

Macmillan
Mathematics
Pupil's book

1B

Paul Broadbent

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MACMILLAN

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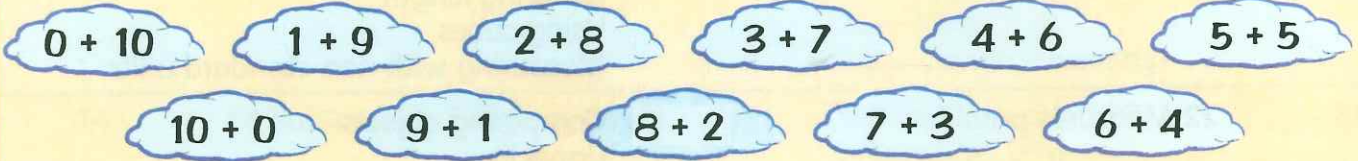
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Adding to 20

Addition facts that make 10 are important.



Use these to help you to add to 20.

$$7 + 4 = \square$$

$$7 + 4 = 7 + 3 + 1 = 10 + 1 = 11$$

$$8 + 6 = \square$$

$$8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$$

1 Copy and complete.

- a) $6 + \square = 10$ b) $9 + \square = 10$ c) $7 + \square = 10$
 d) $4 + \square = 10$ e) $2 + \square = 10$ f) $5 + \square = 10$
 g) $0 + \square = 10$ h) $3 + \square = 10$

2 Add these. Use the number lines to help. Start at the largest number and draw the jumps.

a) $10 + 6$
 total \rightarrow \square

b) $11 + 4$
 total \rightarrow \square

c) $12 + 2$
 total \rightarrow \square

d) $15 + 4$
total \rightarrow



e) $13 + 3$
total \rightarrow



f) $14 + 5$
total \rightarrow



3 Use the number lines to help you answer these.

a) $8 + 5 =$



b) $9 + 7 =$



c) $8 + 4 =$



d) $6 + 5 =$



e) $9 + 4 =$



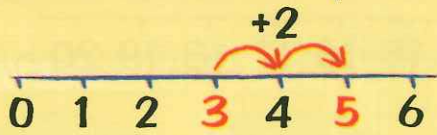
Try this

Find different ways to complete this number sentence.

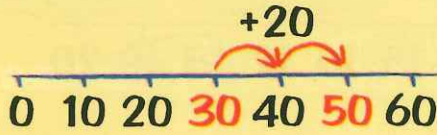
+ = 15

Adding tens

If you can add numbers to ten, adding tens is easy.
Look at this example.



$$3 + 2 = 5$$



$$3 \text{ tens} + 2 \text{ tens} = 5 \text{ tens}$$

$$30 + 20 = 50$$

1 Complete these.

a) $3 + 1 = \square$

$30 + 10 = \square$

c) $2 + 3 = \square$

$20 + 30 = \square$

e) $4 + 3 = \square$

$40 + 30 = \square$

g) $3 + 5 = \square$

$30 + 50 = \square$

i) $3 + 3 = \square$

$30 + 30 = \square$

k) $4 + 4 = \square$

$40 + 40 = \square$

b) $4 + 2 = \square$

$40 + 20 = \square$

d) $2 + 2 = \square$

$20 + 20 = \square$

f) $5 + 1 = \square$

$50 + 10 = \square$

h) $4 + 1 = \square$

$40 + 10 = \square$

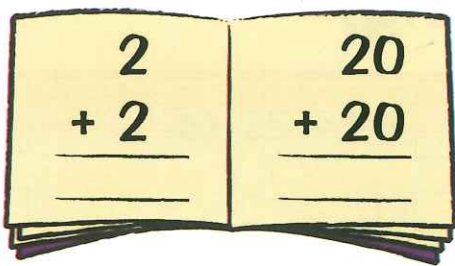
j) $5 + 2 = \square$

$50 + 20 = \square$

l) $5 + 4 = \square$

$50 + 40 = \square$

2 Answer these.



a)
$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ + 20 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 1 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 40 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ + 30 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ + 20 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ + 50 \\ \hline \end{array}$$

3 Answer these.

a)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

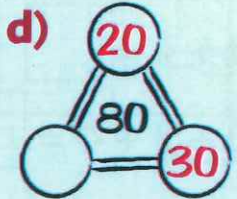
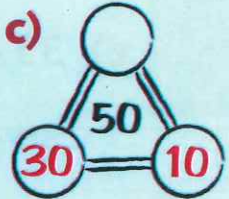
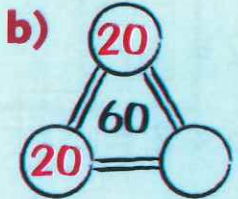
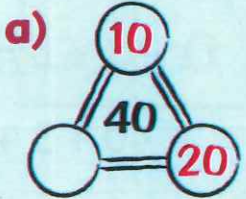
d)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$$

Try this

The numbers at the corners add up to the number in the middle. Write the missing numbers.



TU + U (no renaming)

Example 1

$$12 + 5 = \square \quad \text{Break up the 12 into tens and units.}$$

$$10 + 2 + 5 = \square$$

$$10 + 7 = 17$$

Example 2

$$\begin{array}{r} \text{T U} \\ 2 \ 3 \\ + \quad 4 \\ \hline \end{array}$$

Step 1 Add the units.

$$\begin{array}{r} \text{T U} \\ 2 \ 3 \\ + \quad 4 \\ \hline \end{array}$$

Step 2 Write in the tens.

$$\begin{array}{r} \text{T U} \\ 2 \ 3 \\ + \quad 4 \\ \hline \end{array}$$

1 Complete these.

a) $15 + 3 = \square$

$$10 + 5 + 3 = \square$$

b) $21 + 3 = \square$

$$20 + 1 + 3 = \square$$

c) $34 + 5 = \square$

$$30 + 4 + 5 = \square$$

d) $23 + 4 = \square$

$$20 + 3 + 4 = \square$$

e) $35 + 2 = \square$

$$30 + 5 + 2 = \square$$

f) $43 + 6 = \square$

$$40 + 3 + 6 = \square$$

2 Answer these.

a) $36 + 2 = \square$

b) $25 + 1 = \square$

c) $51 + 3 = \square$

d) $65 + 4 = \square$

e) $24 + 4 = \square$

f) $82 + 3 = \square$

g) $61 + 8 = \square$

h) $45 + 2 = \square$

3 Complete these.

a)
$$\begin{array}{r} 25 \\ + 4 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 44 \\ + 2 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 53 \\ + 5 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 31 \\ + 7 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 45 \\ + 3 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 62 \\ + 5 \\ \hline \end{array}$$

g)
$$\begin{array}{r} 91 \\ + 7 \\ \hline \end{array}$$

h)
$$\begin{array}{r} 84 \\ + 3 \\ \hline \end{array}$$

4 Complete these addition grids.

a)

+	21	35	13
4			
2		37	
3			16

b)

+	32	24	20
3			23
5	37		
4			

TU + Tens

Example 1

$$30 + 13 = \square$$

Break up the 13 into tens and units.

$$30 + 10 + 3 = \square$$

$$40 + 3 = 43$$

Example 2

$$\begin{array}{r} \text{T U} \\ 20 \\ + 34 \\ \hline \end{array}$$

1 Add the units.

$$\begin{array}{r} \text{T U} \\ 20 \\ + 34 \\ \hline 4 \\ \hline \end{array}$$

2 Add the tens.

$$\begin{array}{r} \text{T U} \\ 20 \\ + 34 \\ \hline 54 \\ \hline \end{array}$$

1 Copy and complete.

a) $20 + 15 = \square$

$$20 + 10 + 5 = \square$$

b) $40 + 11 = \square$

$$40 + 10 + 1 = \square$$

c) $30 + 18 = \square$

$$30 + 10 + 8 = \square$$

d) $40 + 23 = \square$

$$40 + 20 + 3 = \square$$

e) $20 + 35 = \square$

$$20 + 30 + 5 = \square$$

f) $30 + 46 = \square$

$$30 + 40 + 6 = \square$$

2 Write the answers.

$$\begin{array}{r} \text{a)} \quad 20 \\ + 15 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{b)} \quad 30 \\ + 12 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{c)} \quad 30 \\ + 24 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{d)} \quad 20 \\ + 26 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{e)} \quad 40 \\ + 31 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{f)} \quad 50 \\ + 27 \\ \hline \\ \hline \end{array}$$

3 Answer these. Use the yellow spaces for working out.

$$\text{a)} \quad 40 + 31 = \square$$

$$\text{b)} \quad 30 + 25 = \square$$

$$\text{c)} \quad 50 + 11 = \square$$

$$\text{d)} \quad 20 + 64 = \square$$

$$\text{e)} \quad 27 + 40 = \square$$

$$\text{f)} \quad 32 + 30 = \square$$

$$\text{g)} \quad 61 + 20 = \square$$

$$\text{h)} \quad 42 + 50 = \square$$

$$\text{i)} \quad 53 + 30 = \square$$

TU + TU (no renaming)

Example 1

$$14 + 23 = \square$$

Try to work this out in your head.

Add the units and the tens.

Units: $4 + 3 = 7$

Tens: $10 + 20 = 30$

Added together: $30 + 7 = 37$

$$14 + 23 = 37$$

Example 2

$$\begin{array}{r} \text{T U} \\ 2 \ 5 \\ + 3 \ 2 \\ \hline \end{array}$$

1 Add the units.

$$\begin{array}{r} \text{T U} \\ 2 \ 5 \\ + 3 \ 2 \\ \hline \ 7 \\ \hline \end{array}$$

2 Add the tens.

$$\begin{array}{r} \text{T U} \\ 2 \ 5 \\ + 3 \ 2 \\ \hline 5 \ 7 \\ \hline \end{array}$$

1 Write the answers.

a)
$$\begin{array}{r} 2 \ 3 \\ + 1 \ 1 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 3 \ 1 \\ + 1 \ 4 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 2 \ 6 \\ + 2 \ 2 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 3 \ 2 \\ + 1 \ 6 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 4 \ 6 \\ + 3 \ 2 \\ \hline \end{array}$$

2 Answer these.

a) $23 + 11 = \square$

b) $15 + 22 = \square$

c) $31 + 16 = \square$

d) $22 + 14 = \square$

e) $27 + 21 = \square$

f) $32 + 13 = \square$

g) $21 + 28 = \square$

h) $26 + 12 = \square$

Assessment

23 30 12 42 40 33 50

Use any of the numbers above to complete these.

a) $\square + \square = 70$

b) $\square + \square = 63$

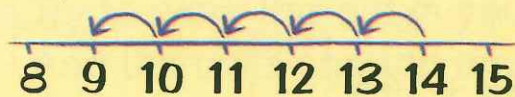
c) $\square + \square = 82$

d) $\square + \square = 65$

Subtracting within 20

Number lines can help you with subtraction.

What is 14 take away 5?



$$14 - 5 = 9$$

What is the difference between 9 and 16?



$$16 - 9 = 7$$

1 Count back to answer these.

a) $13 - 5 = \square$

A number line from 4 to 14. Blue arrows point left from 13 to 12, 12 to 11, 11 to 10, 10 to 9, and 9 to 8, representing a subtraction of 5.

b) $14 - 6 = \square$

A number line from 5 to 15. Blue arrows point left from 14 to 13, 13 to 12, 12 to 11, 11 to 10, 10 to 9, and 9 to 8, representing a subtraction of 6.

c) $15 - 7 = \square$

A number line from 6 to 16. Blue arrows point left from 15 to 14, 14 to 13, 13 to 12, 12 to 11, 11 to 10, 10 to 9, and 9 to 8, representing a subtraction of 7.

d) $16 - 8 = \square$

A number line from 7 to 17. Blue arrows point left from 16 to 15, 15 to 14, 14 to 13, 13 to 12, 12 to 11, 11 to 10, and 10 to 9, representing a subtraction of 8.

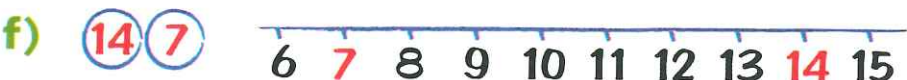
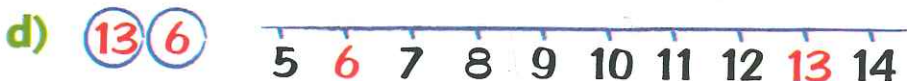
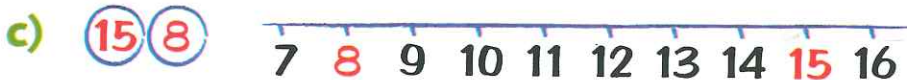
e) $13 - 7 = \square$

A number line from 6 to 14. Blue arrows point left from 13 to 12, 12 to 11, 11 to 10, 10 to 9, 9 to 8, and 8 to 7, representing a subtraction of 7.

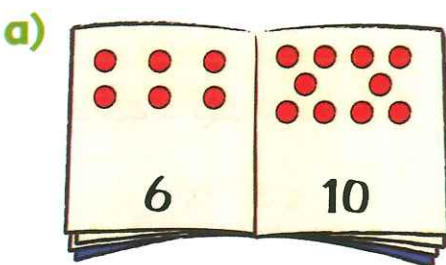
f) $12 - 5 = \square$

A number line from 4 to 13. Blue arrows point left from 12 to 11, 11 to 10, 10 to 9, 9 to 8, and 8 to 7, representing a subtraction of 5.

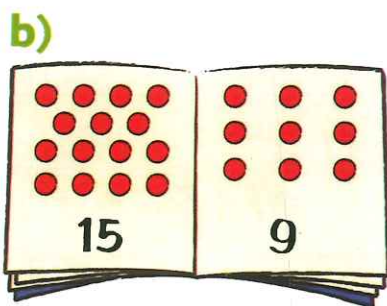
2 Write the difference between these pairs of numbers.
Use the number lines to help you.



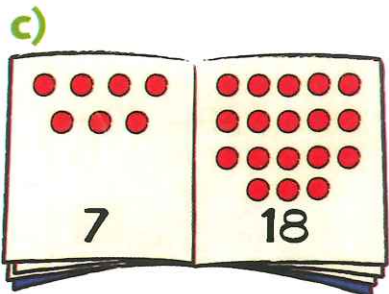
3 Find the difference between the spots.



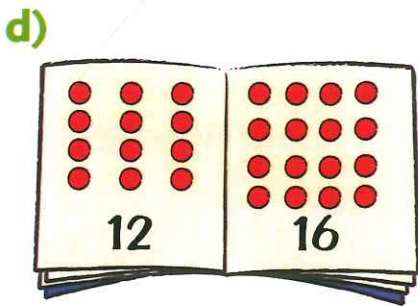
Difference →



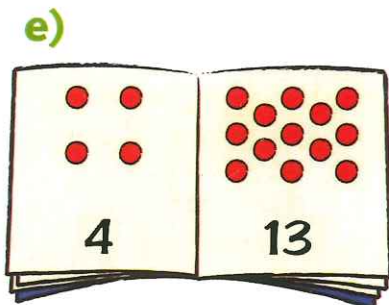
Difference →



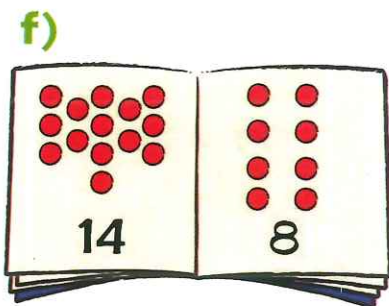
Difference →



Difference →



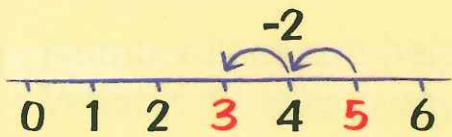
Difference →



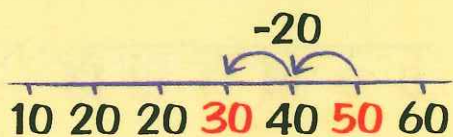
Difference →

Subtracting tens

Look at this example.



$$5 - 2 = 3$$



$$5 \text{ tens} - 3 \text{ tens} = 2 \text{ tens}$$

$$50 - 20 = 30$$

1 Copy and complete.

a) $3 - 1 = \square$

$30 - 10 = \square$

b) $5 - 3 = \square$

$50 - 30 = \square$

c) $6 - 4 = \square$

$60 - 40 = \square$

d) $4 - 2 = \square$

$40 - 20 = \square$

e) $8 - 3 = \square$

$80 - 30 = \square$

f) $7 - 4 = \square$

$70 - 40 = \square$

g) $9 - 5 = \square$

$90 - 50 = \square$

h) $7 - 1 = \square$

$70 - 10 = \square$

i) $6 - 3 = \square$

$60 - 30 = \square$

j) $5 - 4 = \square$

$50 - 40 = \square$

k) $9 - 2 = \square$

$90 - 20 = \square$

l) $8 - 2 = \square$

$80 - 20 = \square$

2 Answer these. The first has been done for you.

a)
$$\begin{array}{r} 60 \\ - 20 \\ \hline 40 \end{array}$$

b)
$$\begin{array}{r} 70 \\ - 50 \\ \hline \end{array}$$

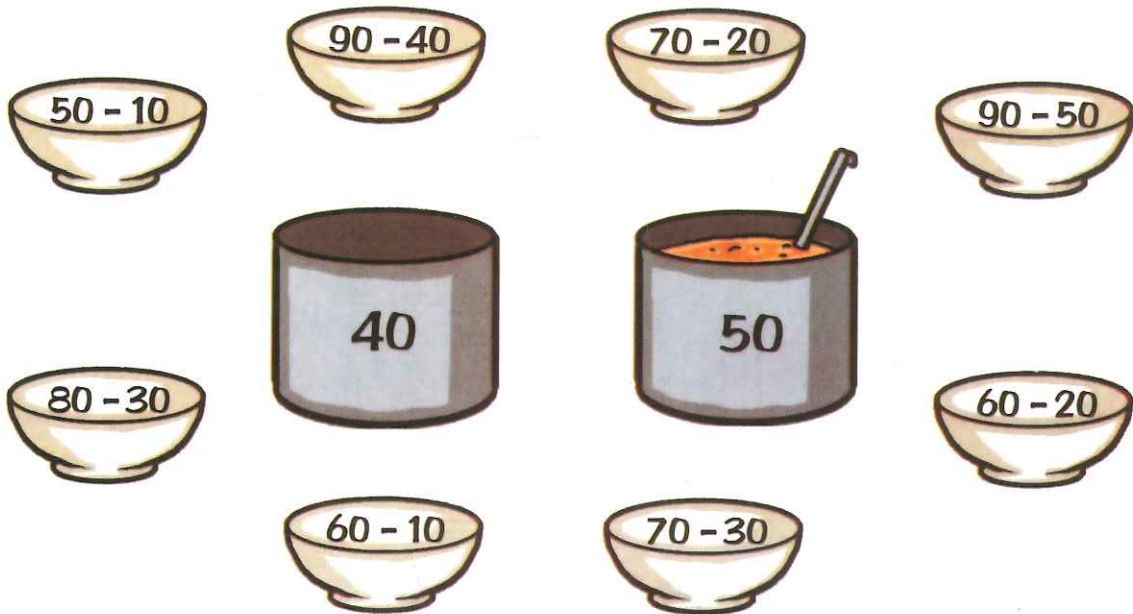
c)
$$\begin{array}{r} 90 \\ - 40 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 60 \\ - 50 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 40 \\ - 30 \\ \hline \end{array}$$

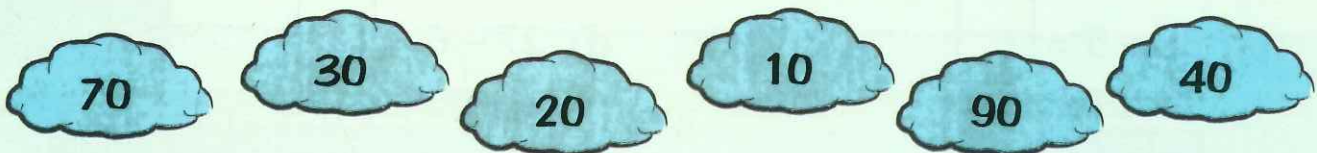
f)
$$\begin{array}{r} 80 \\ - 70 \\ \hline \end{array}$$

3 Match each subtraction to the correct answer.



Try this


a) Match pairs of numbers with a difference of 20.



b) Which two numbers have a difference of 80?

