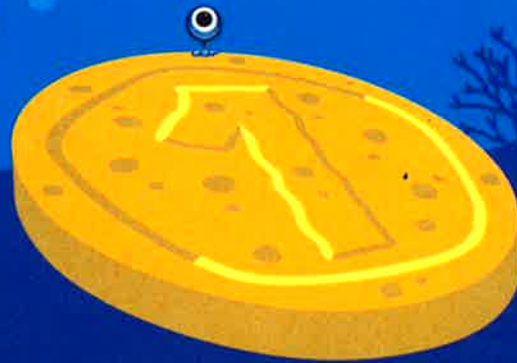


Heinemann

**active**  
maths



**Pupil Book 7**  
**Money and Finance**  
**Information Handling**

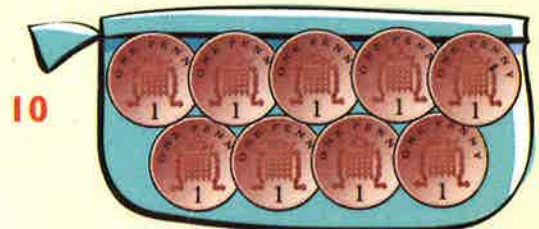
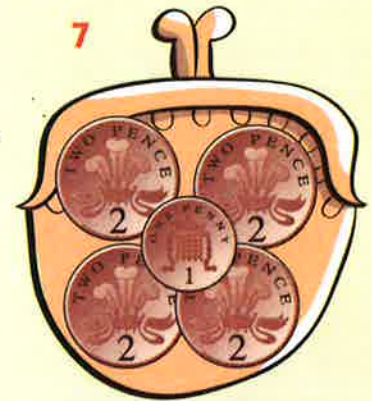
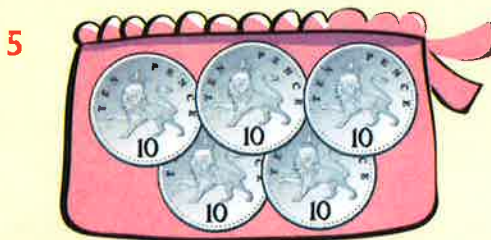
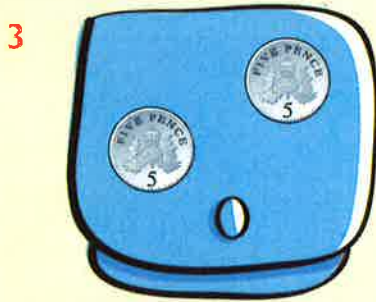
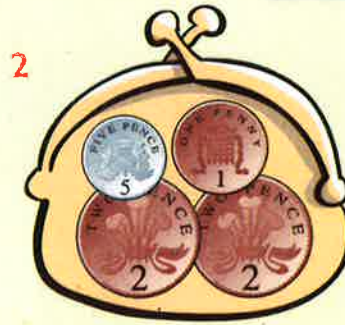
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# Same values

Write the total value of the coins in each purse.

£ 1 0 0



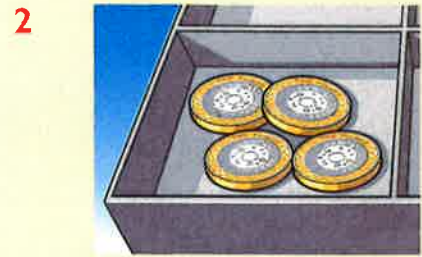
Find pairs of purses with the same value.



I can find the total of a set of coins

Write the amount in each till.

1. £ 1 5



Write the amount in each purse.

5. £ 1 2 4

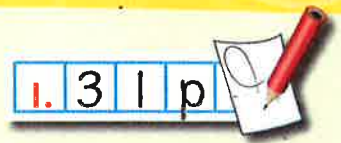


What amounts can you make using £1 and one other coin? How about £2 and another coin?



# How much?

People put sets of coins into the vending machine.  
Write the total of each set of coins.




7 Which of the coins would you use to pay for something costing 58p?




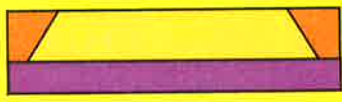


I can find the total of a set of coins

Write which coins you would use to pay for each item. Use the fewest coins you can.

1. 5p and 2p 



1			2
	7p	12p	
3			4
	25p	66p	
5			6
	87p	£1.50	
7			8
	£1.15	£3.01	
			

9 Use as few coins as you can to buy items 5 and 8 together.



Draw a vending machine like this, with items for sale. The machine only takes £1, 20p and 5p coins so price the items carefully.



Write true or false for each statement.



