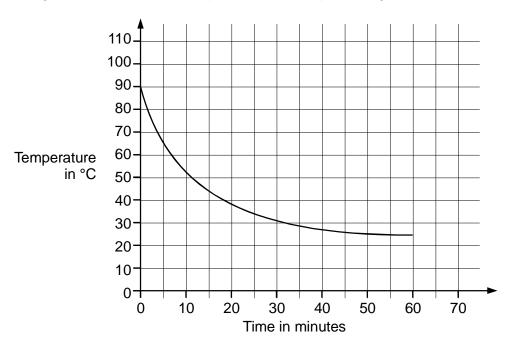
	Lena	John	Rashid	Nicola	Yin
drums	<b>✓</b>	<b>\</b>		<b>\</b>	
keyboard			<b>✓</b>		
trumpet	<b>✓</b>				<b>√</b>
recorder			<b>✓</b>	<b>√</b>	<b>√</b>
piano	<b>✓</b>	<b>√</b>	<b>✓</b>		

Who plays both recorder and drums?

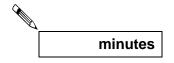
	1 mark
How many children play more than two musical instruments?	
	4
	1 mark

**41.** A hot liquid is left to cool in a science experiment.

This graph shows how the temperature of the liquid changes as it cools.



Read from the graph how many minutes it takes for the temperature to reach 40°C



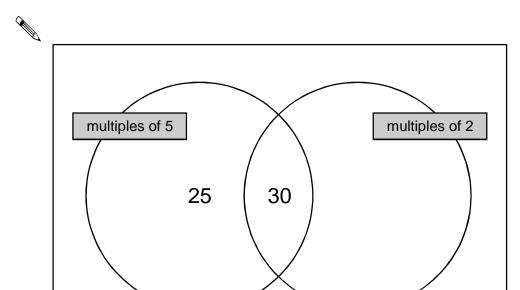
1 mark

Read from the graph how many minutes the temperature is above 60°C



**42.** Write **each of** these numbers in its correct place on the sorting diagram.

40 8 15



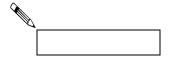
2 marks



This table shows the numbers of children who went walking, sailing or climbing at an outdoor centre.

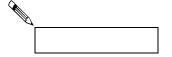
	May	June	July
walking	25	80	75
sailing	15	42	50
climbing	18	27	23

How many children went **sailing** in **May**, **June and July** altogether?



1 mark

How many more children went walking in June than climbing in June?



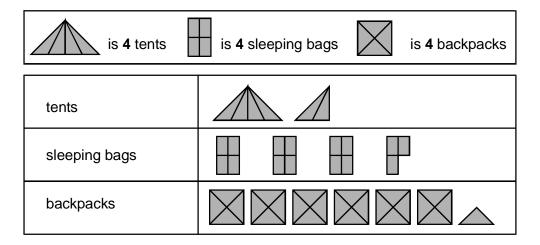
### 44.



A camping shop sells tents, sleeping bags and backpacks.

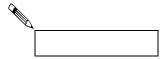
This chart shows how many of each they sold in June.

### Items sold in June



The shop had 20 sleeping bags at the beginning of June.

How many of these sleeping bags did the shop have left at the **end of June**?



1 mark

In July, the shop sold three times as many tents as in June.

How many tents did the shop sell in July?

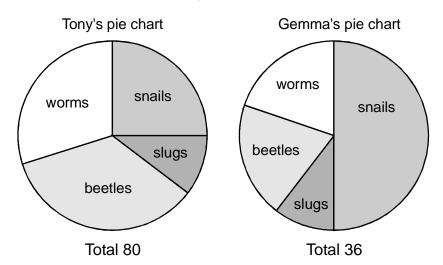


1 mark

**45.** Tony and Gemma looked for snails, worms, slugs and beetles in their gardens.

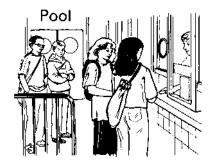


They each made a pie chart of what they found.



## $\label{eq:continuity} \textbf{Estimate} \text{ the number of } \textbf{worms} \text{ that } \textbf{Tony} \text{ found}.$

	1 mark
Who found more snails?  Circle Tony or Gemma.  Tony / Gemma	
Explain how you know.	
	 1 mark



These are the opening times at a swimming pool.

	opening times		
	am		pm
Monday	5		4
Tuesday	Pool closed		
Wednesday	10:30	to	5:30
Thursday	10:30	to	8:30
Friday	10:30	to	9:00
Saturday	8:00	to	6:00
Sunday	7:00	to	4:00

How many hours is the pool open on a Sunday?

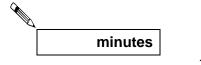


Which day has the latest closing time?

	1 mark

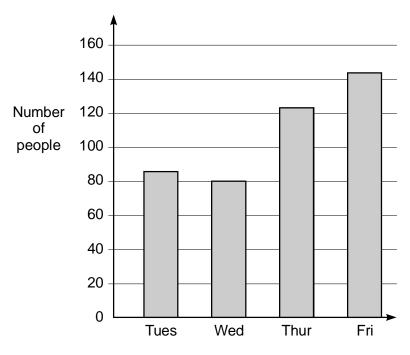
Habib arrives at the pool at 5:20pm on Saturday.

How many **minutes** is it before the pool closes?