TU - U (no renaming)

Example 1

What is 19 take away 5? 

$$19 - 5 = \square \quad \text{Subtract the units.}$$

$$19 - 5 = 14$$

Example 2

What is 25 take away 4?

$$\begin{array}{r} \text{T U} \\ 25 \\ - 4 \\ \hline \\ \hline \end{array}$$

Step 1 Subtract the units.

$$\begin{array}{r} \text{T U} \\ 2 \color{red}5 \\ - \color{red}4 \\ \hline \color{red}1 \\ \hline \end{array}$$

Step 2 Write in the tens.

$$\begin{array}{r} \text{T U} \\ \color{red}2 \color{red}5 \\ - \color{red}4 \\ \hline \color{red}2 \color{red}1 \\ \hline \end{array}$$

1 Answer these. Cross out the cubes to help.

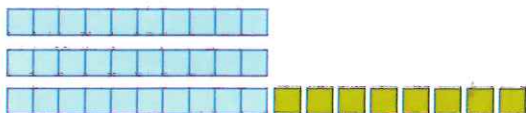
a) $25 - 3 = \square$



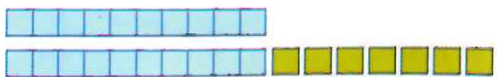
b) $18 - 7 = \square$




c) $38 - 5 = \square$

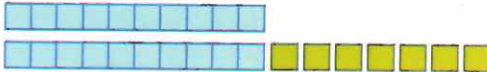



d) $27 - 6 = \square$

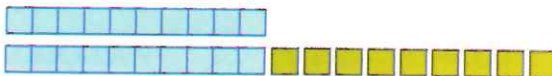



2 Answer these.

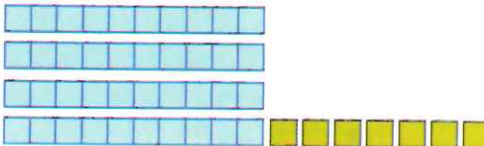
a) $18 - 5 = \square$


b) $27 - 3 = \square$


c) $26 - 6 = \square$


d) $29 - 7 = \square$


e) $35 - 3 = \square$


f) $47 - 5 = \square$


3 Complete these.

a) $\begin{array}{r} 35 \\ - 4 \\ \hline \end{array}$

b) $\begin{array}{r} 48 \\ - 8 \\ \hline \end{array}$

c) $\begin{array}{r} 57 \\ - 5 \\ \hline \end{array}$

d) $\begin{array}{r} 46 \\ - 3 \\ \hline \end{array}$

e) $\begin{array}{r} 65 \\ - 4 \\ \hline \end{array}$

f) $\begin{array}{r} 69 \\ - 7 \\ \hline \end{array}$

g) $\begin{array}{r} 78 \\ - 5 \\ \hline \end{array}$

h) $\begin{array}{r} 79 \\ - 9 \\ \hline \end{array}$

Try this

The numbers 5, 6 and 7 are missing.
 Complete each subtraction correctly.

a) $47 - \square = 41$

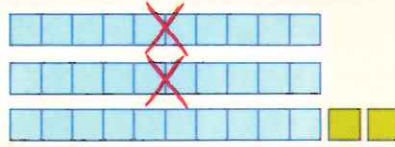
b) $56 - \square = 51$

c) $68 - \square = 61$

TU – Tens

Example 1

What is $32 - 20 = \square$



$$30 - 20 = 10$$

Subtract the tens.

$$10 + 2 = 12$$

Add on the units.

$$32 - 20 = 12$$

Example 2

$$\begin{array}{r} \text{T U} \\ 43 \\ - 20 \\ \hline \\ \hline \end{array}$$

Step 1 Subtract the units.

$$\begin{array}{r} \text{T U} \\ 43 \\ - 20 \\ \hline 23 \\ \hline \end{array}$$

Step 2 Subtract the tens.

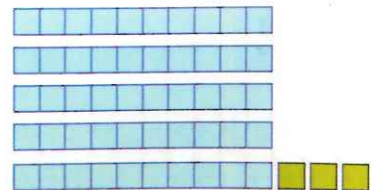
$$\begin{array}{r} \text{T U} \\ 43 \\ - 20 \\ \hline 23 \\ \hline \end{array}$$

1 Complete these.

a) $29 - 10 = \square$



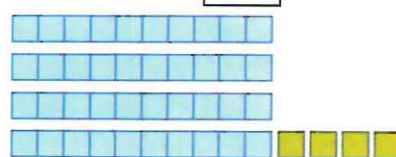
b) $53 - 20 = \square$



c) $35 - 20 = \square$



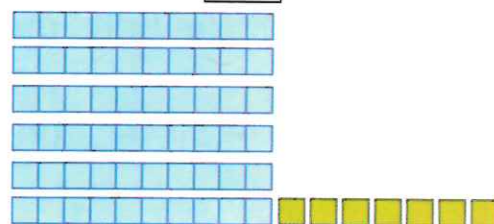
d) $44 - 30 = \square$



e) $52 - 30 = \square$



f) $67 - 40 = \square$



2 Answer these.

a) $48 - 30 = \square$

b) $39 - 20 = \square$

c) $51 - 20 = \square$

d) $37 - 10 = \square$

e) $56 - 40 = \square$

f) $62 - 30 = \square$

g) $51 - 30 = \square$

h) $64 - 50 = \square$

3 Complete these.

a)
$$\begin{array}{r} 58 \\ - 40 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 41 \\ - 10 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 39 \\ - 20 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 61 \\ - 40 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 46 \\ - 30 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 68 \\ - 30 \\ \hline \end{array}$$

g)
$$\begin{array}{r} 74 \\ - 50 \\ \hline \end{array}$$

h)
$$\begin{array}{r} 81 \\ - 40 \\ \hline \end{array}$$

TU – TU (no renaming)

Example 1

$$37 - 23 = \square$$

Try to work this out in your head.
Subtract the units and the tens.

Units: $7 - 3 = 4$ Tens: $30 - 20 = 10$ Added together: $10 + 4 = 14$

$$37 - 23 = 14$$

Example 2

$$\begin{array}{r} \text{T U} \\ 6 \ 5 \\ - 4 \ 2 \\ \hline \\ \hline \end{array}$$

Step 1 Subtract the units.

$$\begin{array}{r} \text{T U} \\ 6 \ 5 \\ - 4 \ 2 \\ \hline \quad 3 \\ \hline \end{array}$$

Step 2 Subtract the tens.

$$\begin{array}{r} \text{T U} \\ 6 \ 5 \\ - 4 \ 2 \\ \hline 2 \ 3 \\ \hline \end{array}$$

1 Answer these.

a) $43 - 11 = \square$

c) $44 - 21 = \square$

e) $27 - 16 = \square$

g) $43 - 21 = \square$

b) $25 - 12 = \square$

d) $35 - 14 = \square$

f) $38 - 17 = \square$

h) $46 - 32 = \square$

2 Complete these.

a)
$$\begin{array}{r} 53 \\ - 41 \\ \hline \\ \hline \end{array}$$

b)
$$\begin{array}{r} 62 \\ - 21 \\ \hline \\ \hline \end{array}$$

c)
$$\begin{array}{r} 49 \\ - 36 \\ \hline \\ \hline \end{array}$$

d)
$$\begin{array}{r} 58 \\ - 25 \\ \hline \\ \hline \end{array}$$

e)
$$\begin{array}{r} 57 \\ - 42 \\ \hline \\ \hline \end{array}$$

f)
$$\begin{array}{r} 69 \\ - 18 \\ \hline \\ \hline \end{array}$$

g)
$$\begin{array}{r} 78 \\ - 35 \\ \hline \\ \hline \end{array}$$

h)
$$\begin{array}{r} 59 \\ - 37 \\ \hline \\ \hline \end{array}$$

Assessment



Use any of the numbers above to complete these sentences.

a) and have a difference of 20.

b) and have a difference of 53.

c) and have a difference of 32.

Coins and notes

Coins



5 cents



10 cents



25 cents



50 cents

Notes



1 dollar



5 dollars

These are some of the coins and notes we use.

Cents can be written as ¢ .

10 cents \rightarrow 10 ¢

Dollars can be written as $\text{\$}$.

5 dollars \rightarrow $\text{\$}5$

1 Circle the odd coin in each set.

a)



b)





c)







d)



2 Write the value of the odd coin or note in each set.

a)  \$ b)  \$

c)  ¢ d)  ¢

e)  f) 

3 Circle the odd coin or note in each set. Write the value of each one that you have circled.

a) 

b) 

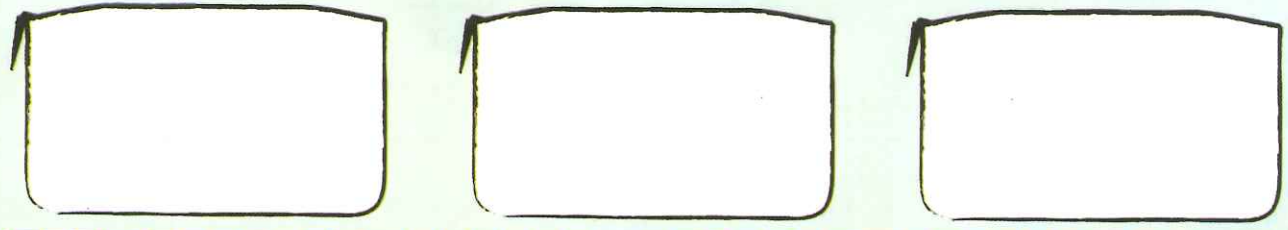
c) 

d) 

e) 

Try this

Draw 3 coins in each purse. Make each purse different.



Ordering coins



These coins are in order, starting with the smallest.

5¢ is less than 10¢.

10¢ is more than 5¢.

10¢ is less than 25¢.

25¢ is more than 10¢.

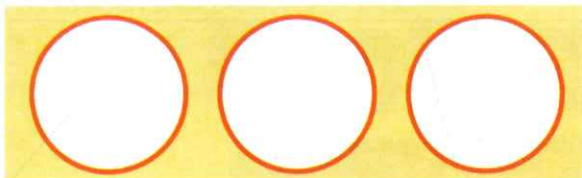
25¢ is less than 50¢.

50¢ is more than 25¢.

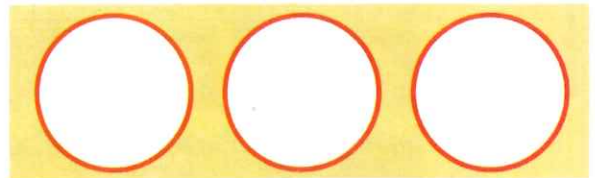
\$ is worth the most.

1 Draw each set of coins in order. Start with the smallest.

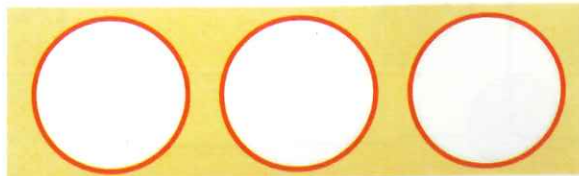
a)



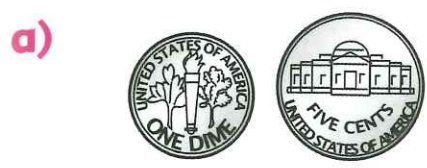
b)



c)



2 Complete each sentence to match the pairs of coins.



¢ is less than ¢.



\$ is less than ¢.



¢ is less than ¢.



¢ is more than ¢.



\$ is more than ¢.



\$ is more than ¢.

Try this

Join these in order. Start with the smallest value.



Equivalence

One 10 cents coin is worth two 5 cents coins.



One 25 cents coin is worth five 5 cents coins.



One 50 cents coin is worth two 25 cents coins.



1 The bags are worth the same. Draw coins to make this true.

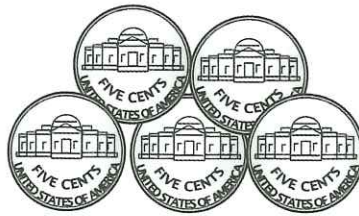
a) → is worth the same as →

b) → is worth the same as →

c) → is worth the same as →

d) → is worth the same as →

2 Join these sets of coins to match their total.



Try this

Look at the coins and notes for 25¢, 50¢, \$1 and \$5.
Complete the sentences.

and is worth the same as 50¢ coin.



and is worth the same as \$1 note.



, , , and is worth the same as \$5 note.



Finding totals

You can make different totals with coins.



$$5\text{¢} + 10\text{¢} = 15\text{¢}$$



$$5\text{¢} + 5\text{¢} + 5\text{¢} = 15\text{¢}$$

1 Add and write the total.



_____ ¢



_____ ¢



_____ ¢



_____ ¢



_____ ¢



_____ ¢



_____ ¢

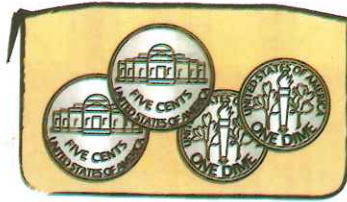
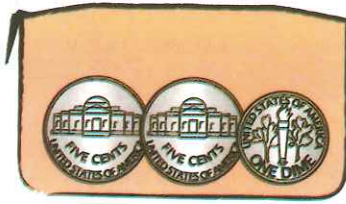


_____ ¢



_____ ¢

2 Add these coins. Join them to the matching label.



30¢

80¢

15¢

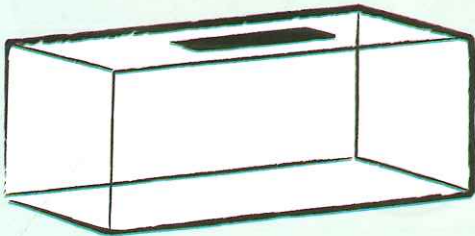
20¢

40¢

35¢

Try this

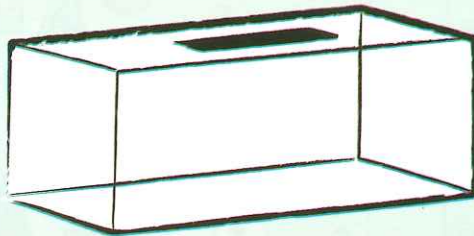
Make 50¢ in different ways.



Use 2 coins.



Use 4 coins.



Use 6 coins.

Shopping





1 Write the total cost for each group of items.

a)  total price ¢

b)  total price ¢

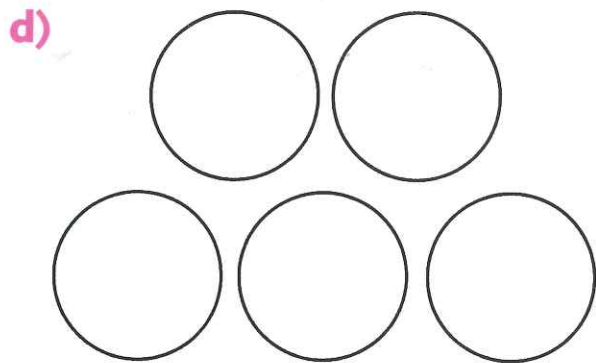
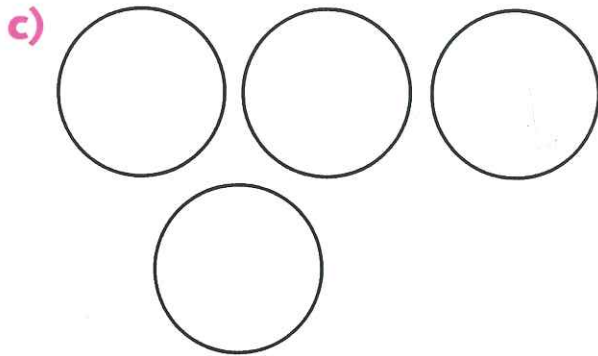
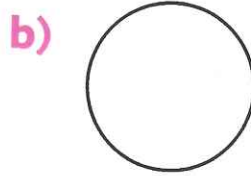
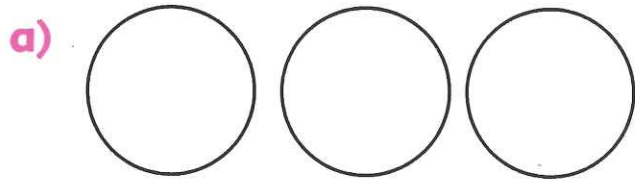
c)  total price ¢

d)  total price ¢

e)  total price ¢

f)  total price ¢

2 Draw the coins to pay for this in different ways.



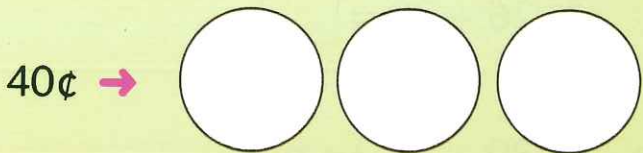
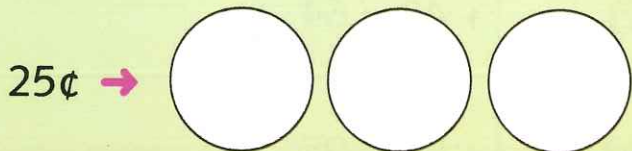
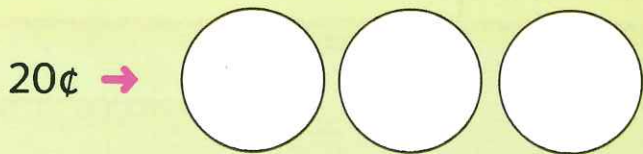
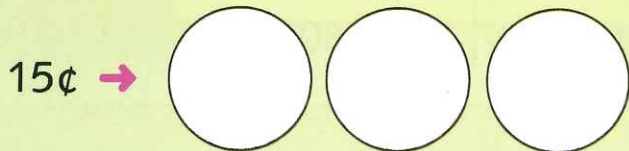
Try this

Look at the party shop. Draw items you can buy for exactly 25¢ and 50¢.



Assessment

Write the three coins that are worth these amounts.



Adding 2-digit numbers

1 Write the totals.

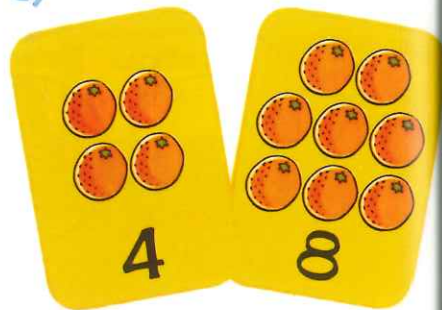
a)



b)



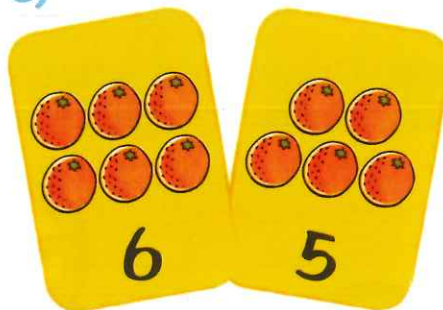
c)



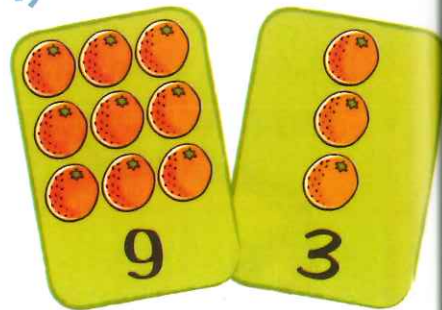
d)



e)



f)



2 Complete these.

a) $30 + \square = 50$

b) $60 + 30 = \square$

c) $\square + 40 = 50$

d) $50 + \square = 80$

e) $26 + 30 = \square$

f) $\square + 40 = 64$

g) $30 + \square = 63$

h) $\square + 55 = 95$

3 Answer these.

a) $26 + 3 = \square$

b) $34 + 4 = \square$

c) $32 + 7 = \square$

d) $25 + 3 = \square$

e) $38 + 1 = \square$

f) $16 + 3 = \square$

g) $21 + 5 = \square$

h) $25 + 4 = \square$

i) $32 + 7 = \square$

j) $43 + 6 = \square$

4 Answer these.

a)
$$\begin{array}{r} 32 \\ + 20 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 45 \\ + 13 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 21 \\ + 65 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 30 \\ + 47 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 61 \\ + 18 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 53 \\ + 45 \\ \hline \end{array}$$

g)
$$\begin{array}{r} 62 \\ + 31 \\ \hline \end{array}$$

h)
$$\begin{array}{r} 37 \\ + 42 \\ \hline \end{array}$$

i)
$$\begin{array}{r} 65 \\ + 34 \\ \hline \end{array}$$

j)
$$\begin{array}{r} 52 \\ + 37 \\ \hline \end{array}$$

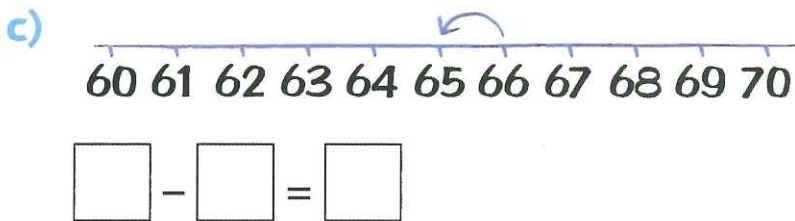
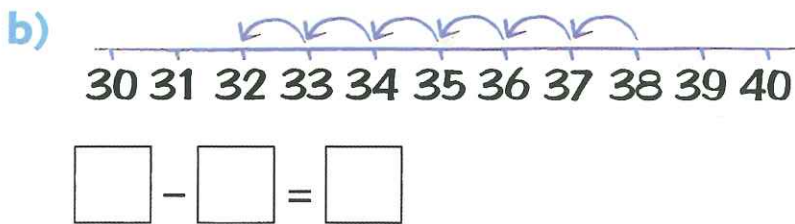
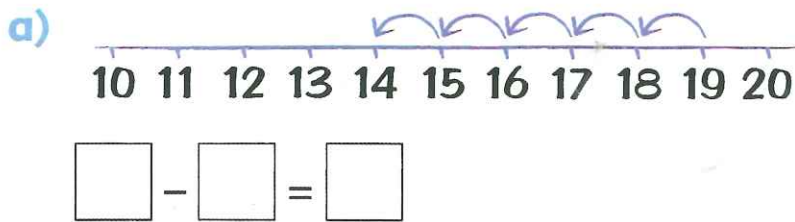
Try this

Choose 5 different ways to make this total.