1 Ten 5p coins have the same value as five 10p coins.



2 Two £10 notes have the same value as ten 20p coins.



3 Ten £5 notes have the same value as ten 5p coins.



4 Five £1 coins have the same value as ten 50p coins.



5 Twenty 20p coins have the same value as two £2 coins.



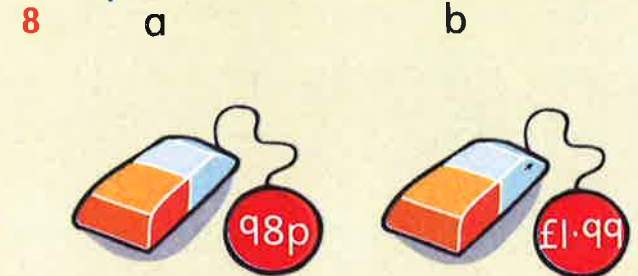
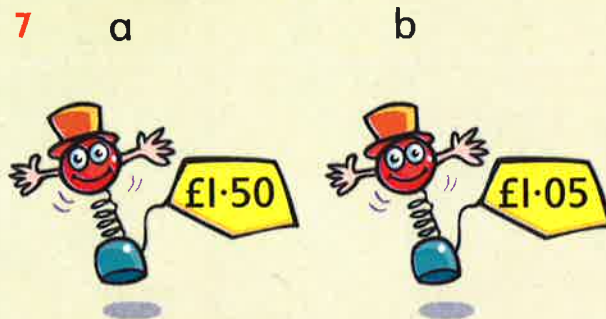
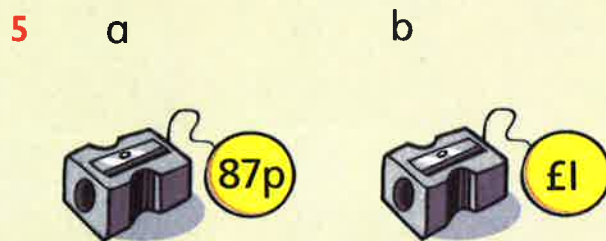
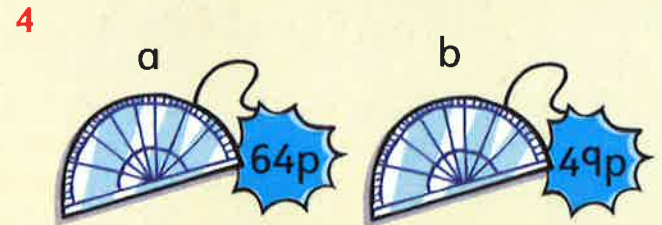
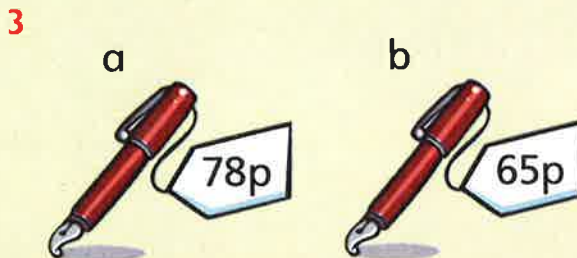
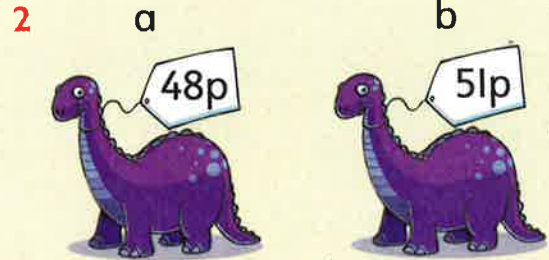
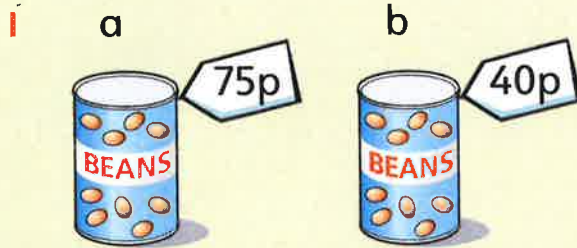
Write two true and two false statements like these.



I can exchange coins and notes for others with the same value

Write which is cheaper and by how much.

1. b is cheaper by 35p



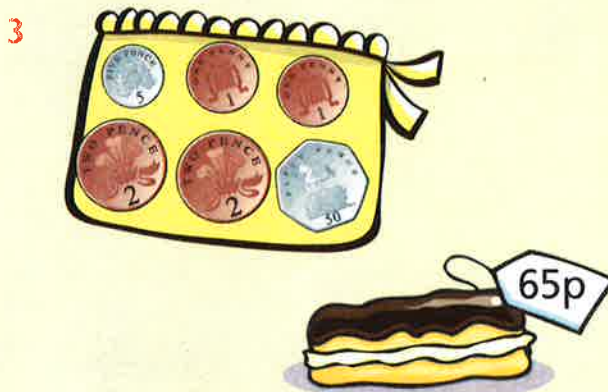
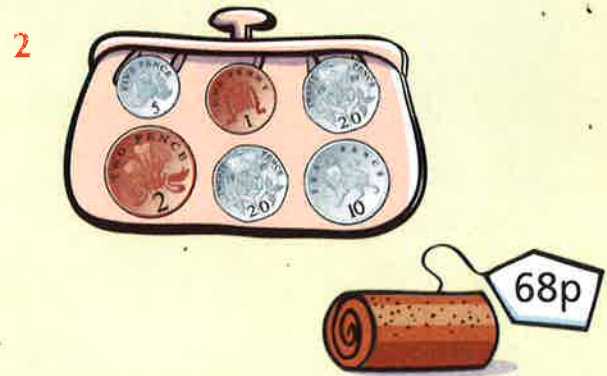
Find the difference between the cheapest and most expensive item on this page.





# Can I afford it?

Is there enough money in the purse to pay for the cake? Write yes or no.




Choose how to spend £2 on these cakes.



I can compare how much I have with the cost of items

- 1 Write the prices in order from the cheapest to the most expensive.

1. £ 4 9 9 . . .




- 2 Draw three T-shirts with price labels. They are more expensive than the red top but cheaper than the pink shirt. Choose different prices to write on the labels.
- 3 How many of the items above cost between £9.50 and £12?



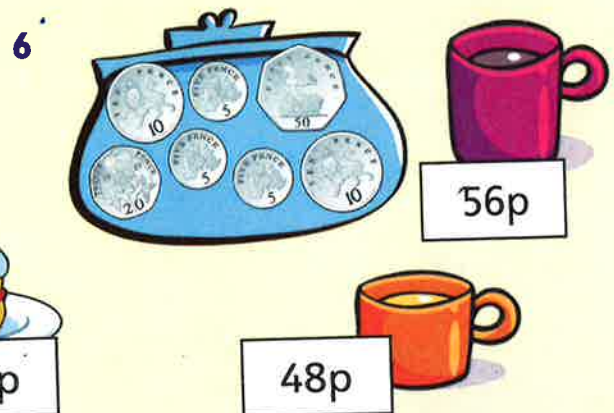
Look in a clothes catalogue and choose how to spend £50.





Is there enough money in each purse to pay for the items? Write yes or no.

I. yes



Look at your 'yes' answers. How much money will be left in each purse after paying?



# Money problems

- 1 Choose three items. Add the prices. Write the total in £ and pence. Do this six times.



85p



39p



13p

	8	5	
	4	4	
	7	6	
	2	0	5 p
£	2	0	5



54p



76p



62p



95p



44p



28p



67p

- 2 What coins will pay for each item? Use as few as possible. No change allowed!