1 mark

**47.** This bar chart shows how many people went to a school play.



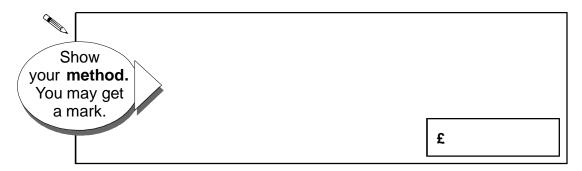
Estimate the number of people who went there on **Thursday** and **Friday** altogether.





Each person paid £2.25 for a ticket to get in.

How much ticket money was collected on Wednesday?



2 marks

**48.** *n* stands for a number.

Complete this table of values.



n	5 n – 2
20	
	38

2 marks

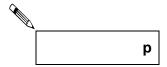
**49.** This table shows the cost of sending a letter.

	Cost in pence	
Mass	first class	second class
up to 60g	26	20
61g to 100g	39	31
101g to 150g	49	38
151g to 200g	60	45
201g to 250g	70	55

Paul is sending a letter.

It costs 38p second class.

How much would it cost him to send it first class?



Jenny has a letter with a mass of 170g.



What does it cost to send if first class?



1 mark

**50.** These are the times letters are collected from a post box.

Monday to Friday	Saturday	Sunday
8am 2pm 6:30pm	11:30am	no collection



What is the latest time letters are collected on Wednesday?



Carla posts a letter at 9 am on Monday.

How **long** will it be before it is collected?



Gareth posts a letter on Saturday at 3pm.

When is it collected from the post box?

day	time	1 mark
		i illaik

**51.** Tom, Amy and Helen want to go on a boat trip.



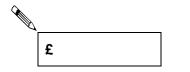
There are three boats.

# Lark 50 minute trip 70 minute trip Tickets £2.75 each Example 10 to 10 to

90 minute trip

Tickets
£4.20
each

How much does it cost altogether for **three** people to go on the **Lark**?

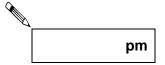


1 mark

Tom and Amy go on the **Heron**.

They leave at 2:15pm.

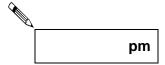
At what **time** do they return?



1 mark

Helen goes on the **Kestrel** and **gets back at 4:15pm**.

At what **time** did the boat leave?



1 mark

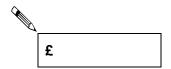
**52.** Three children do a sponsored silence.



This is a chart of the money they collected.

$\begin{array}{ccc} & & & \\ &$			
Sheena	£10 £10 £10 £7		
Gary	£10 £10 £1		
Pip	£10 £10 £1		

Estimate how much **Sheena** collected.

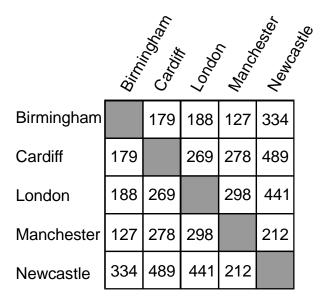


1 mark

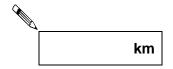
Together Gary and Pip collected more than £60.

Explain how the **chart** shows this.


**53.** This table shows the distances in **kilometres** between five towns.



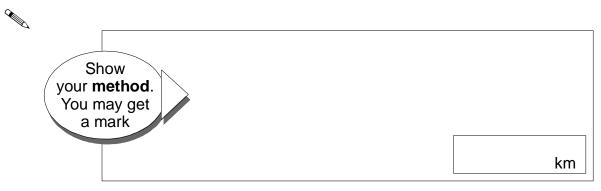
Use the table to find the distance from London to Manchester.



1 mark

James goes from Newcastle to Birmingham, and then on to Cardiff.

How many kilometres does he travel?

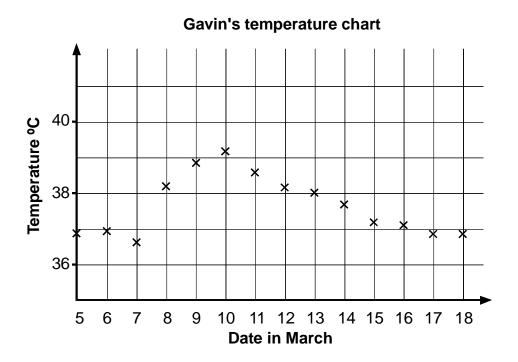


2 marks

### **54.** Gavin was ill in March.



This is his temperature chart.



For how many days was his temperature marked as **more than 37°C**?



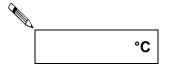
Which date showed the largest change in temperature from the day before?



1 mark

Estimate Gavin's **highest** temperature shown on the graph.

Give your answer to 1 decimal place.

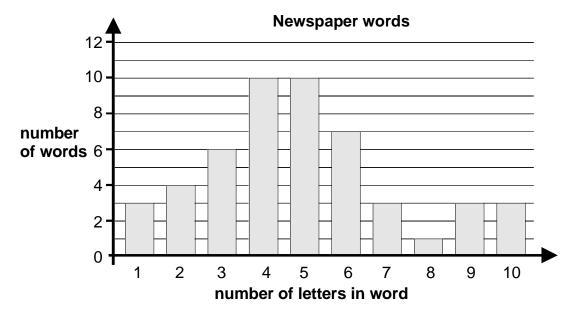


1 mark

### **55.** Kelly chooses a **section** of a newspaper.

It has 50 words in it.

She draws a bar chart of the number of letters in each word.



What fraction of the 50 words have more than 6 letters?

23 of the 50 words have less than 5 letters. This shows that nearly half of all the words

less than 5 letters in them.

Explain why she could be wrong.

	1 mark
used in the newspaper have	

Kelly says,