$$\square + \square = 56$$

Subtracting 2-digit numbers

1 Write the subtraction shown on each number line.



2 Complete these.

a) $80 - \square = 40$

b) $70 - 30 = \square$

c) $\square - 40 = 20$

d) $50 - \square = 10$

e) $66 - 20 = \square$

f) $\square - 50 = 14$

g) $81 - \square = 51$

h) $\square - 20 = 65$

3 Answer these.

$$\begin{array}{r} \text{a)} \quad 4 \ 2 \\ - \ 2 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b)} \quad 3 \ 5 \\ - \ 1 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c)} \quad 6 \ 8 \\ - \ 3 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d)} \quad 5 \ 8 \\ - \ 4 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e)} \quad 6 \ 5 \\ - \ 2 \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f)} \quad 5 \ 9 \\ - \ 4 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{g)} \quad 7 \ 4 \\ - \ 3 \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} \text{h)} \quad 5 \ 7 \\ - \ 4 \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{i)} \quad 4 \ 5 \\ - \ 3 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{j)} \quad 8 \ 7 \\ - \ 3 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{k)} \quad 5 \ 8 \\ - \ 3 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{l)} \quad 7 \ 6 \\ - \ 5 \ 1 \\ \hline \end{array}$$

4 Answer these.

$$\text{a)} \quad 43 - 10 = \square$$

$$\text{b)} \quad 35 - 20 = \square$$

$$\text{c)} \quad 48 - 30 = \square$$

$$\text{d)} \quad 54 - 30 = \square$$

$$\text{e)} \quad 35 - 13 = \square$$

$$\text{f)} \quad 29 - 15 = \square$$

$$\text{g)} \quad 44 - 21 = \square$$

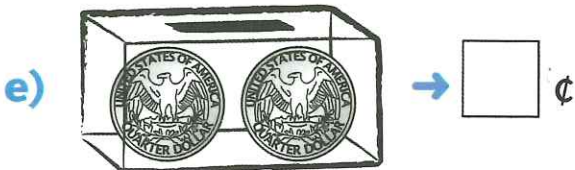
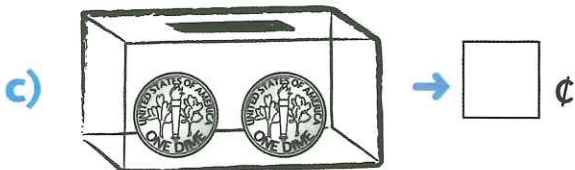
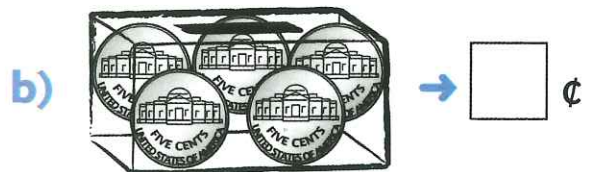
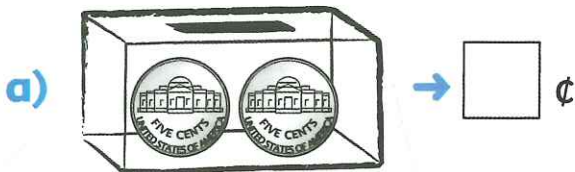
$$\text{h)} \quad 56 - 32 = \square$$

Money

1 Circle the odd coin in each set.



2 Write these totals.



3 How many of these coins do you need to pay for these? Choose from these coins and draw them next to each label.

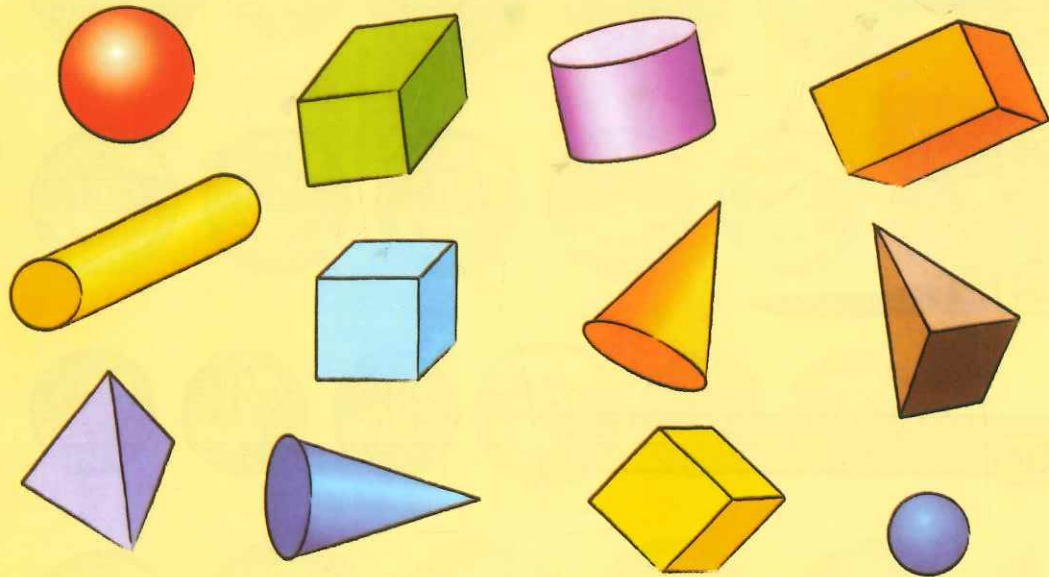


4 Draw any coins that you could use to pay for these.

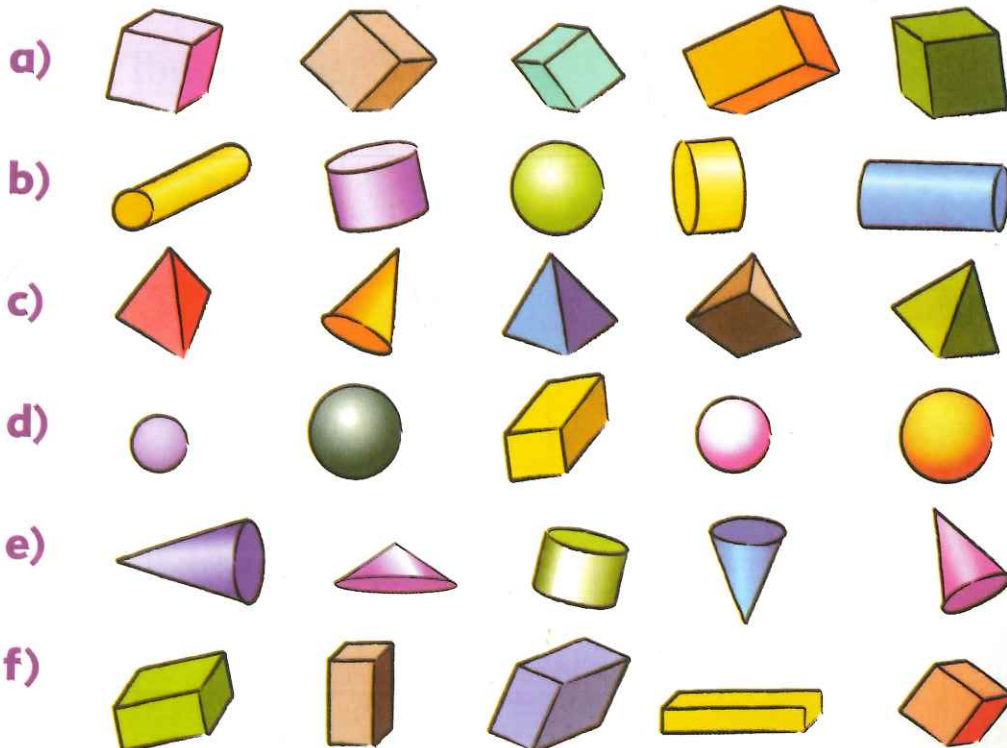


Comparing shapes

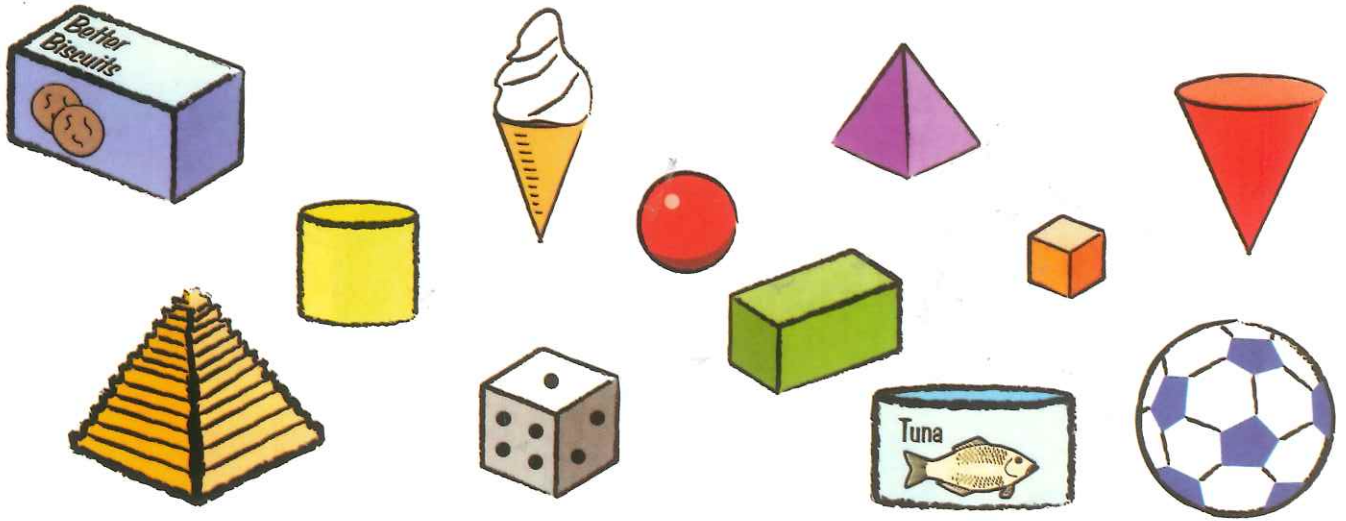
Some solid shapes look the same. Some solid shapes look different.



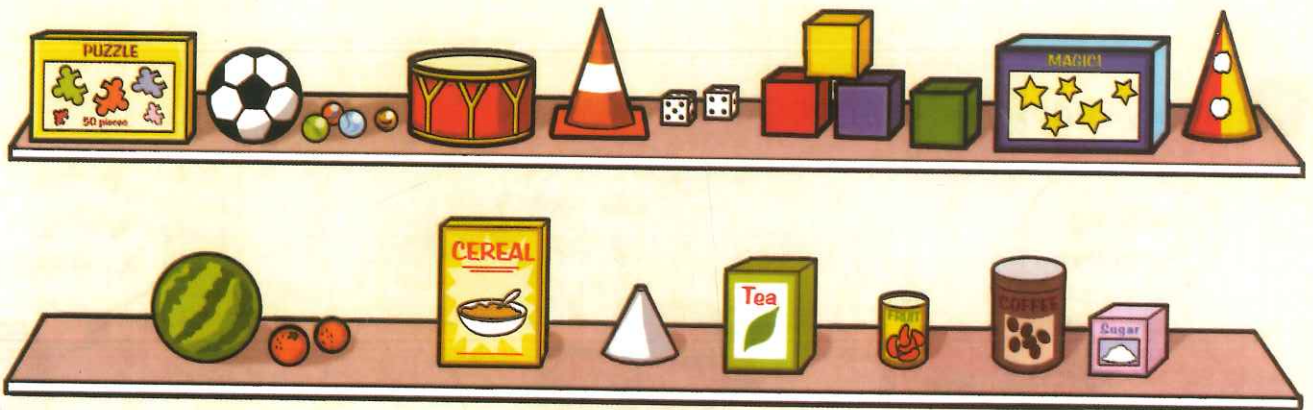
1 Circle the odd shape out in each set.

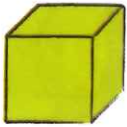

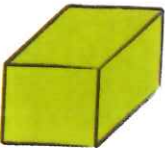




2 Join matching shapes.



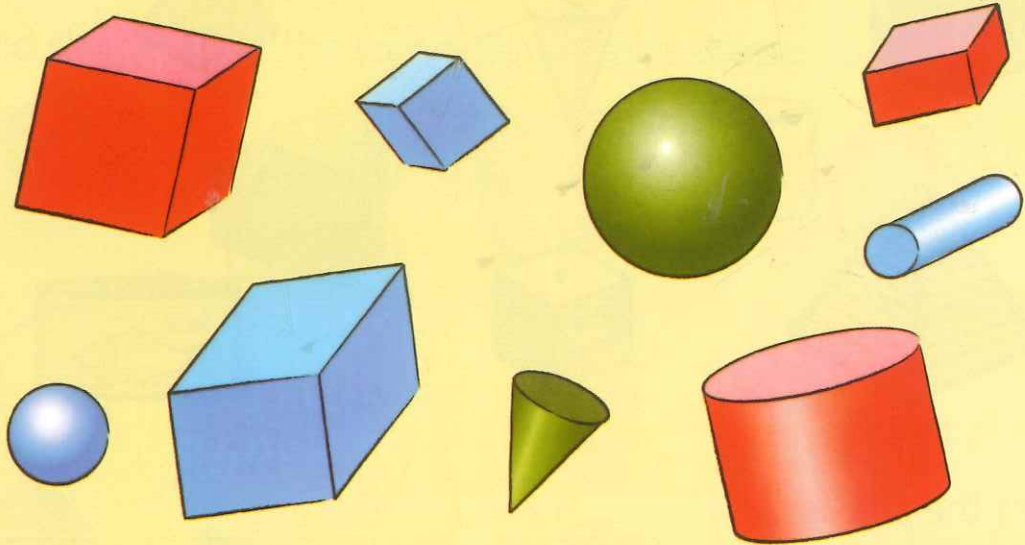
3 Count the shapes.



- a) 
- b) 
- c) 
- d) 
- e) 

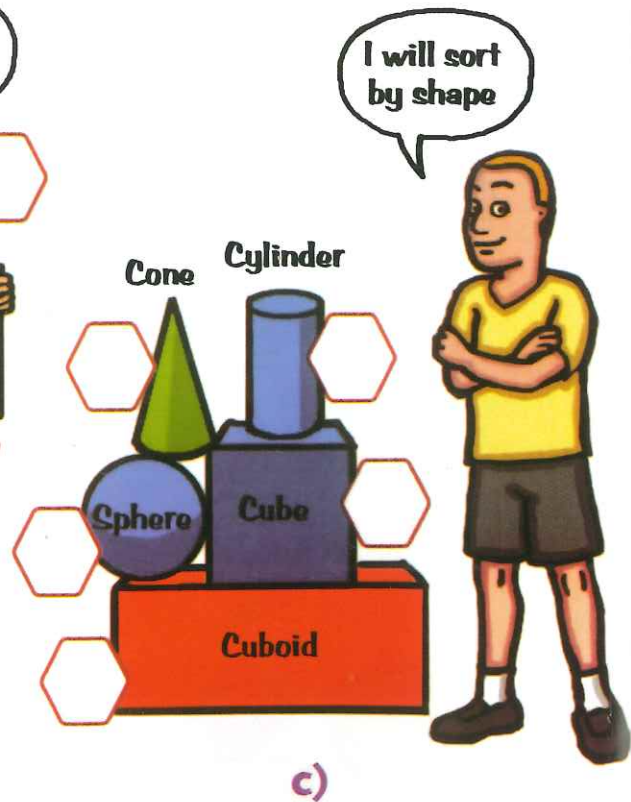
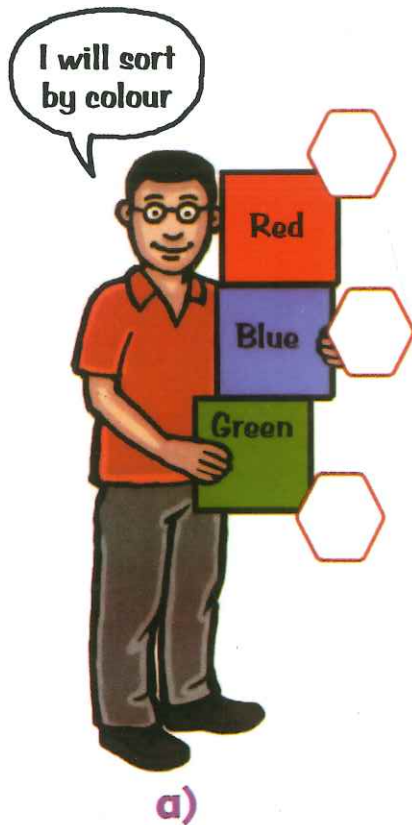
Sorting and matching

There are different ways to sort these shapes.

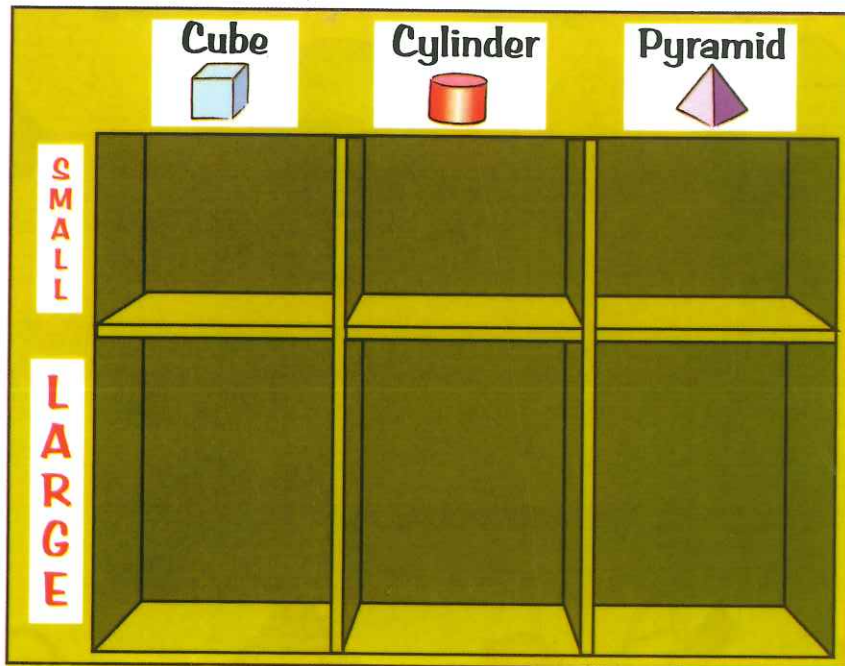
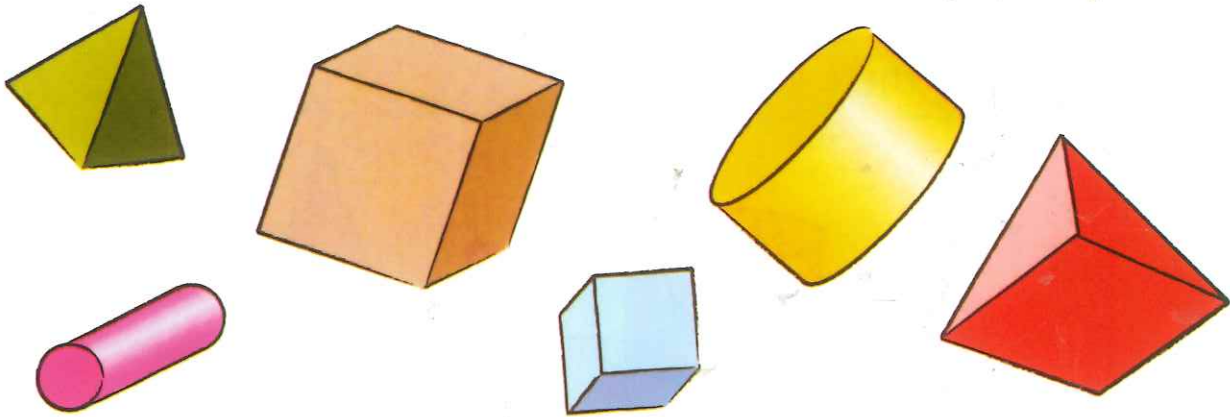


You can sort them by colour, by size or by shape.

1 How many shapes will go into each box?

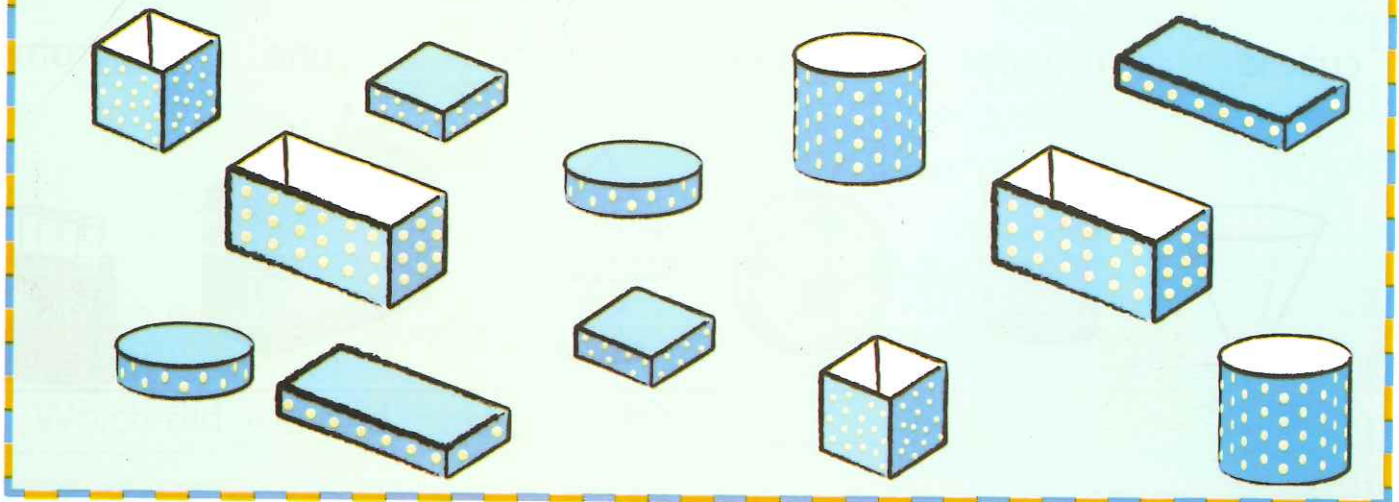


2 Sort these shapes. Draw a line to show where they belong.



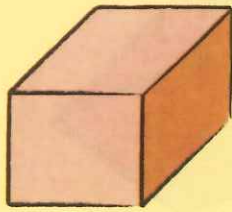
Try this

Match each lid to the correct box.