8	5	p	
1	x	5	0 p
1	x	2	0 p
1	x	1	0 p
1	x	5	p

- 3 Jenny has four silver coins. List four amounts she could have. Which is the most? Which is the least?



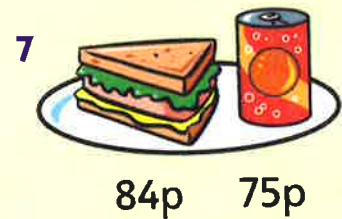
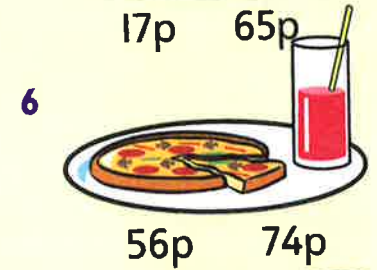
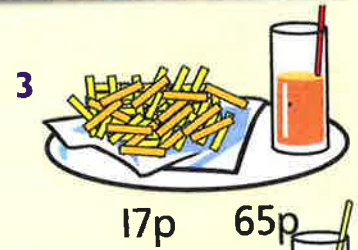
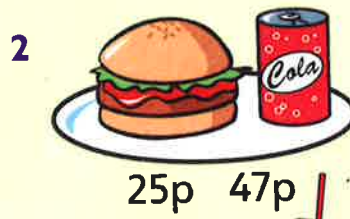
Make up a problem like this for your partner to do.



I can solve money problems

How much to buy each pair of items?

1.	70p	+	30p	=	£1.00
	6p	+	5p	=	11p
	£1.00	+	11p	=	£1.11



Add 78p to each money box. How much is in there now?



Add 66p to each purse. How much is in there now?



A pizza and a drink come to £1.71. They each cost less than £1. What could the prices be? Write 5 answers.

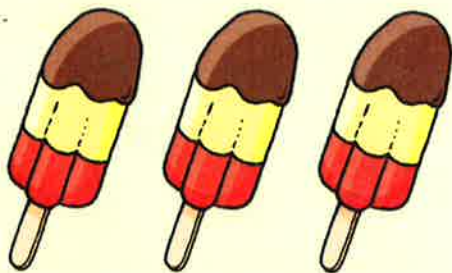


# How much for one?

The total cost of the ice-creams is shown. Find the cost of one.

$$1. \quad 69p \div 3 = 23p \text{ each}$$

1



total cost = 69p

2



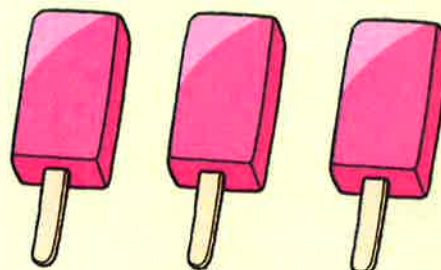
total cost = 88p

3



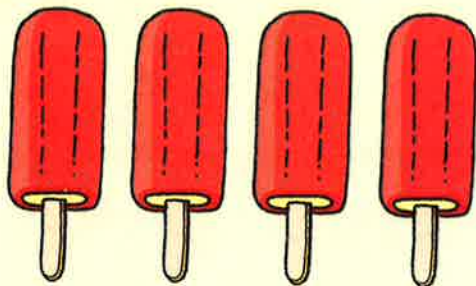
total cost = £1.10

4



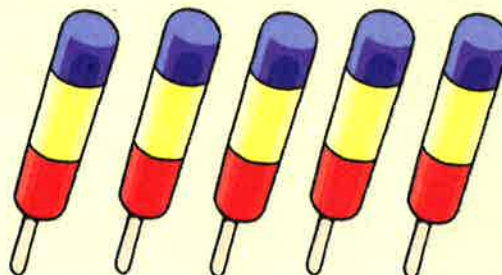
total cost = 93p

5



total cost = £1.28

6



total cost = £2.50



Make up a problem like this about 5 ice-creams. What total costs would work? Try some and see.



I can find the price of one when given the price of several

Each group of children put their money together and then share it equally.  
How much will each child get?

1. 20 p each

1



27p 15p 18p

2



54p 24p 12p

3



14p 29p 27p 18p

4



21p 21p 12p 10p 26p

5



32p £1 18p

6



£1 £2 £5 40p

7



55p £1.20 £1.05 £2

8



1p £1 £1 10p £3.04



Make up another question like this for your partner to solve. Make sure the children can get equal amounts.





# Special offers

There is a **Buy One Get One Free** offer.

Write how much each item costs you, if you buy two.

1. 8 0p

1



2



3



4



There is a **Buy Two Get the Third Free** offer.

Write how much each item costs you, if you buy three.

5. 2 0p

5



6



7



8



Make up a problem like this for your partner to do. Make sure you know the answer!



I can work out the cost of items in special offers

The box shows the ticket prices for a theme park.

- 1 How much will these two pay?



**ADULT** £12

**CHILD** HALF THE ADULT PRICE

**SENIORS** (OVER 65s) £4 OFF  
THE ADULT PRICE



**SPECIAL OFFER!** SPEND OVER  
£50 AND GET A £5 DISCOUNT

- 2 Grandma is 70. How much will they pay?



- 3 Grandpa is 55. How much will this family pay?



- 4 How much will this family pay?



- 5 Both grandparents are 70. How much will this family pay?



Work out how much your family would pay.