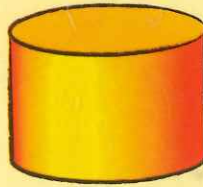


Naming solid shapes

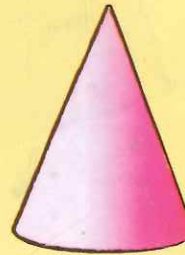
Learn the names of these solid shapes.



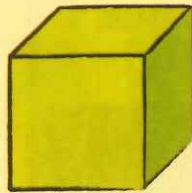
cuboid



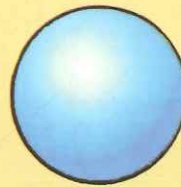
cylinder



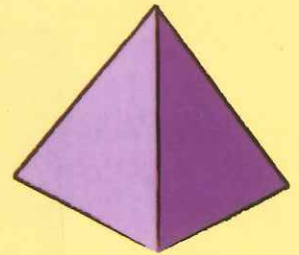
cone



cube



sphere

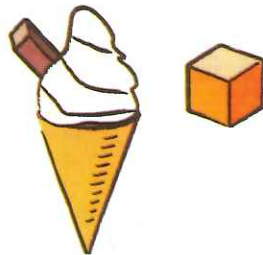


pyramid

1 Match each shape to the correct name.



cuboid



cylinder

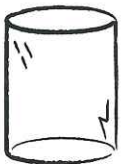
sphere



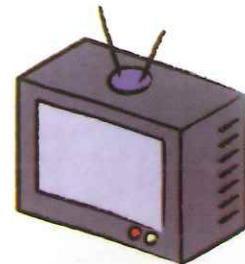
cube



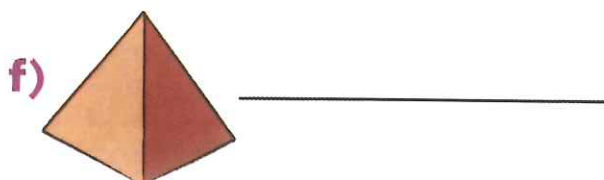
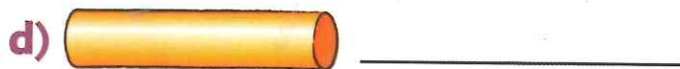
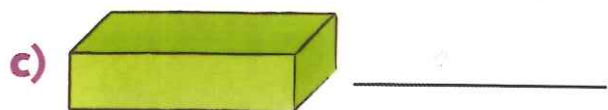
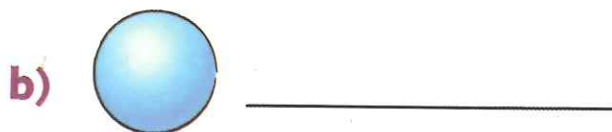
cone



pyramid



2 Name each shape.



Try this

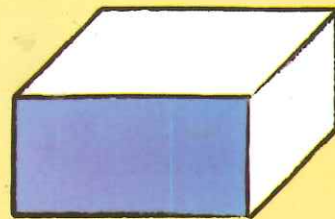
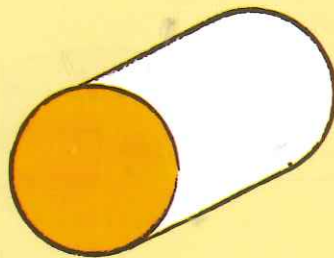
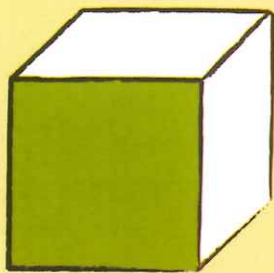
Draw each solid shape from question 2 carefully.

Which is the easiest to draw? _____

Which did you find most difficult? _____

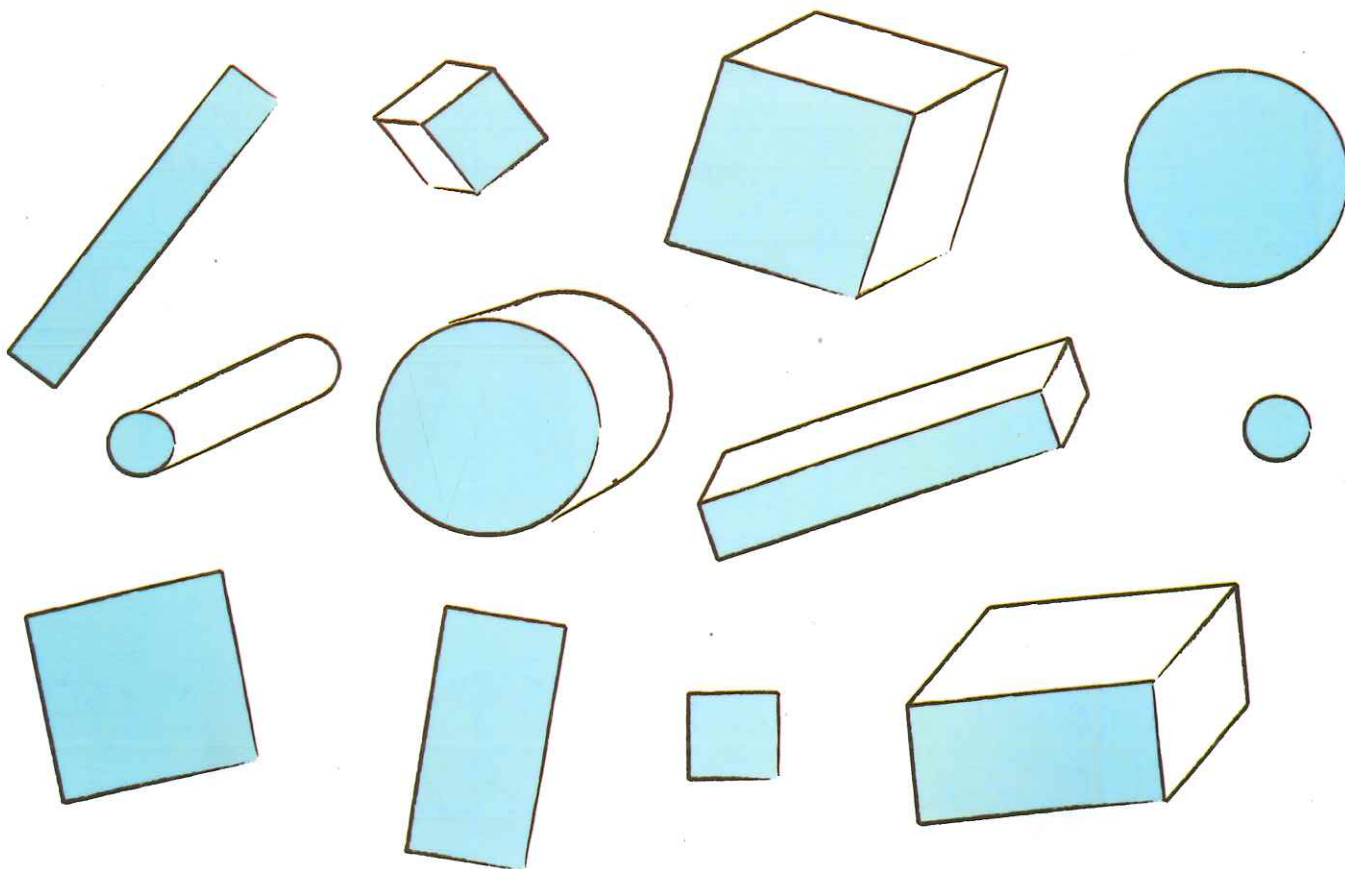
Solid shape properties

Compare solid shapes by looking at their faces.

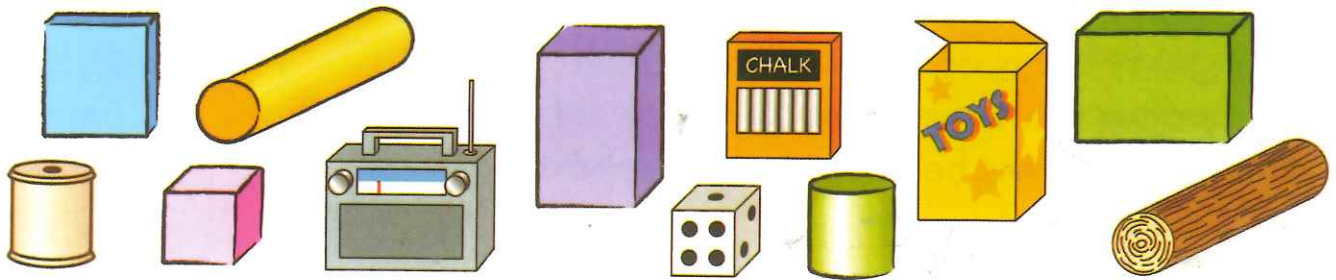


The faces of these shapes are different.

1 Join each shape to its matching face.

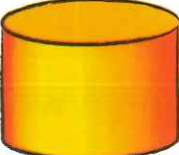



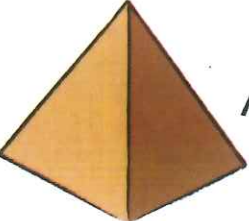

2 Match pairs of shapes that are the same.
Look at the faces to help you.



3 Write the shape names to complete these sentences.

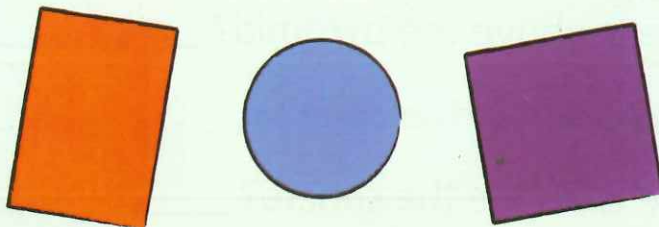
a)  A c_____ has a  square face.

b)  A c_____ has a face that is a  circle.

c)  A p_____ has a face that is a  triangle.

Try this

Find objects around you that have these faces.
Write the name of the object and the name of the shape.



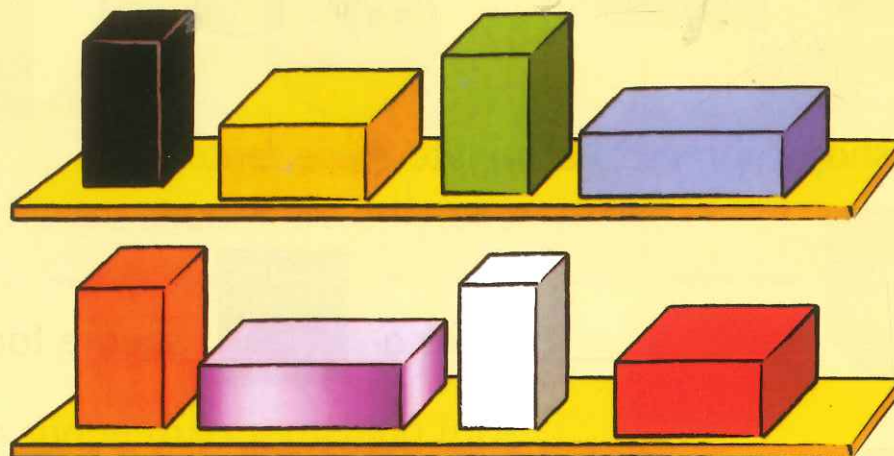
Position of objects

The orange box is **below** the black box.

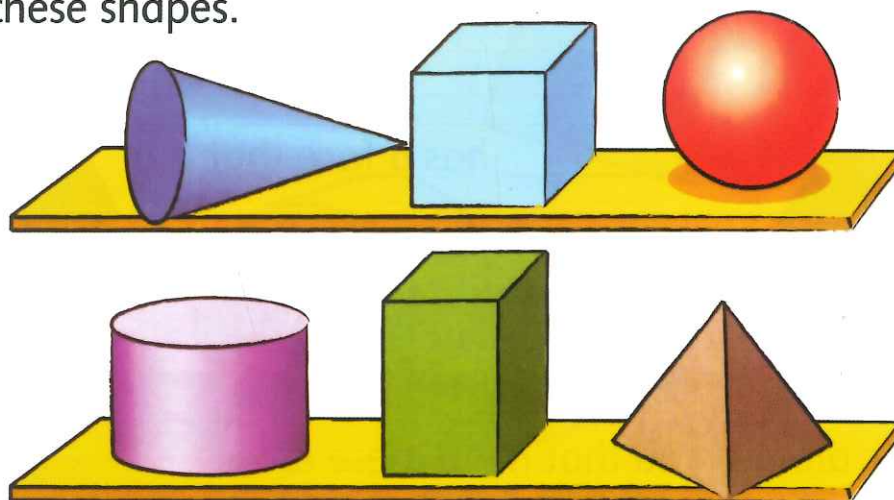
The green box is **above** the white box.

The yellow box is **between** the black and green boxes.

The purple box is **beside** the orange box.

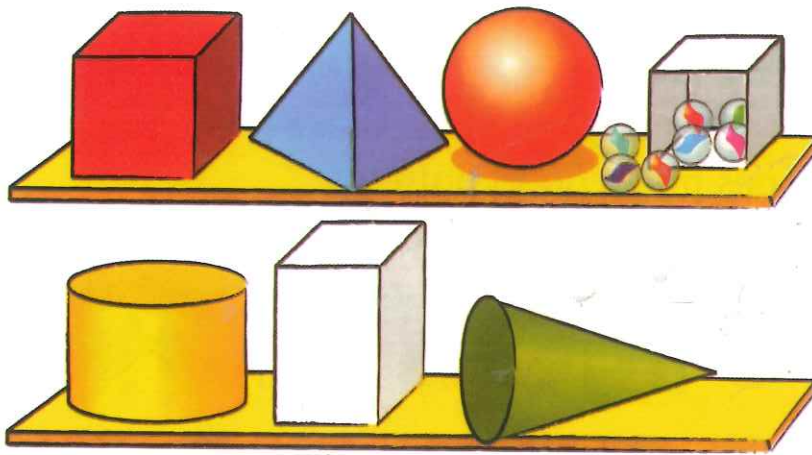


1 Look at these shapes.



- a) Which shape is above the pyramid? _____
- b) Which shape is below the cone? _____
- c) Which shape is beside the sphere? _____
- d) Which shape is between the cylinder and pyramid? _____

2 Look at these shapes.



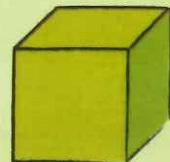
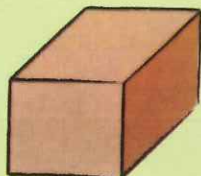
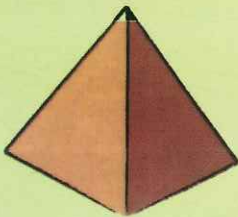
- a) Which shape is above the green cone? _____
- b) Which shape is below the blue pyramid? _____
- c) Which shape is beside the cuboid? _____
- d) Which shape is between the cube and sphere? _____
- e) How many marbles are inside the box?
- f) How many marbles are outside the box?

Assessment

Complete each name. Match each shape to its name.

c _ _ _ i d _ _ b e c _ _ _ n d _ _

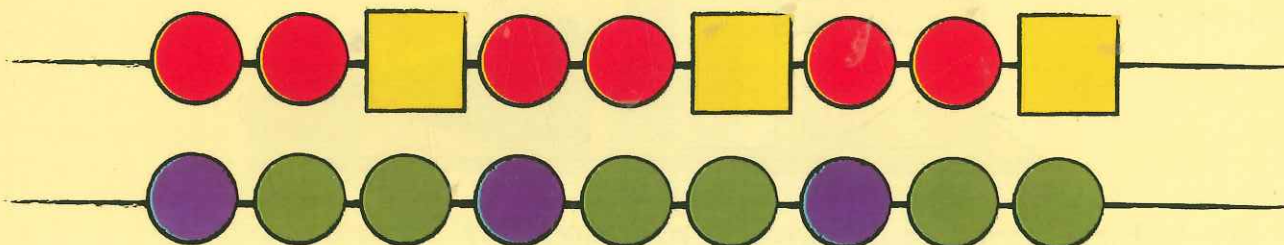
s _ _ _ _ e _ _ n e _ _ _ _ m i d



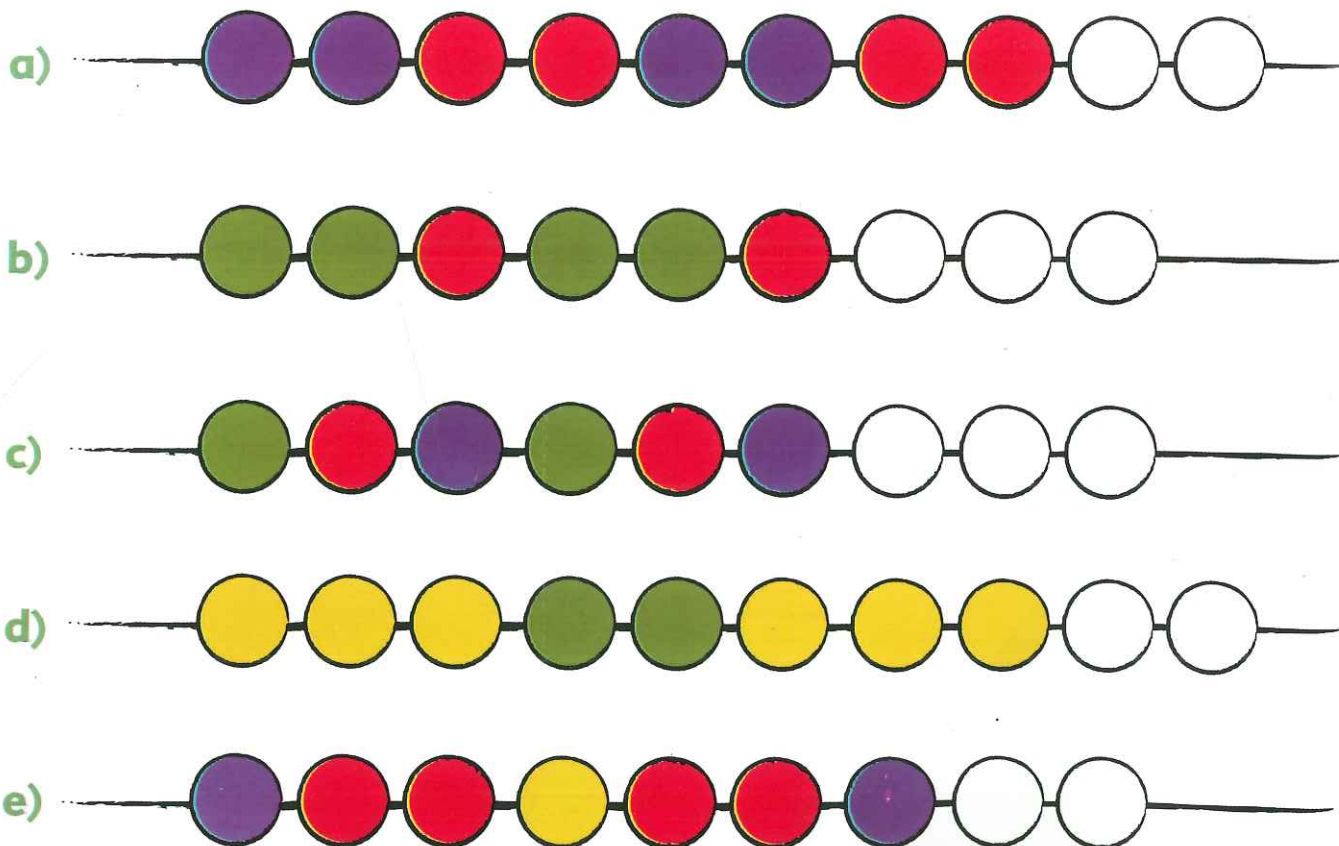
Unit 18 Flat shapes

Shape patterns

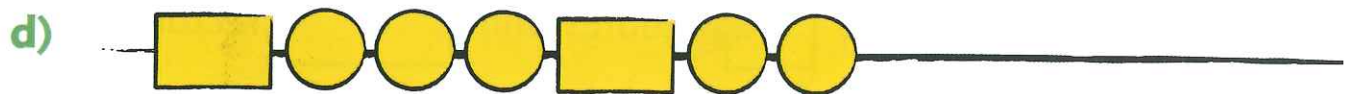
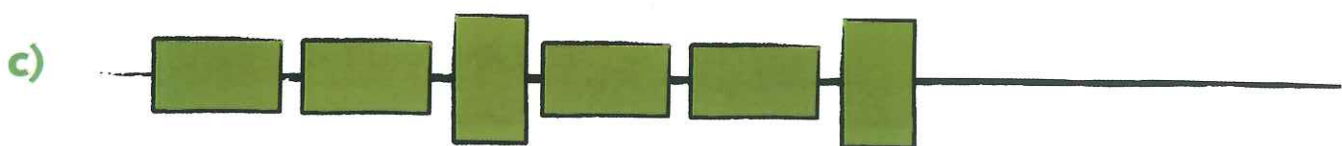
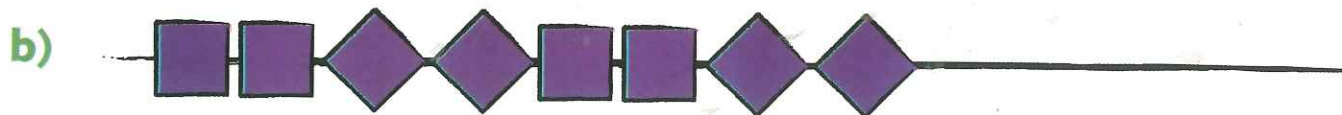
Colours and shapes make good patterns



1 Colour the shapes to continue the patterns.



2 Continue each pattern. Draw three more shapes on each necklace.



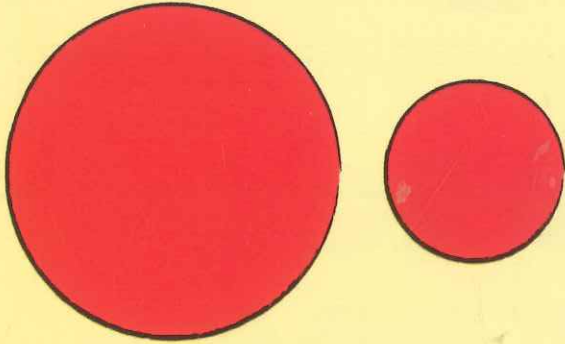
Try this

Draw a necklace and make your own patterns.
Choose 2 different colours.

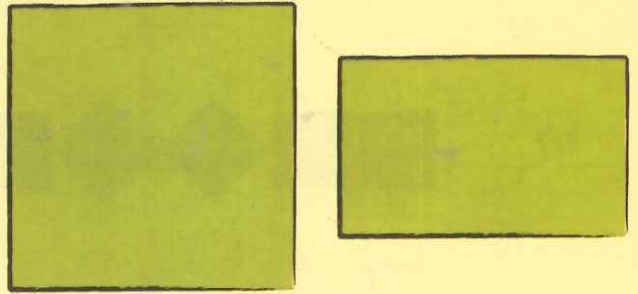


Matching shapes

Some shapes look the same. Some shapes look different.



These are the same.

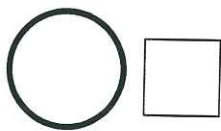
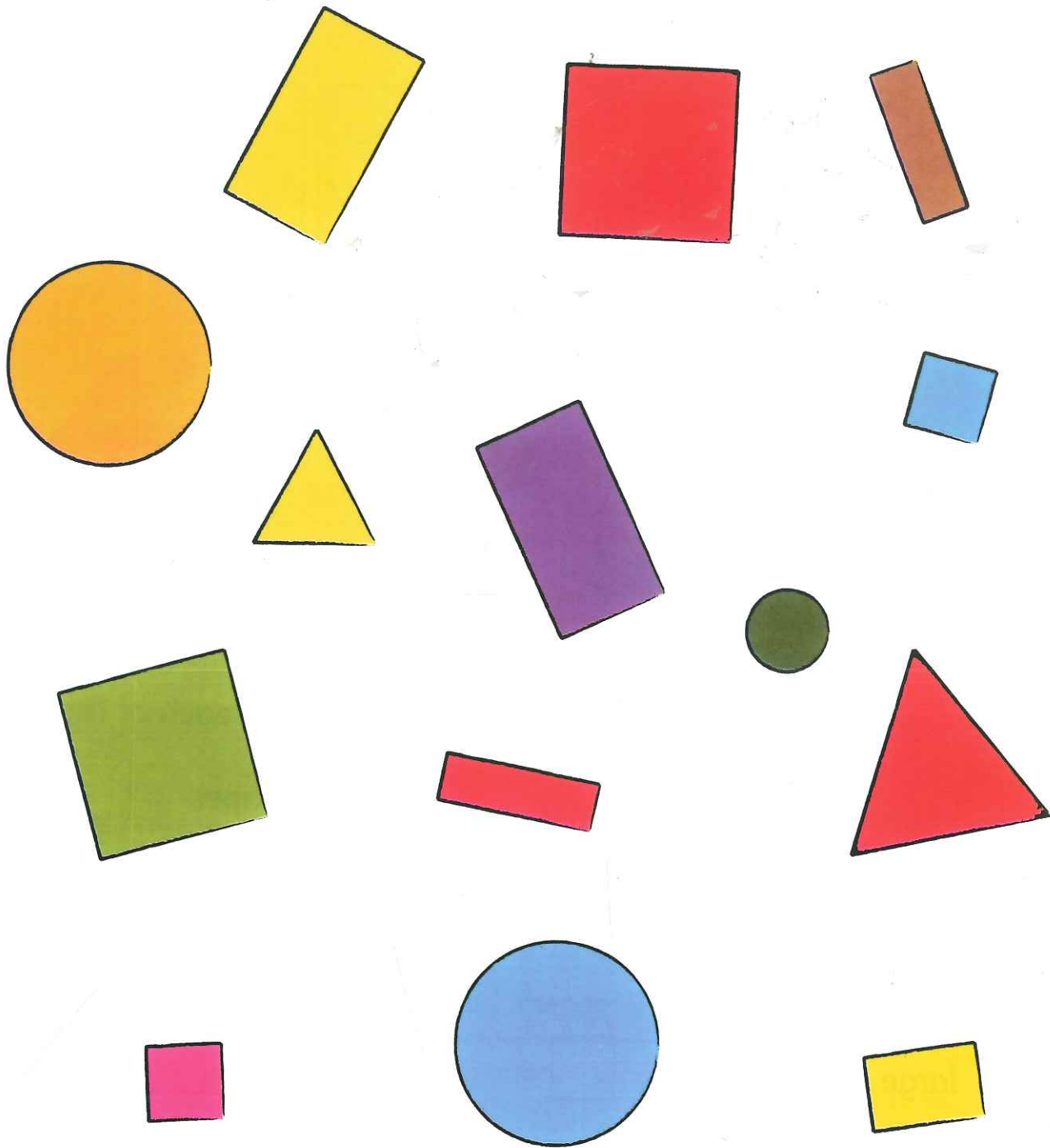


These are different.

1 Look for  circles,  squares and  rectangles.

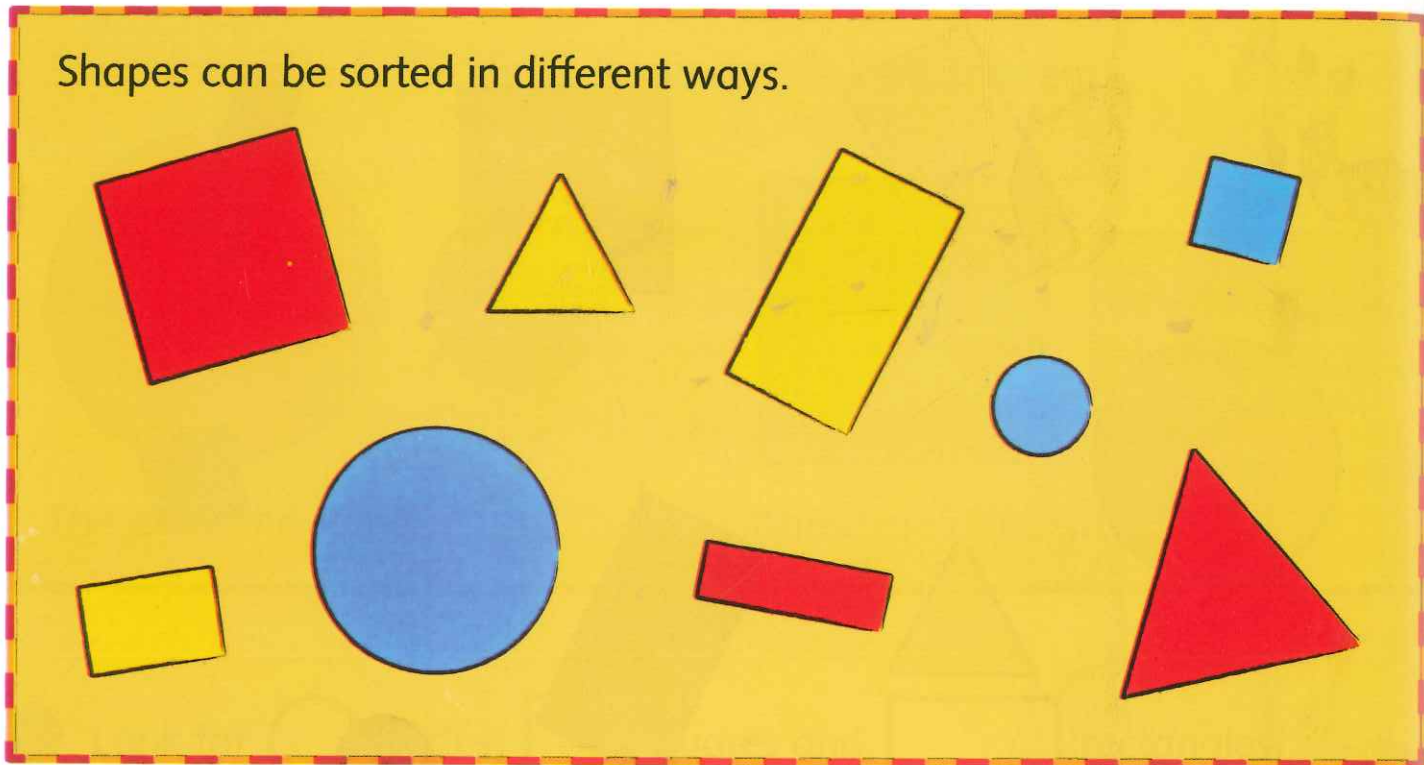


2 Count each shape.



Sorting shapes

Shapes can be sorted in different ways.



1 Look at the shapes above. How many are there of each of these?

a) large shapes

b) blue shapes

c) small shapes

d) small yellow shapes

e) large blue shapes

f)



g)



h)

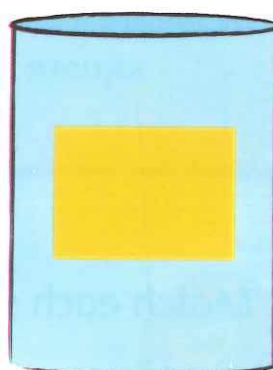
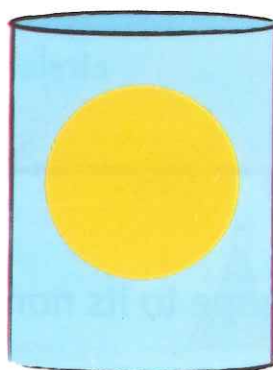
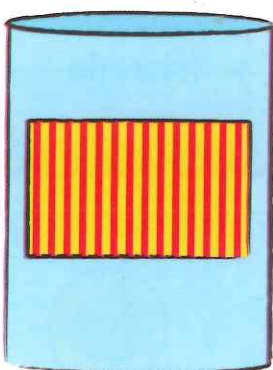
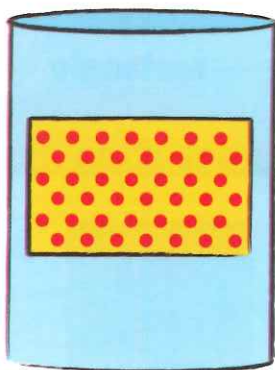
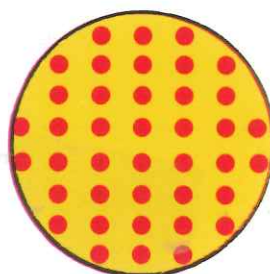
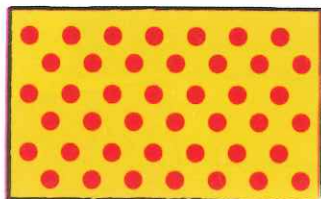


i)



2

Sort these shapes.
Join each shape to the matching pot



Try this

Draw and colour shapes to match the sort.

rectangles



red shapes

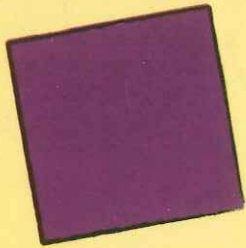


red rectangles

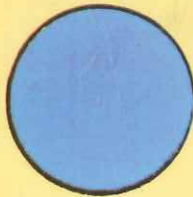


Naming shapes

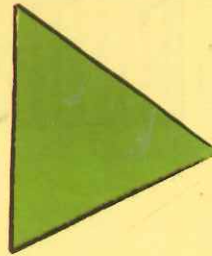
Learn the names of these shapes.



square



circle

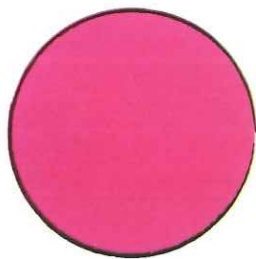
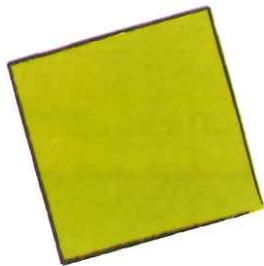


triangle



rectangle

1 Match each shape to its name.

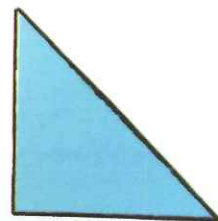


square

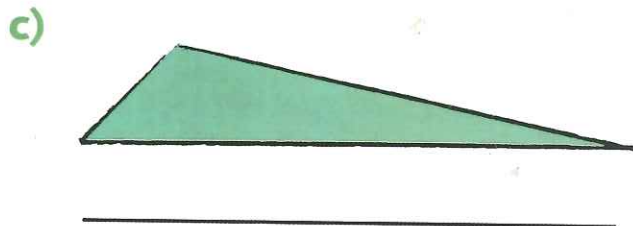
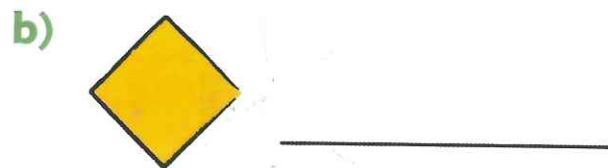
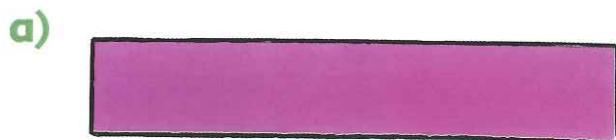
triangle

circle

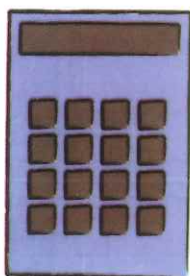
rectangle



2 Write the name for each shape.



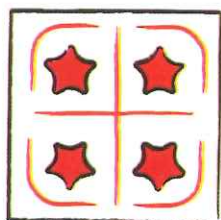
3 Join each shape to the matching name.



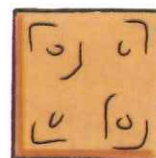
rectangle



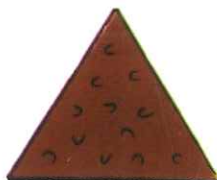
square



triangle



circle



Try this

Draw these shapes as carefully as you can.

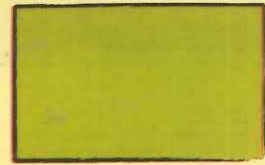
- a) circle
- b) rectangle
- c) square
- d) triangle

Squares and rectangles

A square is a special rectangle.



square

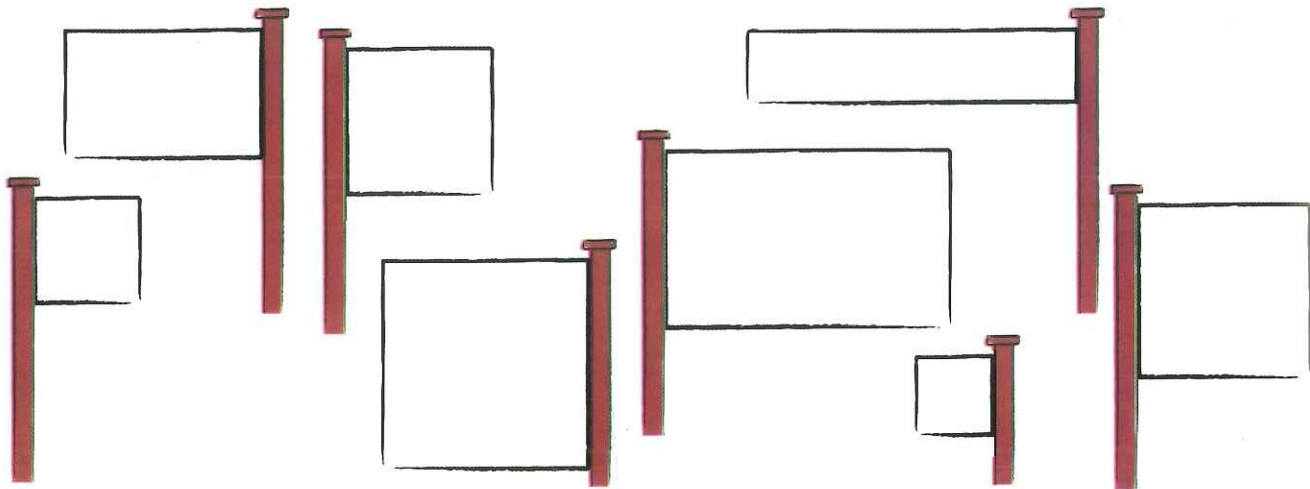


rectangle

A square is special.

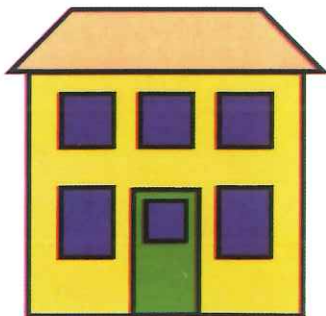
The sides of a square are all the same length.

1 Colour the squares red and the rectangles blue.

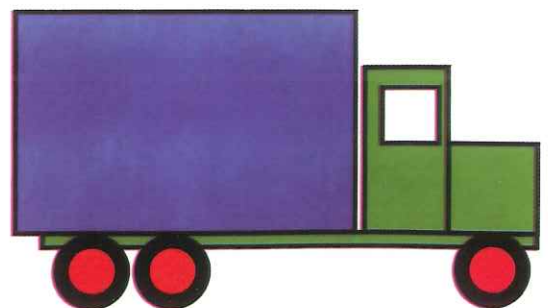


2 Count how many squares you can see in each picture.

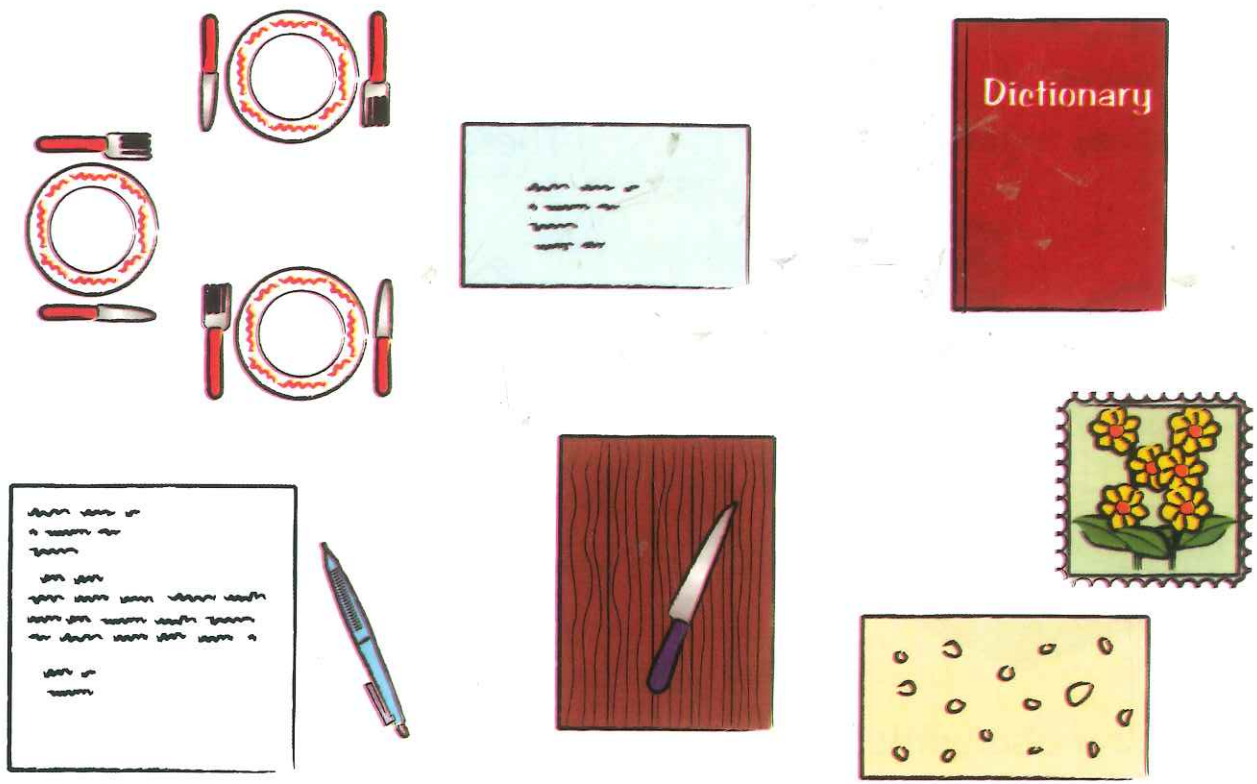
a) squares



b) squares



3 Count how many there are of each shape. Complete these sentences.



There are rectangles.