# Special offers

There is a **Buy One Get One Half Price** offer. Write how much you pay if you buy two of each item.

$$1. \text{£}18 + \text{£}9 = \text{£}27$$

1



2



3



4



5



6



7



8

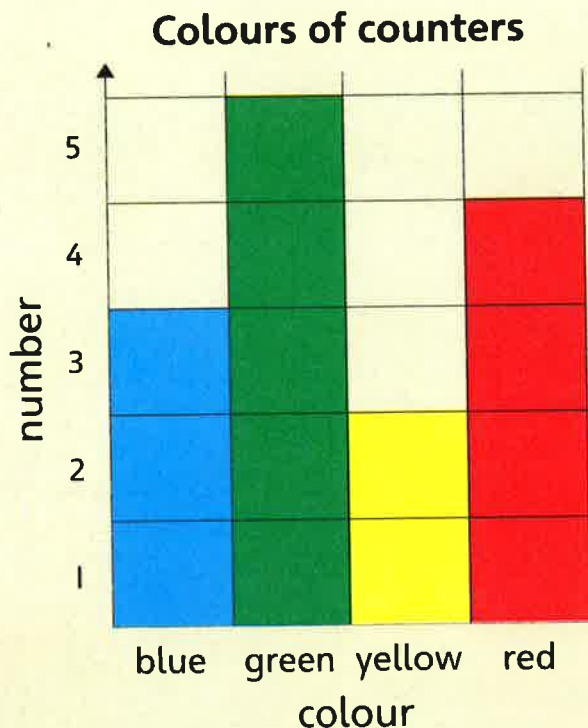


Make up a problem like this for your partner to do. Make sure you know the answer!

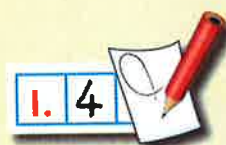


I can work out how much to pay for items in special offers

The graph shows what colour counters are in the bag.



Use the graph to write the number of:



- |                           |                              |
|---------------------------|------------------------------|
| 1 red counters            | 2 blue counters              |
| 3 yellow counters         | 4 green counters             |
| 5 blue and green counters | 6 green and yellow counters  |
| 7 blue and red counters   | 8 green and red counters     |
| 9 counters altogether     | 10 counters that are not red |




















Find 20 counters in any colour. Make your own block graph to show how many you have in each colour. Hide some counters then ask your partner to look at your graph and say which colour counters you have hidden.



# Pictograms

## Number of ice-creams sold

strawberry						
vanilla						
mint						
chocolate						



means 1 ice-cream

Write the number of ice-creams sold that are:



- 1 mint
- 2 strawberry
- 3 chocolate
- 4 vanilla
- 5 mint or chocolate
- 6 vanilla or strawberry
- 7 Write the number of ice-creams sold altogether.

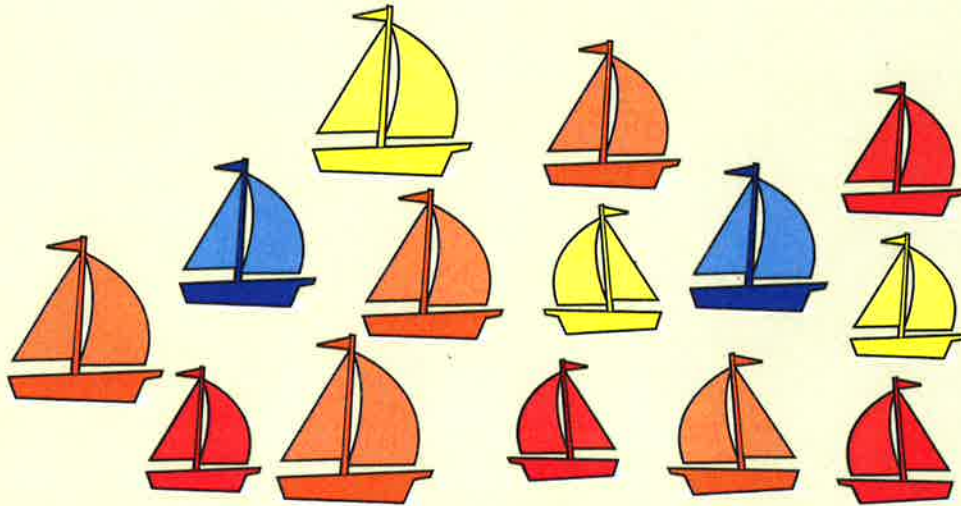


Ice-creams cost 50p each. How much does the ice-cream man get for the strawberry ice-creams he has sold? For the vanilla ice-creams? For all the ice-creams?











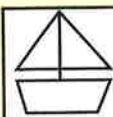
I can answer questions about simple pictograms

- 1 Draw your own pictogram, like the one that has been started, to show the colours of the boats.



Boat colours



means 1 boat



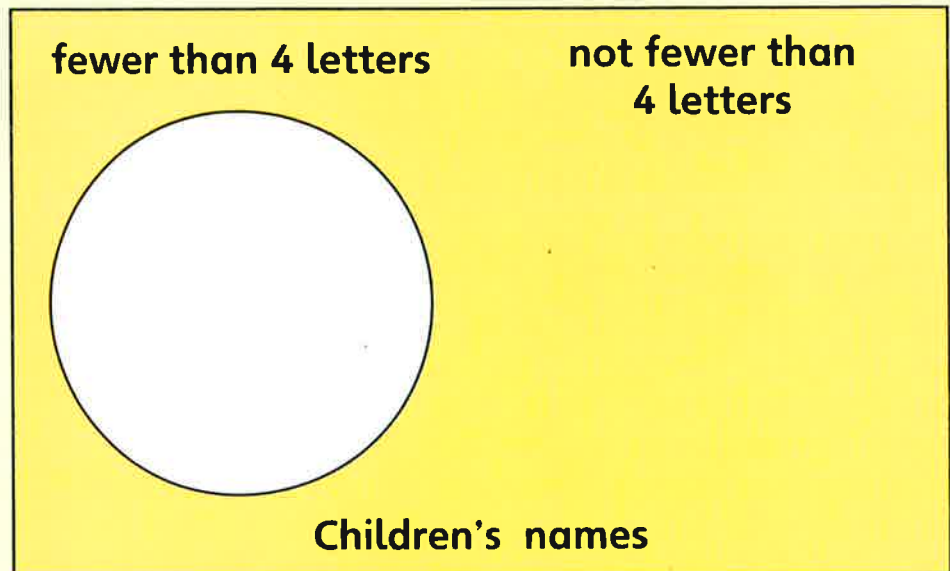
Make up some questions about the pictogram for your partner to answer.