There are circles

There are squares.

Assessment

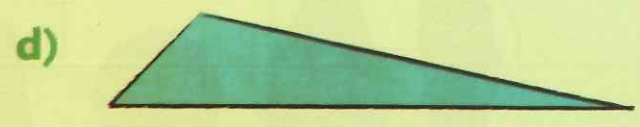
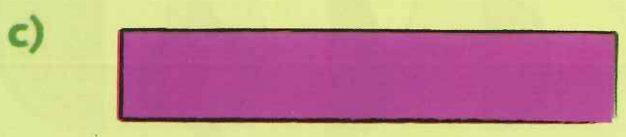
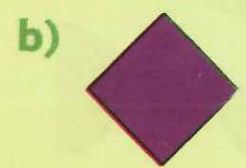
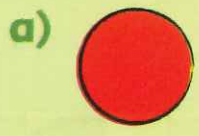
Complete each name. Match each shape to its name.

r _ _ _ a _ g _ _

_ _ u _ _ e

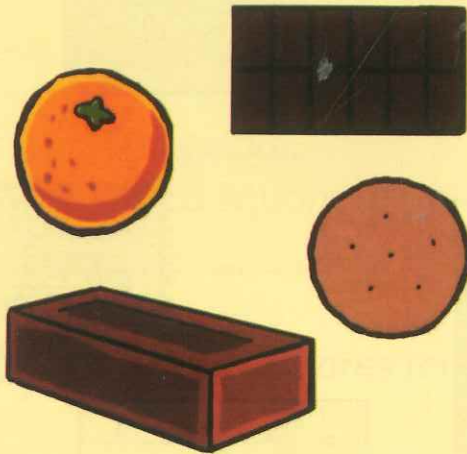
_ _ _ n g _ _

c _ _ _ e

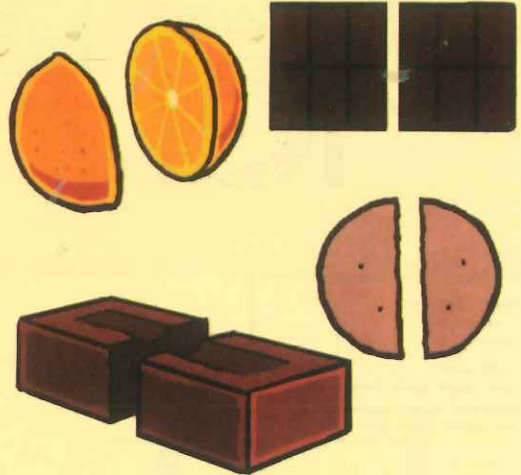


Halves and wholes

These show whole objects.



These show halves.



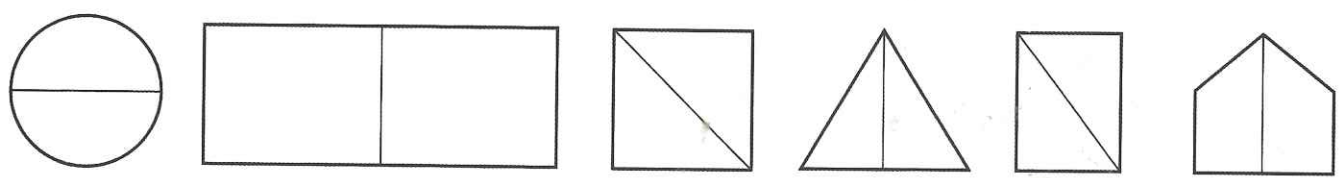
One-half is also written as $\frac{1}{2}$.

1 a) Circle the whole objects.

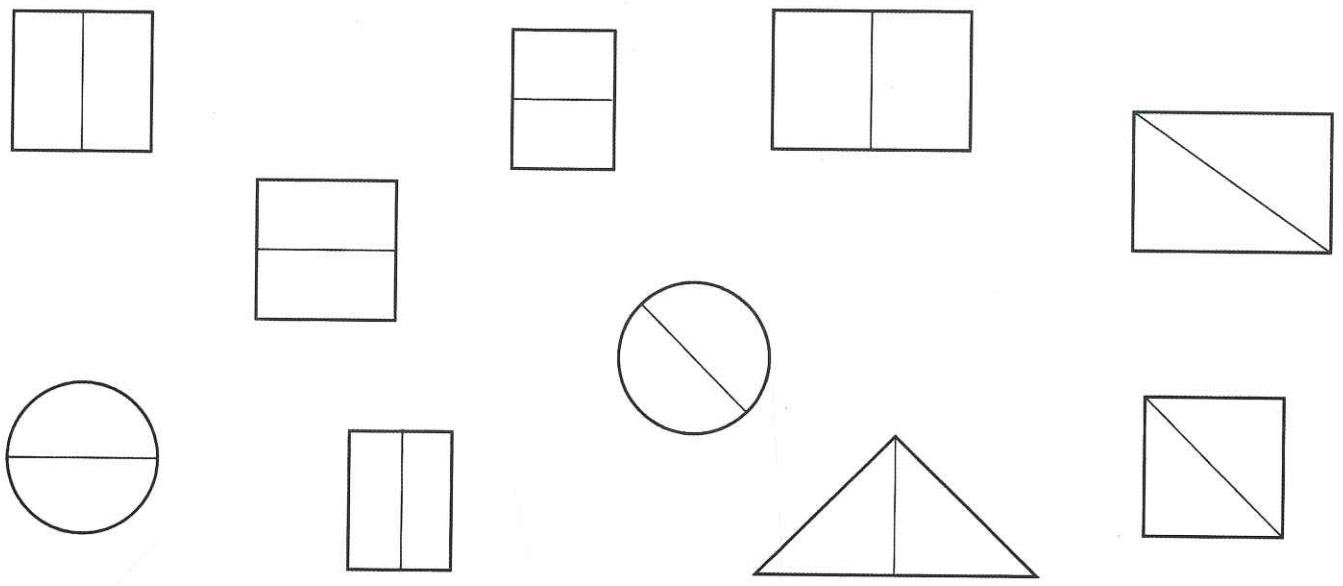
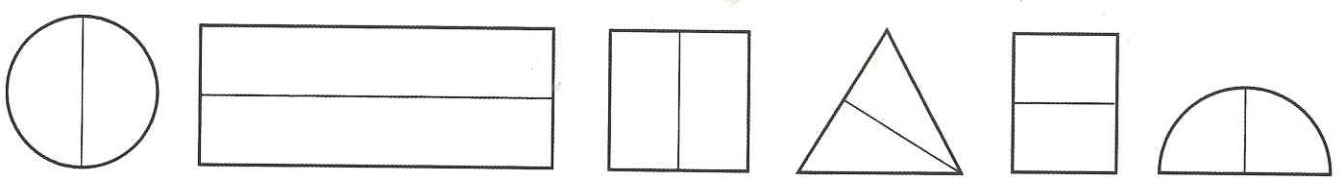
b) Join the matching halves.



2 Colour $\frac{1}{2}$ of each shape.

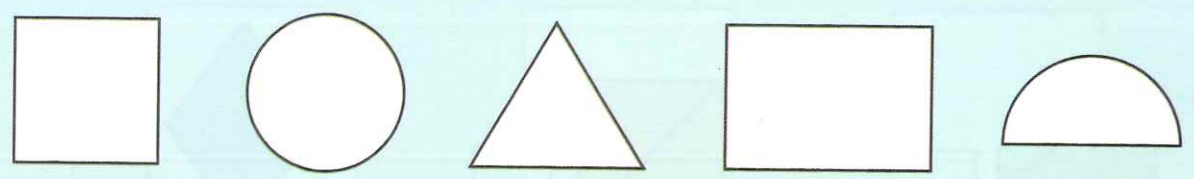


3 Colour $\frac{1}{2}$ of each shape.



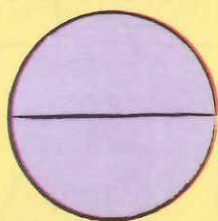
Try this

Draw a line to halve each shape.

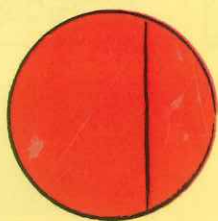


$\frac{1}{2}$ as equal parts

Fractions are equal parts of a whole.



$\frac{1}{2}$



not $\frac{1}{2}$



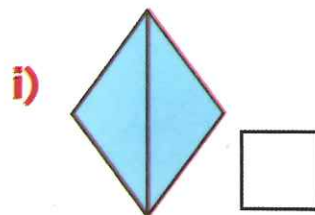
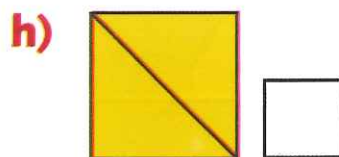
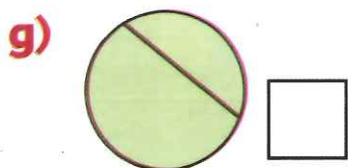
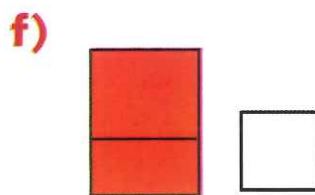
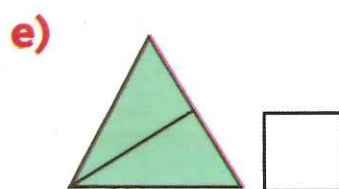
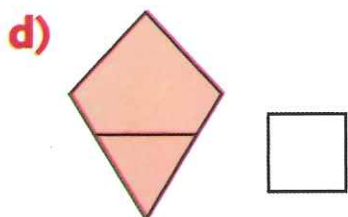
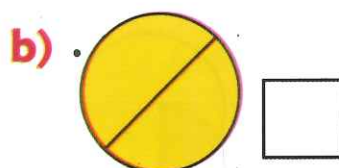
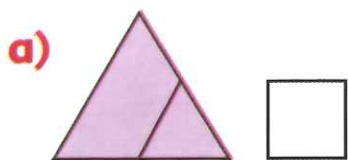
$\frac{1}{2}$



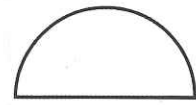
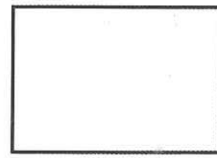
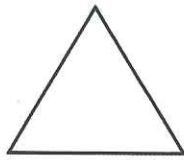
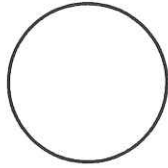
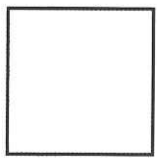
not $\frac{1}{2}$

Halving makes two equal parts.

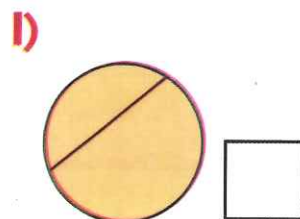
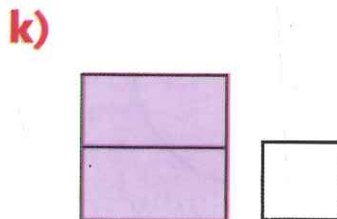
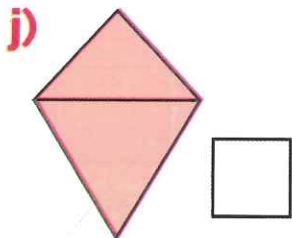
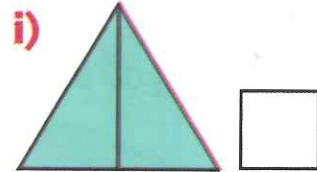
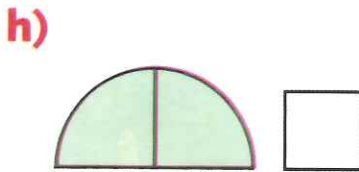
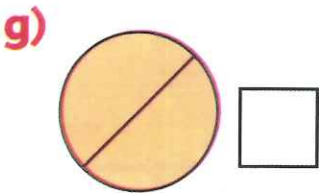
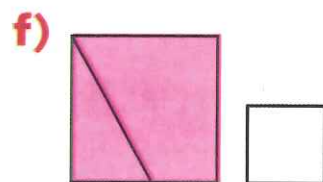
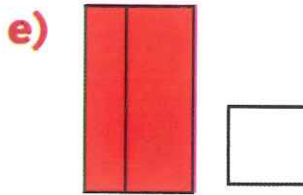
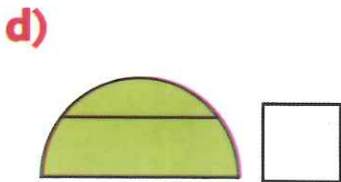
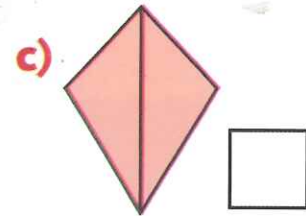
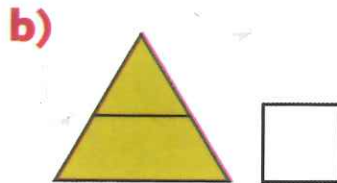
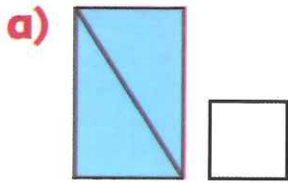
1 Tick the shapes that show **half**.



2 Draw a line on each shape to show exactly half.

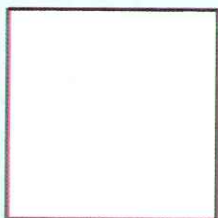


3 Tick the shapes that show two halves.
Cross the shapes that do not show halves.



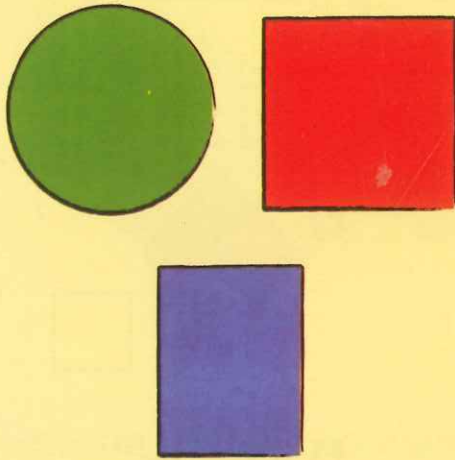
Try this

Draw a line to **halve** each square. Make each line different.

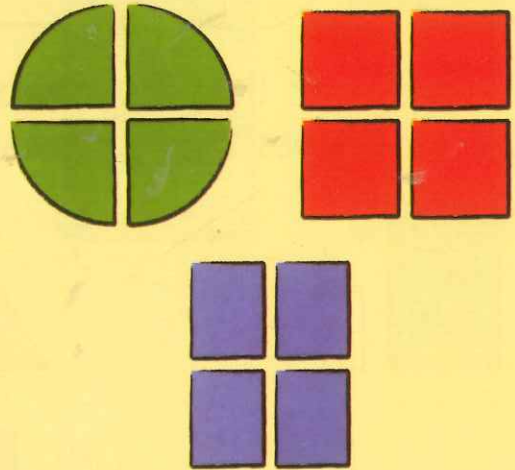


Quarters

These show whole objects.

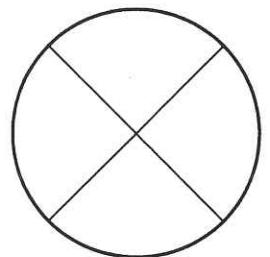
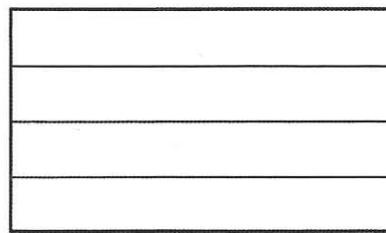
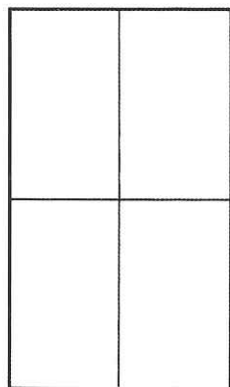
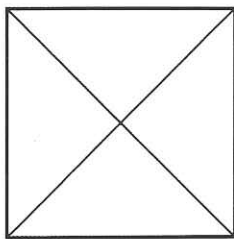
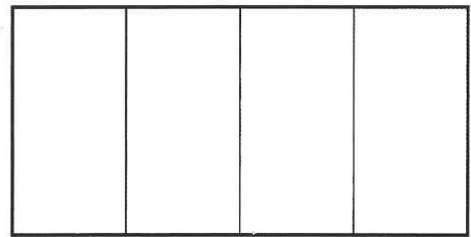
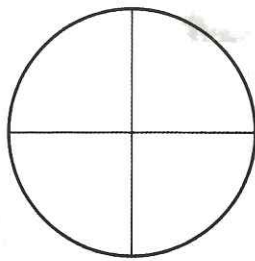
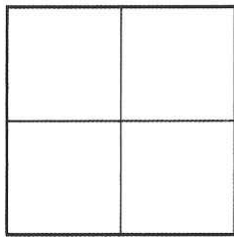


These show quarters.

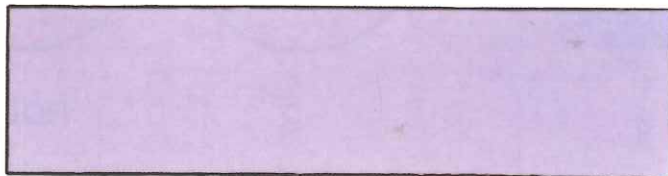
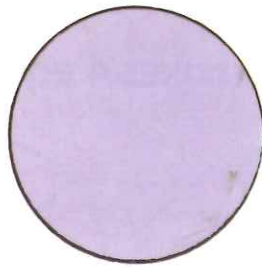
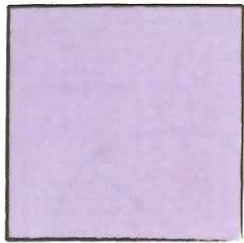


One-quarter is also written as $\frac{1}{4}$.

1 Colour $\frac{1}{4}$ of each shape.



2 Draw lines to **quarter** each shape.



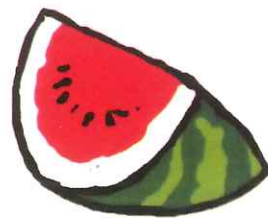
3 Find the wholes, halves and quarters.
Draw lines from each shape to match.



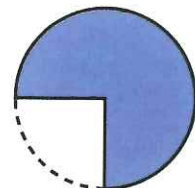
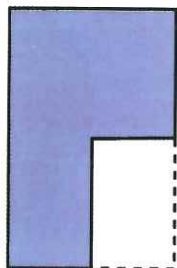
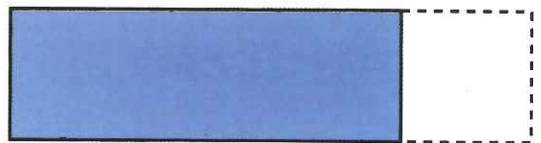
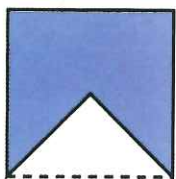
1 whole

$\frac{1}{2}$ half

$\frac{1}{4}$ quarter

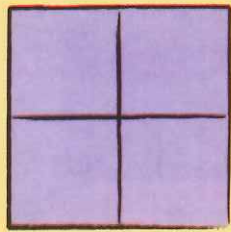


4 Match each $\frac{1}{4}$ shape to make a whole.

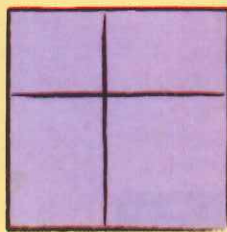


$\frac{1}{4}$ as equal parts

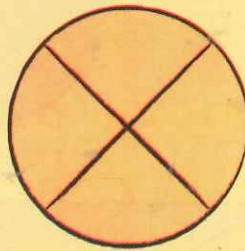
Cutting an object into quarters makes 4 equal parts.



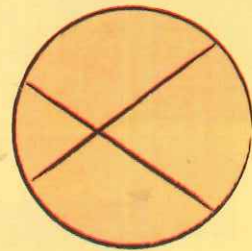
$\frac{1}{4}$



not $\frac{1}{4}$

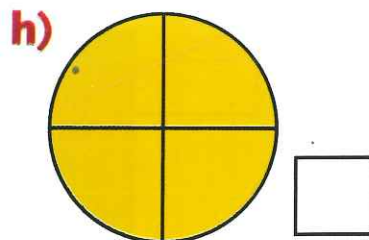
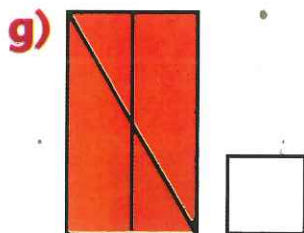
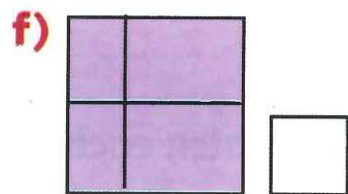
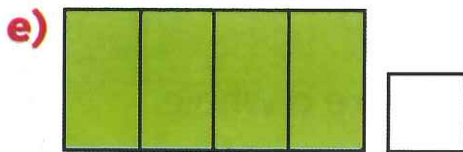
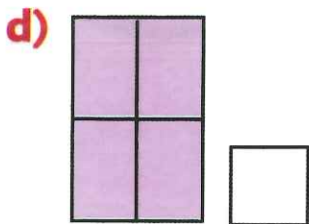
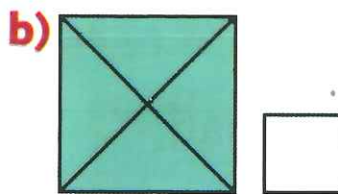
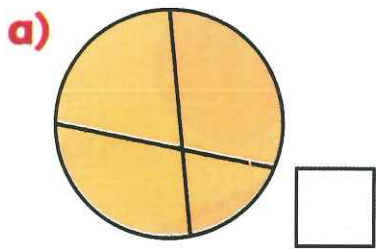


$\frac{1}{4}$

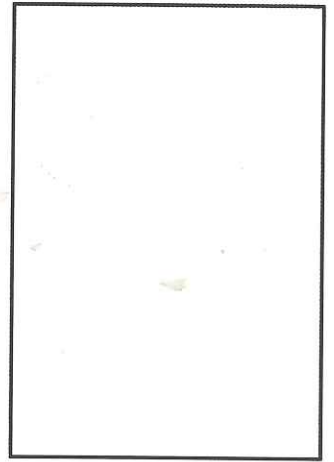
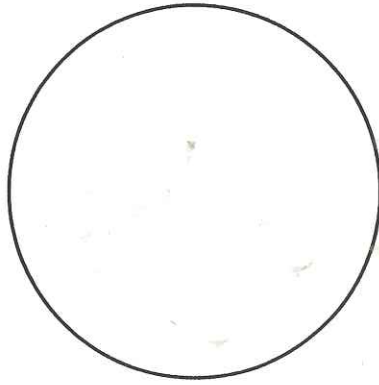
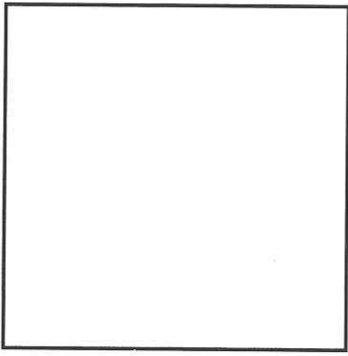


not $\frac{1}{4}$

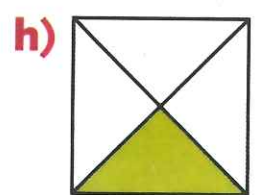
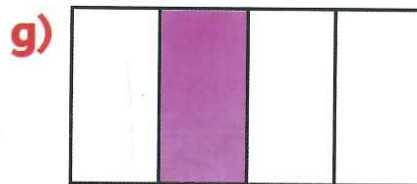
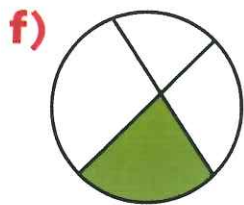
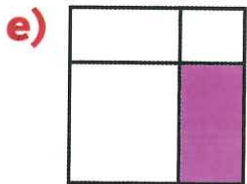
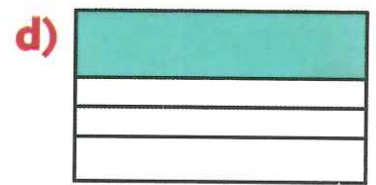
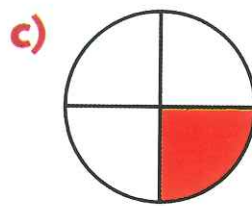
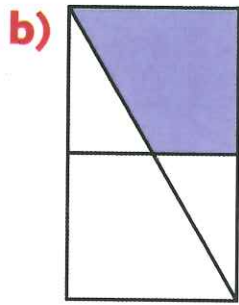
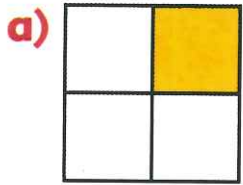
1 Tick the shapes that show quarters.



2 Draw lines and colour $\frac{1}{4}$ of each of these.

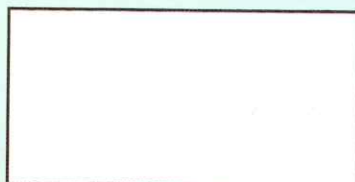
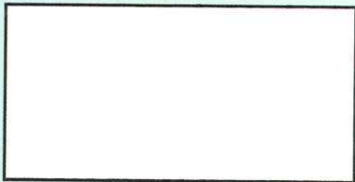


3 Cross through all the shapes that do not show quarters.



Try this

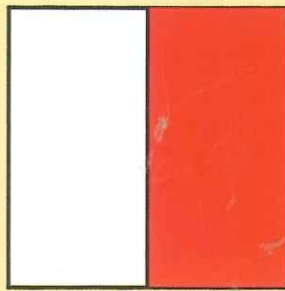
Draw lines to quarter each rectangle.
Quarter each rectangle differently.



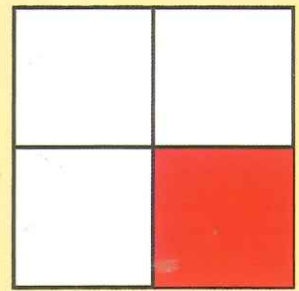
Halves and quarters



The whole square is red.



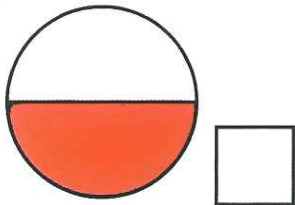
Half the square is red.



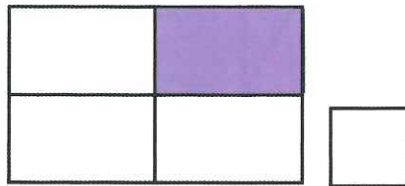
Quarter of the square is red.

1 Write $\frac{1}{2}$ or $\frac{1}{4}$ to show each fraction.

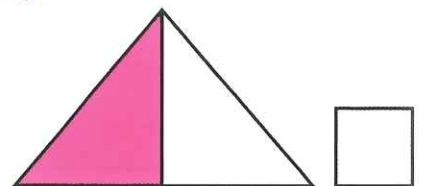
a)



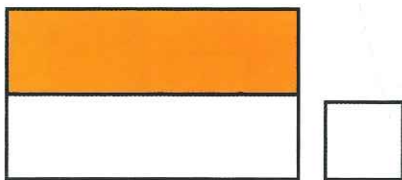
b)



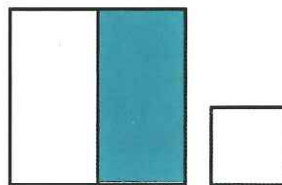
c)



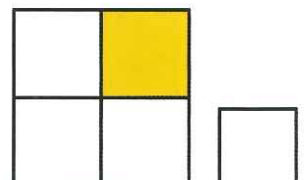
d)



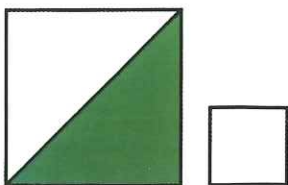
e)



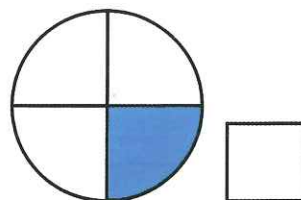
f)



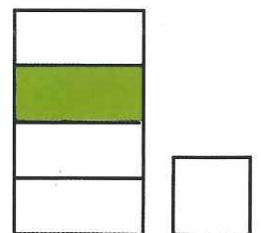
g)



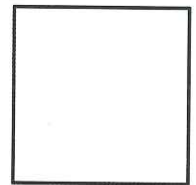
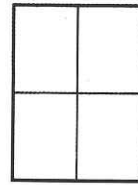
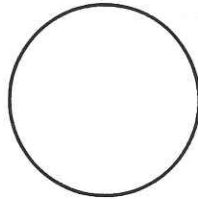
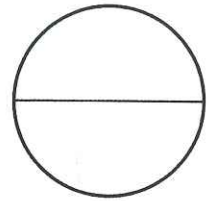
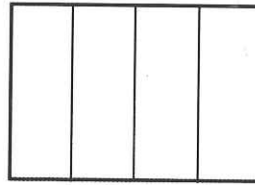
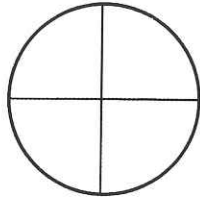
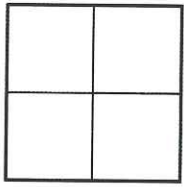
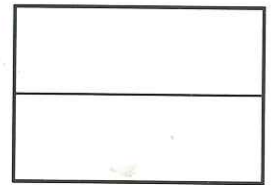
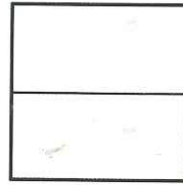
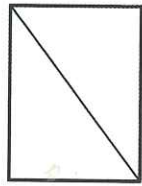
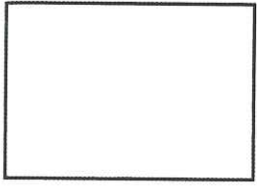
h)



i)

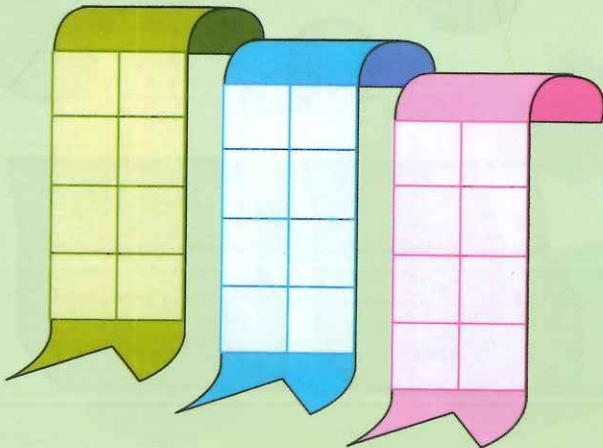


- 2** Colour all the whole shapes red.
 Colour all the half shapes blue.
 Colour all the quarter shapes green.

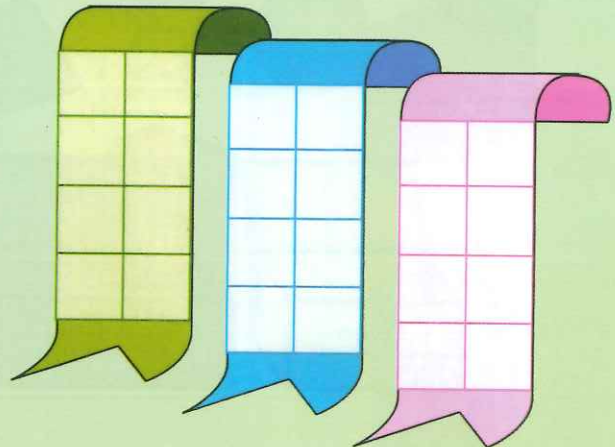


Assessment

- 1** Colour $\frac{1}{2}$ of these ribbons.
 Make each pattern different.

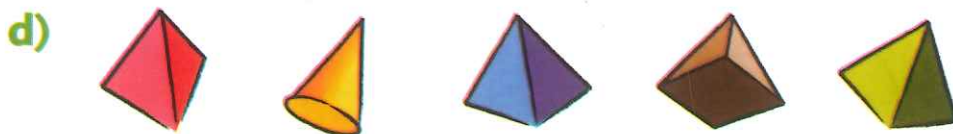
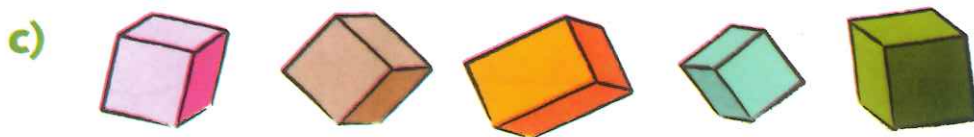
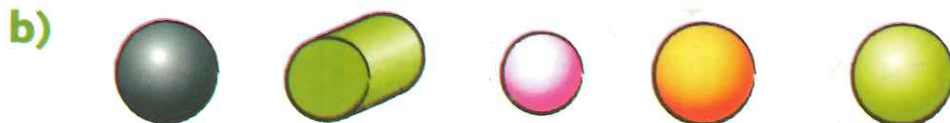


- 2** Colour $\frac{1}{4}$ of these ribbons.
 Make each pattern different.

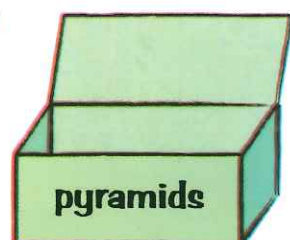
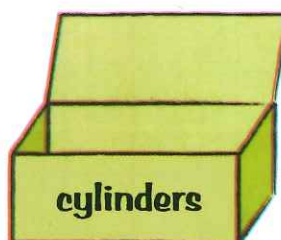
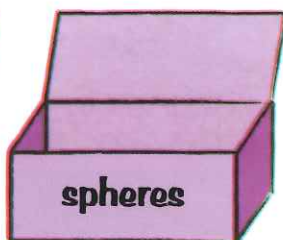
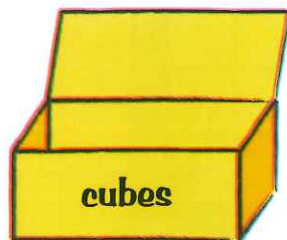
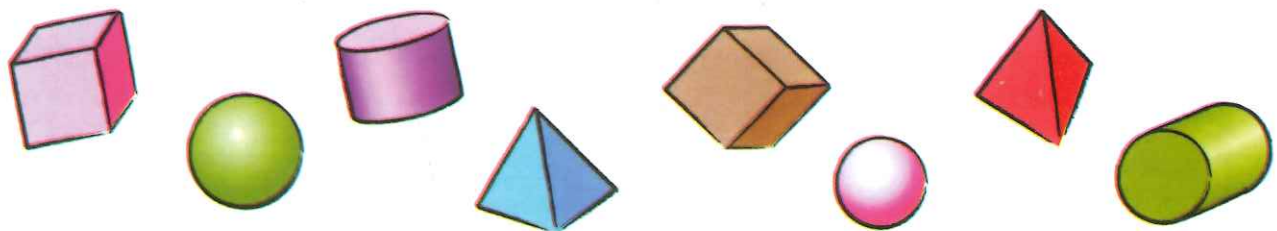


Solid shapes

1 Cross out the odd shape in each set.



2 a) Draw lines to join each shape to the correct box.



b) Which shapes are between the cubes and cylinders? _____

3

Circle the odd one out in each set. Complete the sentences below. Use these words.

cube

pyramid

sphere

cylinder

a)



These are _____. The odd one out is a _____.

b)



These are _____. The odd one out is a _____.

c)



These are _____. The odd one out is a _____.

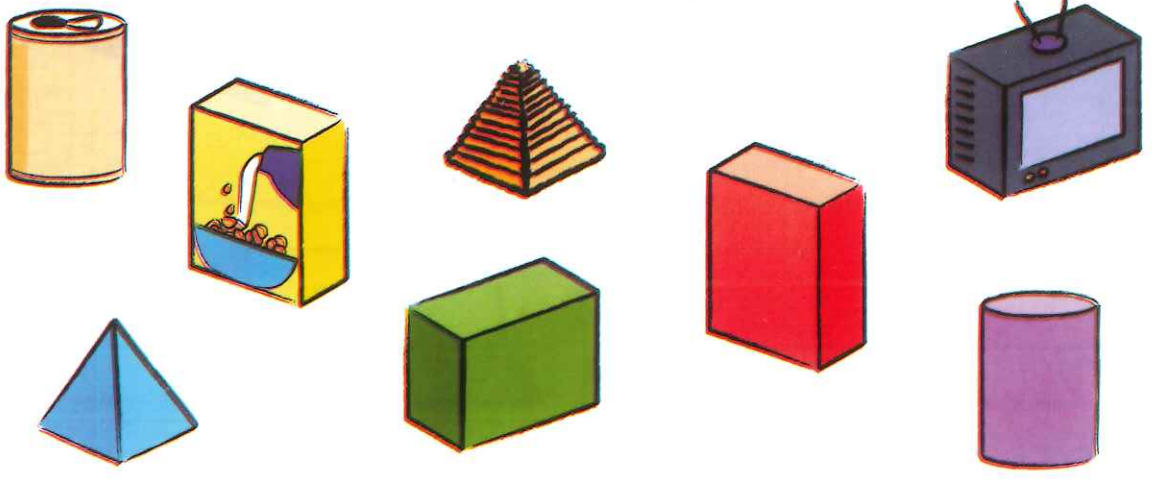
d)



These are _____. The odd one out is a _____.

4

Match pairs of shapes that are the same. Look at the faces to help you.



Flat shapes

1 Draw and colour three more shapes to continue these patterns.

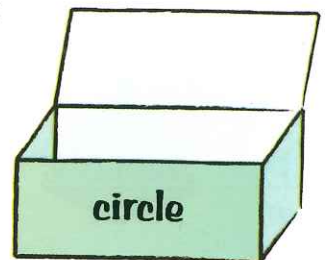
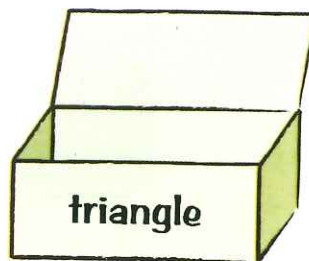
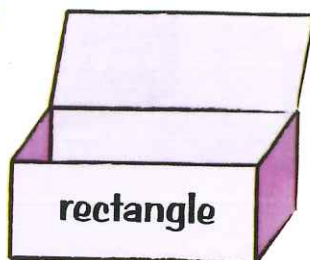
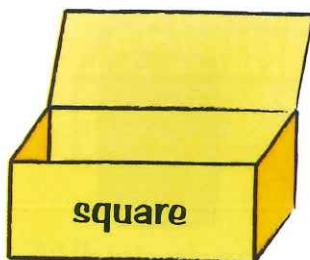
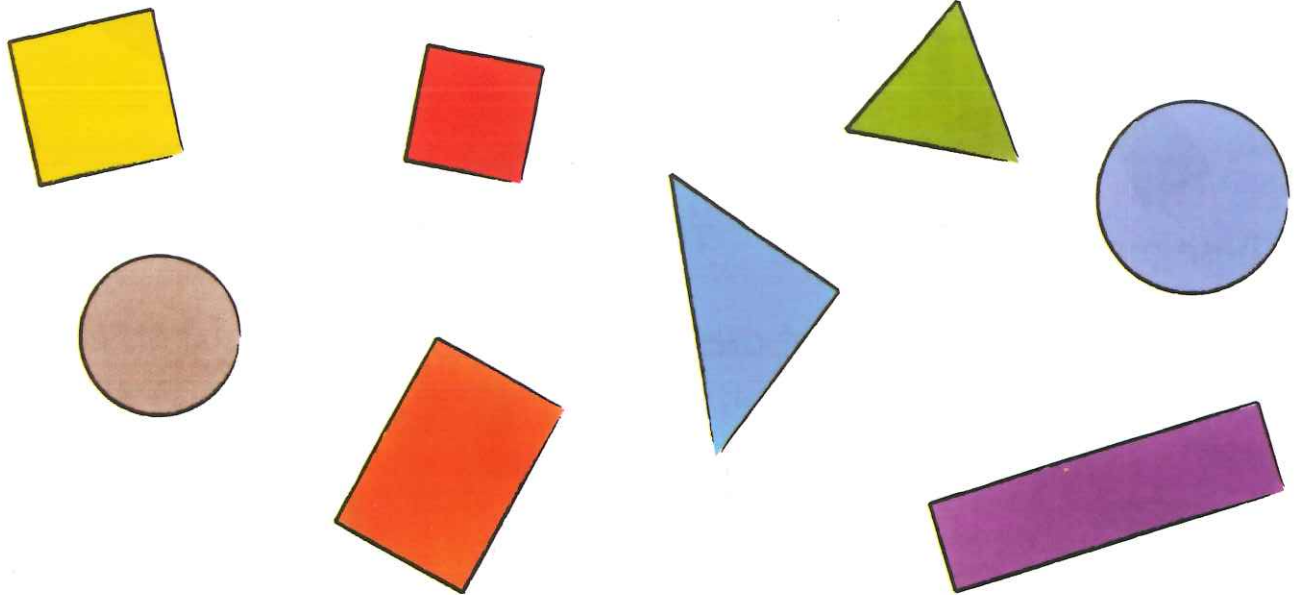
a)



b)