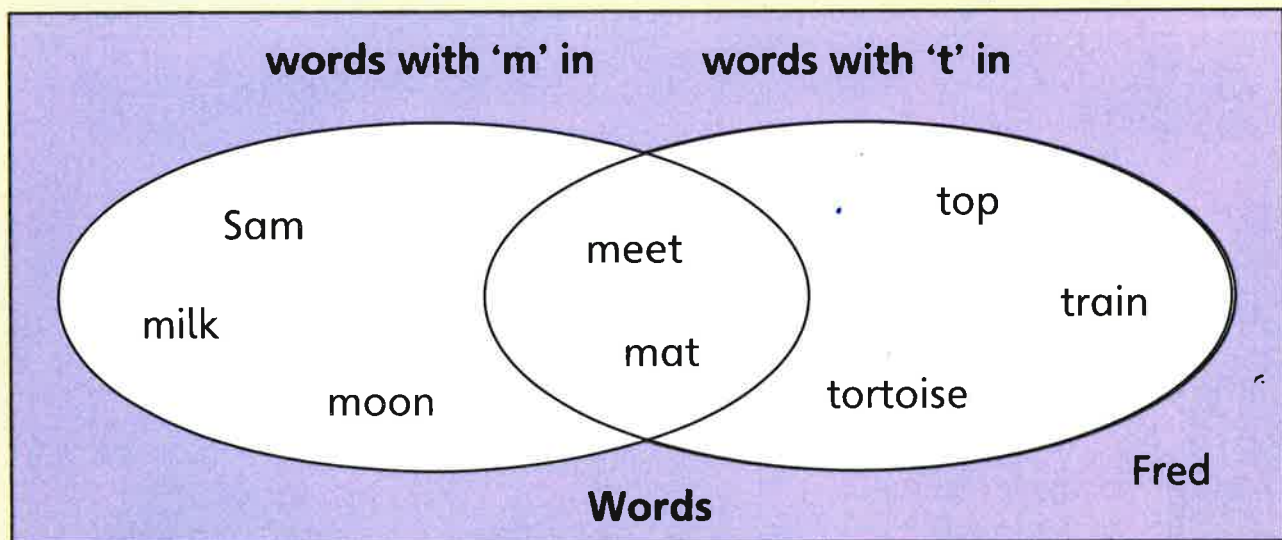
# Venn diagrams

- 1 Copy the Venn diagram. Make sure you draw it big enough! Write each name in the correct place.

Gita      Chuy  
 Amit      Tom  
 Raj        May  
 Bella      Debbie  
 Zoe        Paul  
 Ann        John  
 Mick      Natalie



- 2 Copy the Venn diagram. Think of more words to write on it.



Draw a Venn diagram to show something about your toys, for example 'with wheels' or 'no wheels'.



I can sort information onto a Venn diagram

- 1 Look at the Carroll diagram. Put the words in the correct sections.

	Joining word	Not joining word
Short word (fewer than 4 letters)		
Not short word (4 or more letters)		

cat

where

but

table

dog

chair

and

which

because

- 2 Use a book to find more words. Write them on the diagram.



What could the column and row headings be on this Carroll diagram?

	remote-control car	doll teddy
	TV computer	bike pogo stick

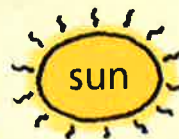




# Carroll and Venn diagrams

- 1 Copy the Carroll diagram. Write the words that should go in each section. Think of other words to write on the diagram.

	2 syllables or fewer	Not 2 syllables or fewer
Words rhyming with sea		
Words not rhyming with sea		



- 2 Transfer all this information onto a Venn diagram. Label your diagram carefully.



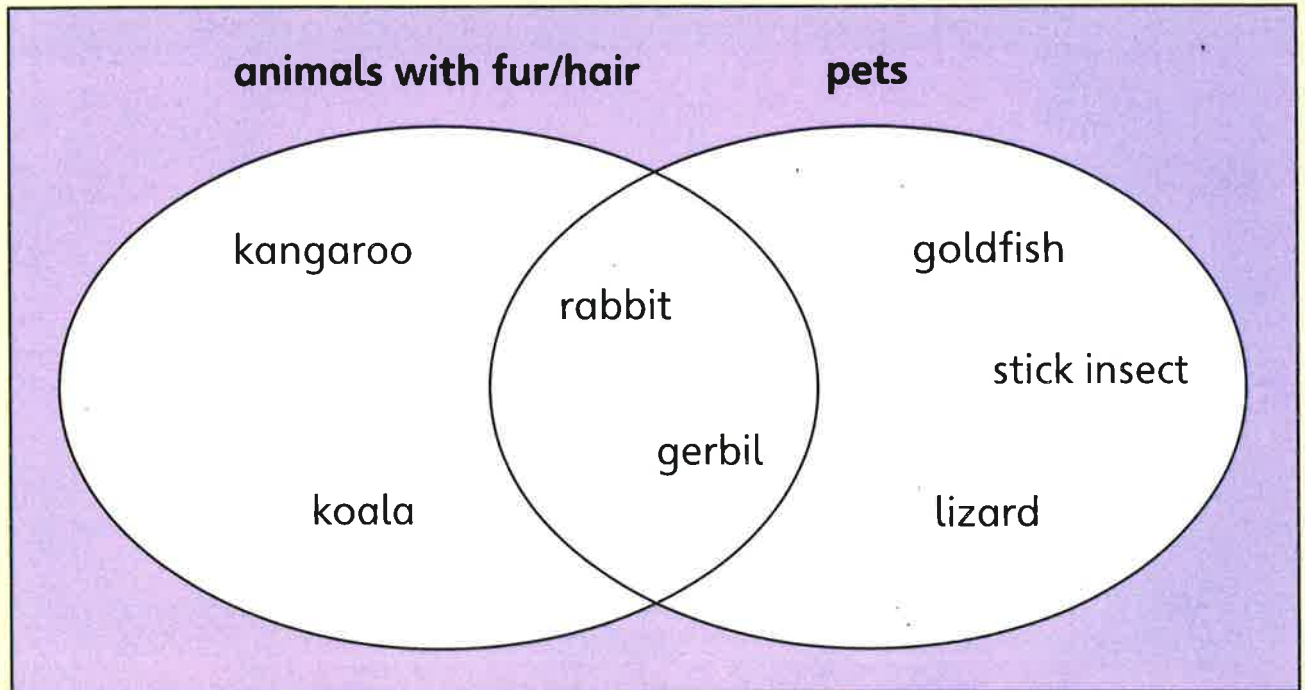
Copy the empty Carroll diagram above. Open a book and look at the first 20 words. If you sort them onto the diagram, which section do you think will have the most words in? Now sort them. Were you right?



I can sort information onto Venn and Carroll diagrams

# Carroll and Venn diagrams

- 1 Look at the Venn diagram. Draw a Carroll diagram to show the same information.
- 2 Add another 10 animals to both diagrams.



- 3 Sort the numbers between 20 and 50 onto this diagram.

	Multiples of 3	Not multiples of 3
Odd		
Not odd		



Look at the Carroll diagram. Change 'Multiples of 3' and 'Not multiples of 3' to another multiple so that one section on the diagram is empty.



# Always, sometimes, never

Say whether each statement is:  
always true; sometimes true; never true.

1. never true



- 1 The day after Sunday is Tuesday.
- 2 The day after Wednesday is Thursday.
- 3 An hour has 60 minutes.
- 4 A month has 30 days.
- 5 When a triangle is folded in half it looks like a square.
- 6 When a square is folded in half diagonally it looks like a triangle.
- 7 A year has 365 days.
- 8 The total of two odd numbers is even.

November						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					



		3 + 5		
1 + 7			15 + 1	
		9 + 11		



Make up some statements and ask your partner to say whether they are: always true; sometimes true; never true.



I can say whether something is always, sometimes or never true

Say whether each event is:  
impossible; unlikely; likely to happen.

1. unlikely



- 1 Someone in your family will win the lottery.



- 2 You will see a car today.



- 3 It will rain tomorrow.



- 4 You will go to the moon this week.



- 5 Someone in your class will be away tomorrow.



- 6 Your teacher will sing a song tomorrow.



- 7 You will meet a crocodile on your way to school tomorrow.



- 8 It will snow this week.



Write an event that is:

9 likely

10 unlikely

11 impossible



# Likelihood

IHI.5

Say whether each event is impossible; unlikely; likely to happen.

1. likely



- 1 I will eat dinner today.
- 2 I will eat chips tonight.
- 3 One day I will go to America.
- 4 Tomorrow I will go to school.
- 5 The next person I see will be a boy.
- 6 Next year I will learn to swim.
- 7 Next week I will be younger.
- 8 One day I will be rich.
- 9 One day I will be married.
- 10 I will fall over tomorrow.



Think up 10 impossible events.



I can say how likely something is to happen

Draw a table like this. Decide how likely each event is and write the number in the correct column of the table.

likely	unlikely	impossible
		1

- 1 I will land on Mars tonight.
- 2 I will go to bed late tonight.
- 3 I will walk more than 10 steps today.
- 4 I will find a four-leaf clover today.
- 5 I will watch television tonight.

Draw a table like this. Decide how often each event happens and write the number in the correct column of the table.

always	sometimes	never

- 6 I go to sleep at night.
- 7 The moon shines in my window.
- 8 I have sweet dreams.
- 9 I wake up and get up.
- 10 I take the tiger for a walk.
- 11 I eat ice-cream for breakfast.








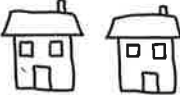
Make up more statements for each column of your two tables.



# Pictograms

Look at the pictogram. Answer the questions.

 means 2

Where people in Class X live	
bungalow	
terraced house	
semi-detached house	
detached house	
block of flats	



1 How many people live in a terraced house?



2 What is the most common type of housing?



3 How many people do not live in a detached house?

4 How many people were asked about their house?



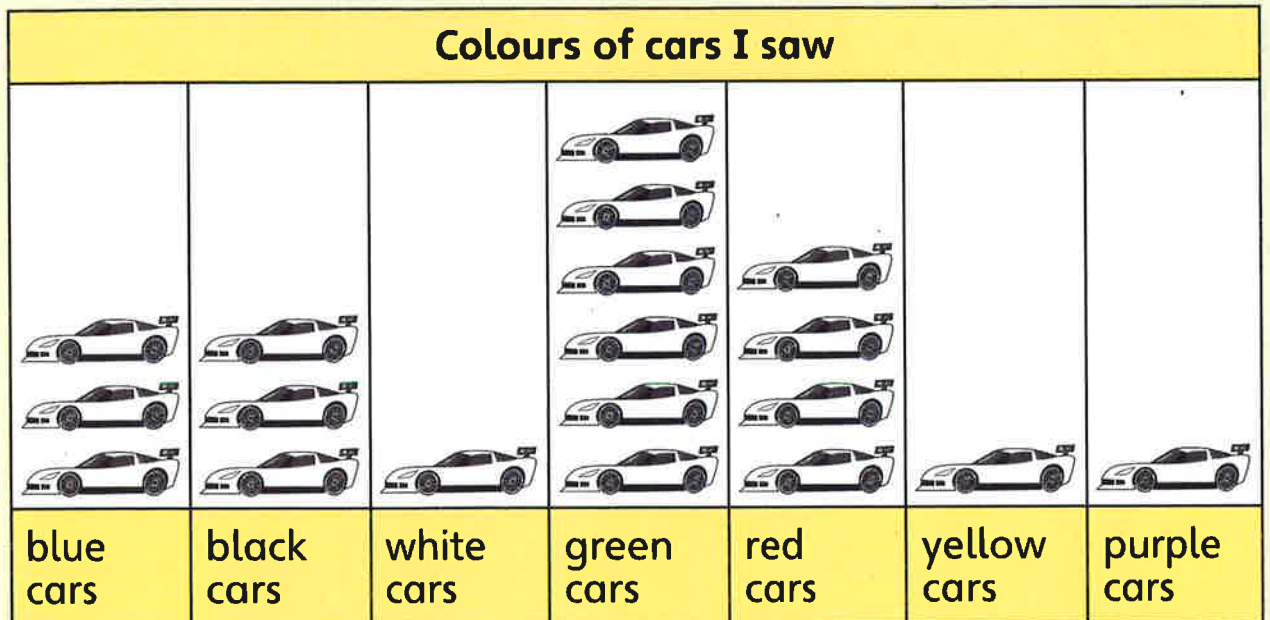
Draw your own table about people in your class.



I can answer questions about simple pictograms

Ramon drew a pictogram showing the colours of cars driving down the street.

 means 2



1 How many blue cars?

2 How many cars were red?



3 How many cars were either black or white?



4 Which was the most common colour?

5 Which was the least common colour?



6 Which was the second most common colour?

7 How many cars were red, blue, green or yellow?



What other things could you look at in a traffic survey?



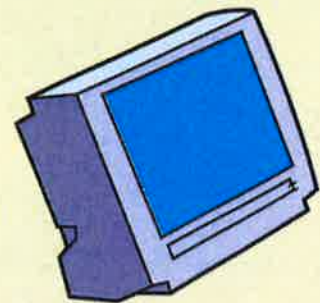
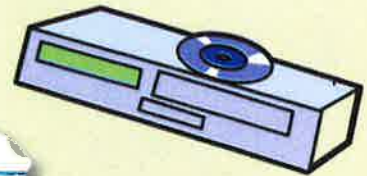


- 1 Use the results in the tally chart to draw a pictogram.  
Use a smiley face to represent **two** children.



Equipment people use	Number of children
CD player	
mobile phone	
television	
video player	
DVD player	
portable music player	

	☺	
	☺	
	☺	
	☺	
	☺	
CD		
player		



- 2 How many children use a mobile phone?  
3 How many more children use a DVD player than use a video player?

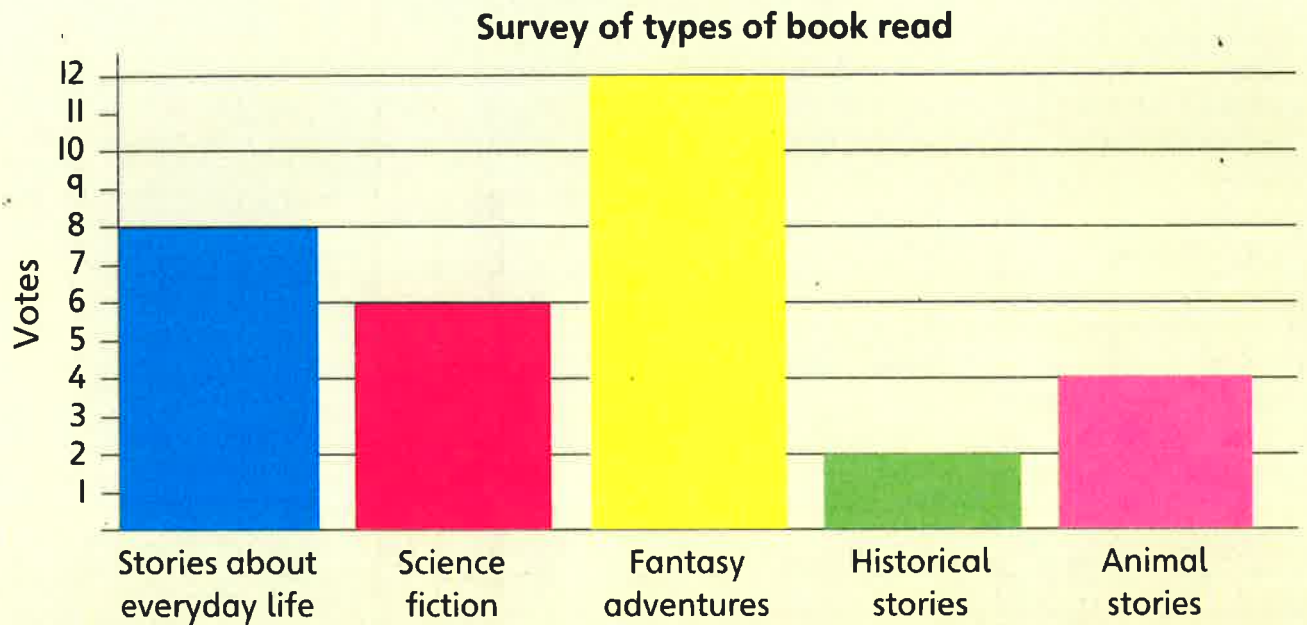


Can you think of four more categories to add? Talk to your partner.



I can answer questions about simple pictograms

Study the bar graph. Answer the questions.



Which type of story is:

- 1 most popular?
- 2 least popular?
- 3 liked by 8 children?

How many children:

- 4 like the most popular story type?
- 5 like animal stories?
- 6 like animal stories or science fiction?



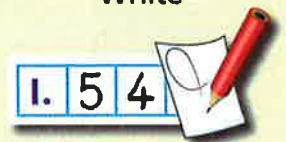
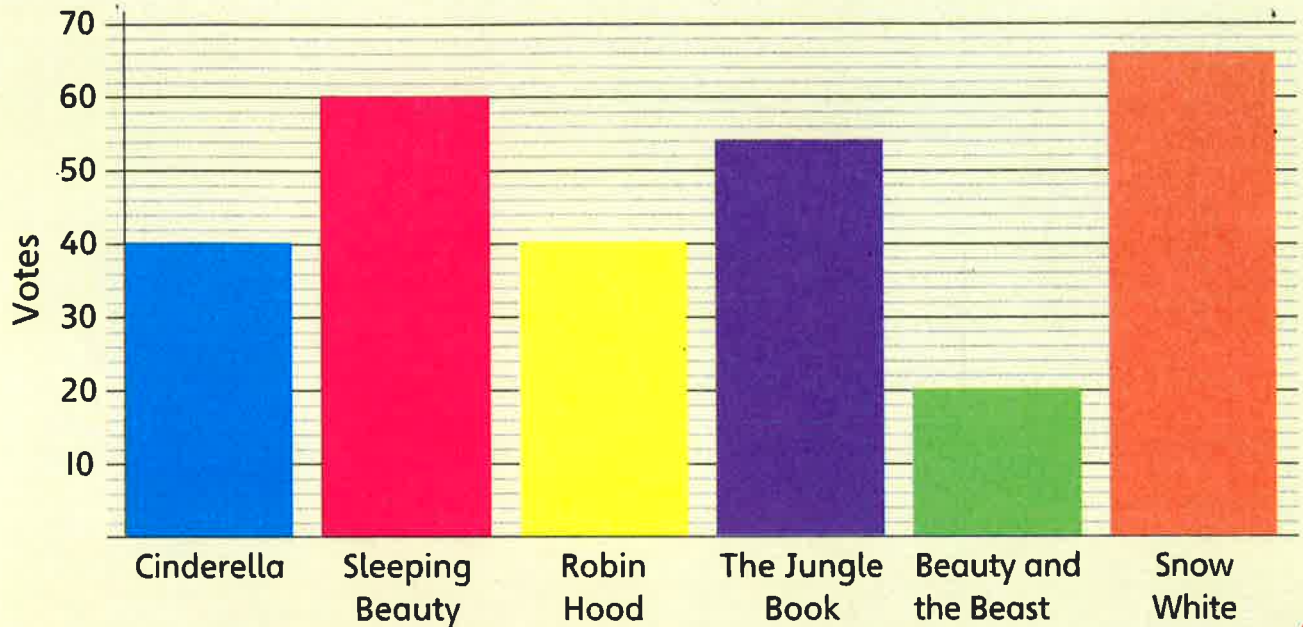
Suppose each child had just one vote.  
How many children were asked to vote?  
What if each child had two votes?



# Bar graphs

Look at the bar graph. Answer the questions.

Favourite films in Willowtree School



- How many children like The Jungle Book?
- Which two films are liked by the same number of children?
- Which film is the most popular?
- Which film is the least popular?
- How many children like Robin Hood?
- How many more children like Sleeping Beauty than like Beauty and the Beast?



Carry out your own film survey, using your friends' opinions.



I can answer questions about simple bar graphs

Work with your partner. Choose a question to find out about.  
Write a questionnaire or recording sheet.

Is it true that more children in our class have birthdays in winter than summer?



or

Which is the most common type of shoe fastening in school: laces, Velcro<sup>®</sup>, elastic or buckles?



or

Is it true that the children in our school would prefer to have a shorter lunchtime and go home earlier?

or

Which do the children in our class choose as their favourite lesson?



**Think about...**

Are the questions clear?

What might the answers be?

Do you need to suggest answers for people to choose from?

Have you got enough space for recording the information?

Is the sheet quick to fill in?



Here are two questionnaires. One is a much better questionnaire than the other.

1 Write at least five reasons why the second is better.

Do you eat bread?  
 Do you like it?  
 How often do you eat it?  
**How much do you eat?**  
**Which type of bread do you prefer?**



1 Do you like bread?  
 (If no, stop the survey now)

Yes

No

2 Which type of bread do you prefer?

Brown


White

Wholemeal

3 How often do you eat bread?

Every day


A few times a week

Less than once a week

Other .....

4 About how many slices of bread do you eat at:

Breakfast?


Lunch?

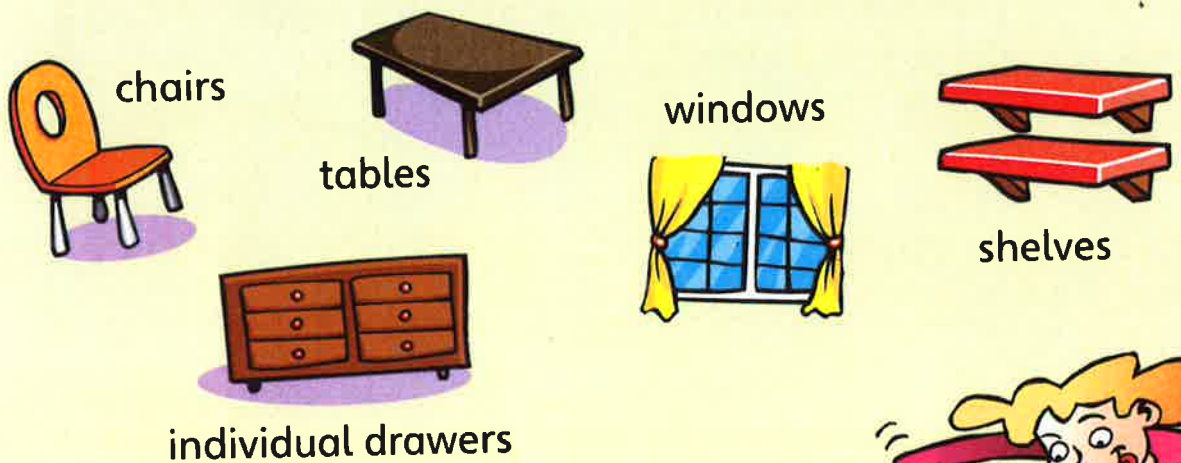
In the evening?

2 Write a questionnaire asking people about cooked potatoes, such as chips, mash, boiled or roasted ones.



I can say what is good or bad about a questionnaire

- 1 Look around your classroom. Count the numbers of:



- 2 Draw a chart to show the information you collected about things in your classroom.

- 3 Find about 20 words in a dictionary, book or spelling list.

Has at least two vowels

Sort the words onto a Venn, Carroll or tree diagram. Use these labels on your diagram:

Has two letters the same

- 4 Now sort the same words, using the same labels, but onto a different kind of diagram than you chose before.



Talk to your partner about how the two sorting diagrams are alike or not alike.



1 Choose one question to find out about.

What type of TV programme is most popular with children in the class?



or

What do the children in our class say is their favourite type of fruit?



or

Which season of the year do most children in our class have their birthday?



Spring

Summer

Autumn

Winter

or

Which would the children in our class vote as their favourite pet?



- 2 Find out the answer by asking other children in your class. Record what you find.
- 3 Draw a chart or graph to show the information. Label it carefully and write a title.



I can collect information and draw my own chart