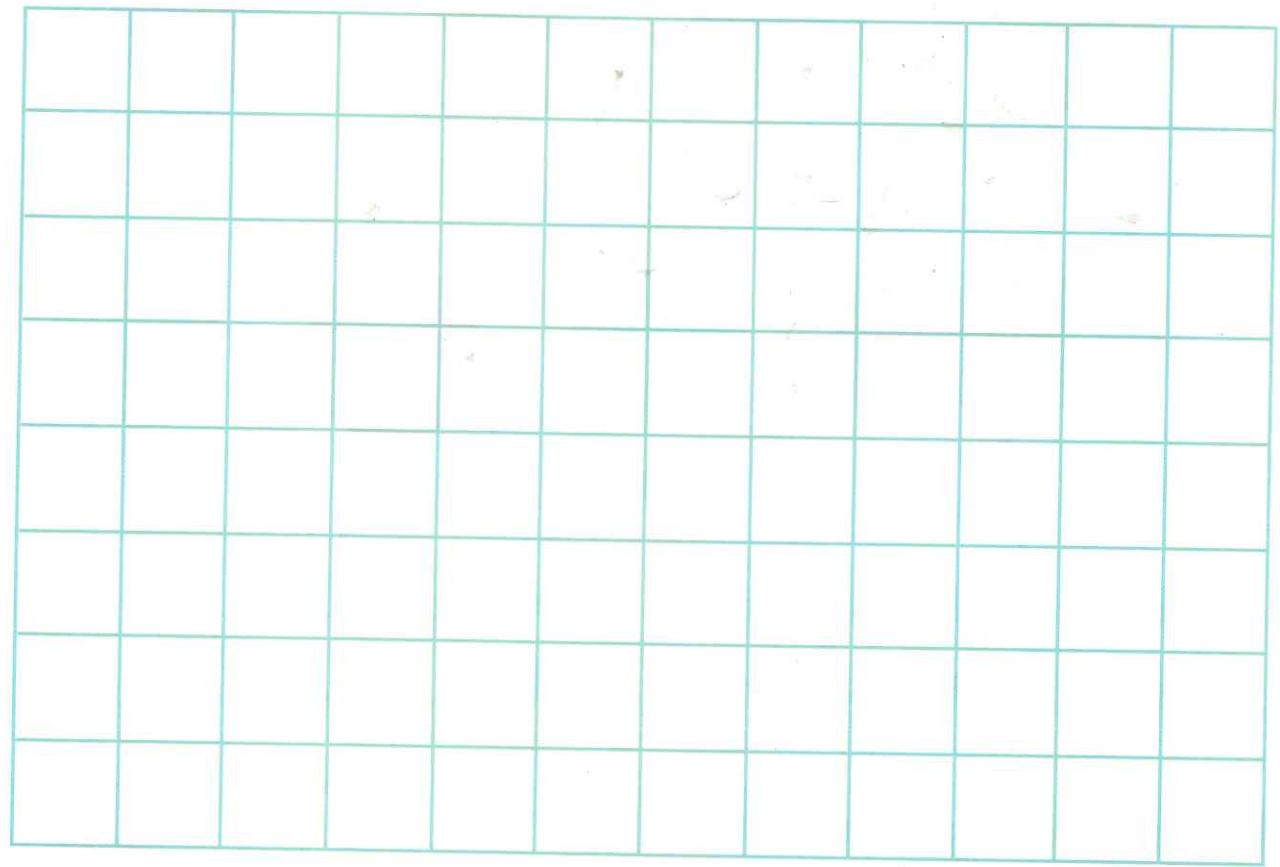


2 Match the shapes to their names.

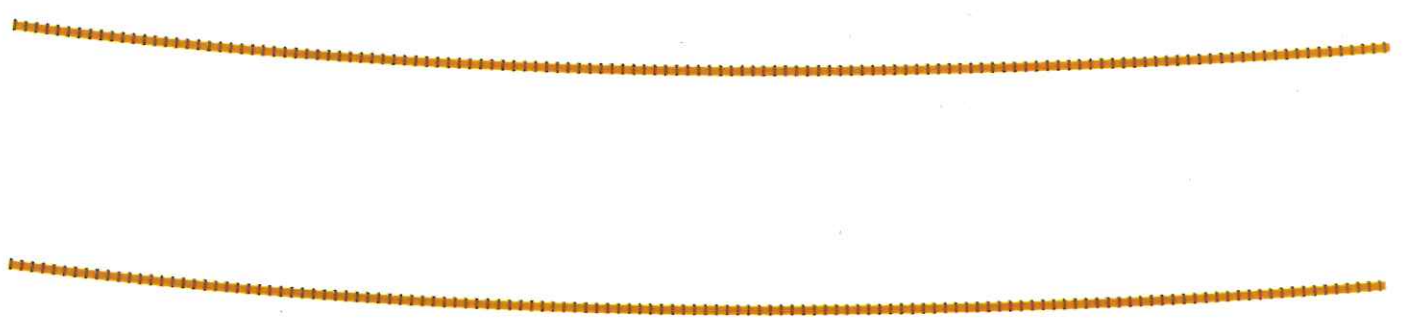
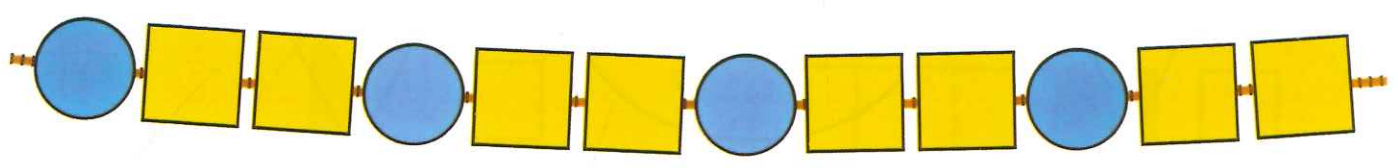


3 Use this grid.

- a) Draw a square.
- b) Draw a rectangle.

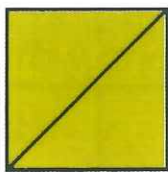


4 Design a pattern with squares and circles on the strings.

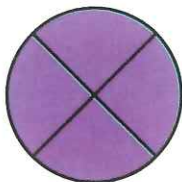


Fractions $\frac{1}{2}$ and $\frac{1}{4}$

1



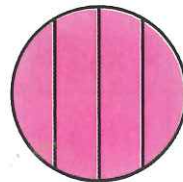
a



b



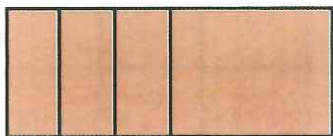
c



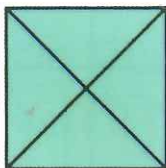
d



e



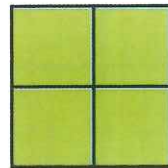
f



g



h



i



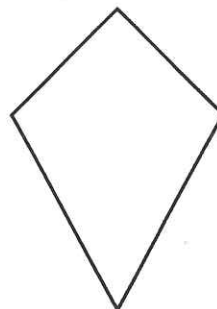
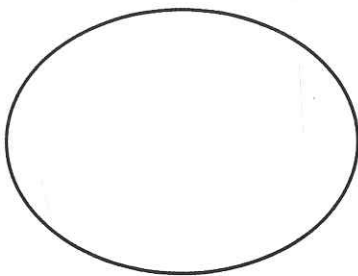
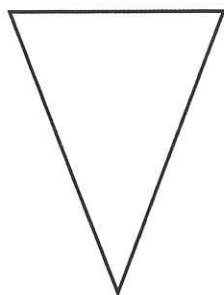
j

a) Which shapes are in two halves? _____

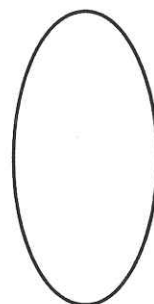
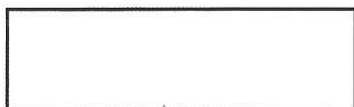
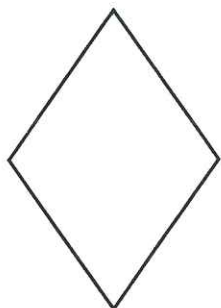
b) Which shapes are in four quarters? _____

2

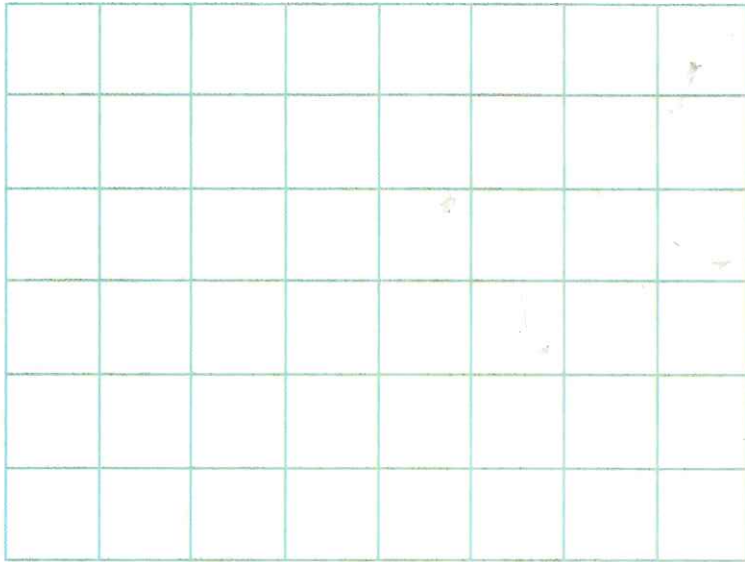
a) Colour $\frac{1}{2}$ of these shapes.



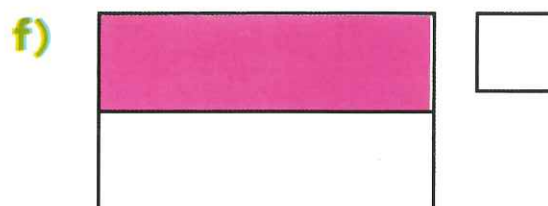
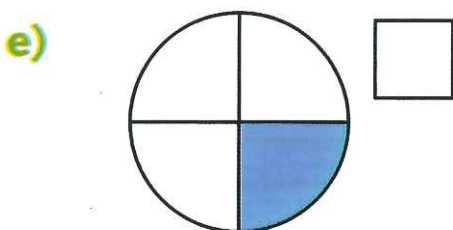
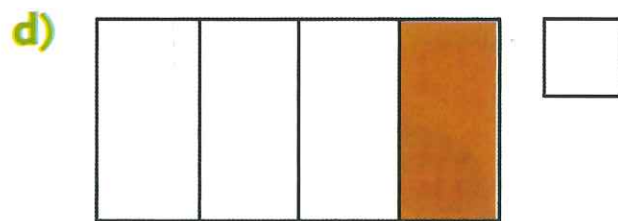
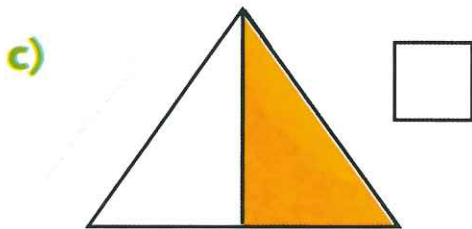
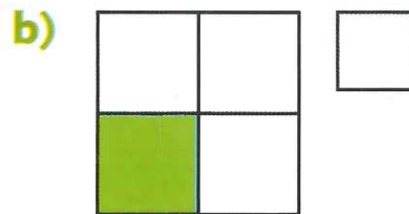
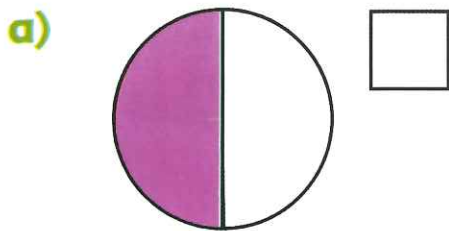
b) Colour $\frac{1}{4}$ of these shapes.



- 3 Draw a large square on this grid.
Colour half of the square red.
Colour quarter of the square blue.

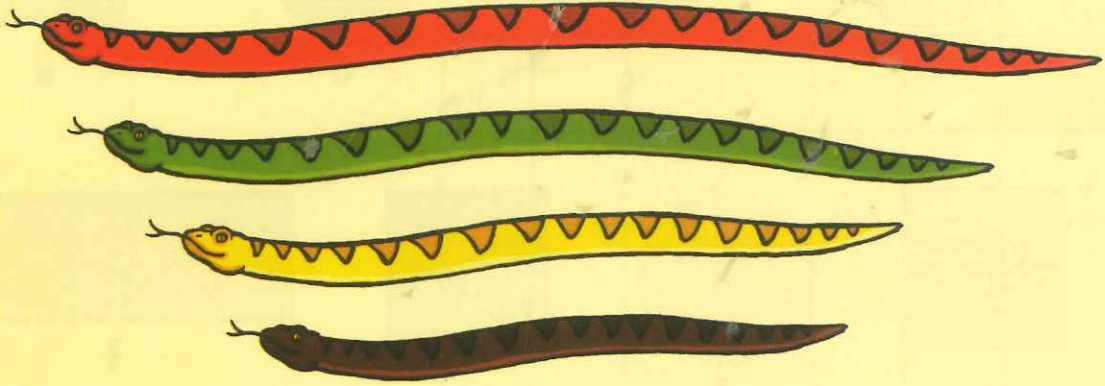


- 4 Write $\frac{1}{2}$ or $\frac{1}{4}$ to name each fraction shown.



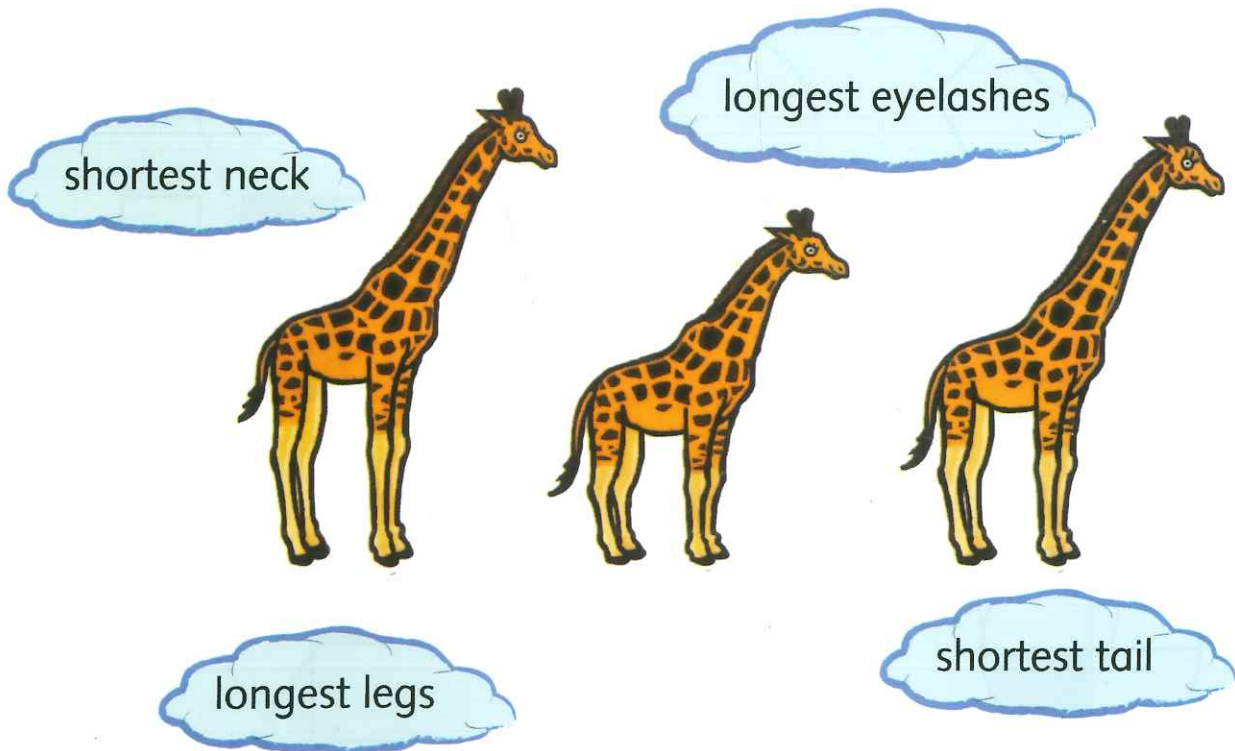
Unit 21 Measuring length

Comparing length

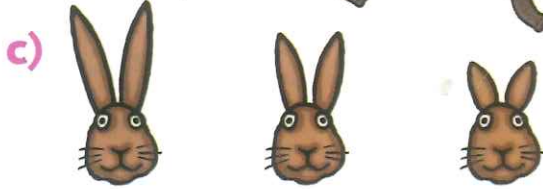
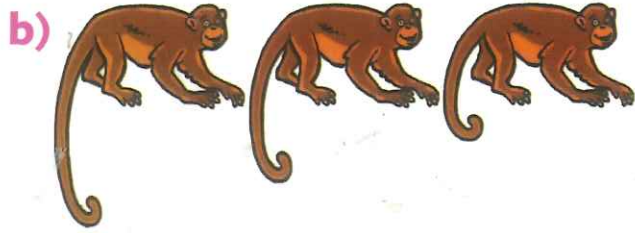
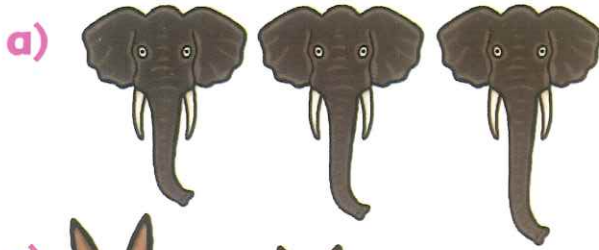


The green snake is **longer** than the brown snake.
The red snake is the **longest**.
The yellow snake is **shorter** than the green snake.
The brown snake is the **shortest**.

1 Draw a line from each sentence to a matching giraffe.



2 Tick the **longest** in each group and circle the **shortest**.

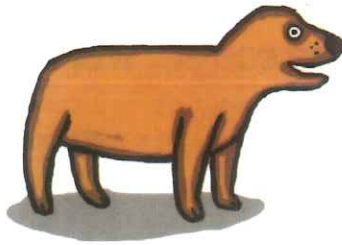


3 Draw the correct sized tails and ears on these dogs.

a) Draw long ears and a short tail.

b) Draw short ears and a short tail.

c) Draw short ears and a long tail.



Try this

Complete each snake to match each sentence.



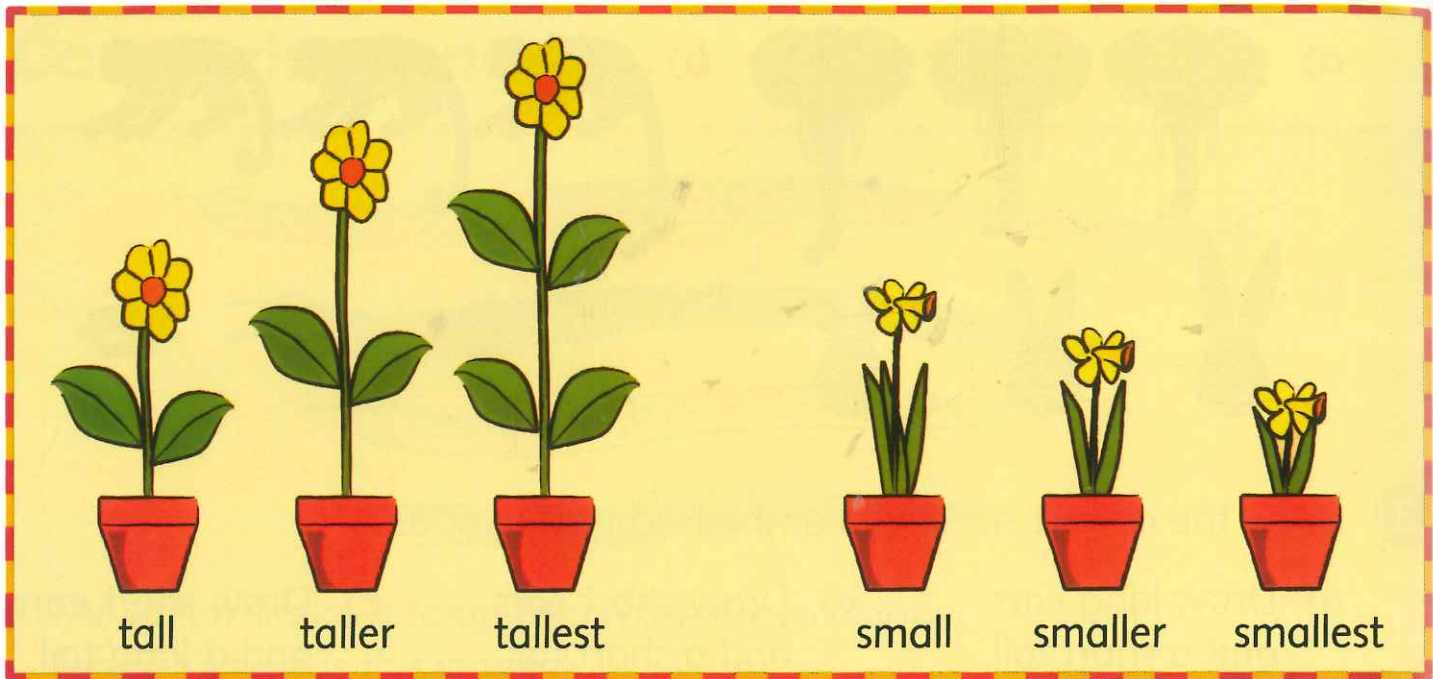
Draw a **longer** snake.



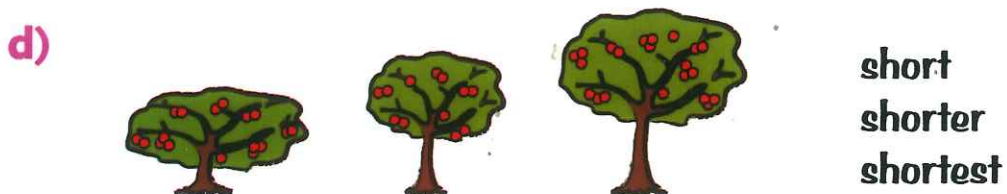
Draw a **shorter** snake.



Comparing height



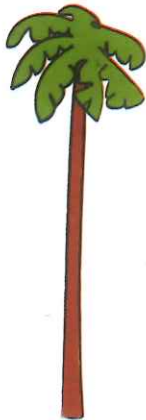
1 Join each of these to the correct words.



2 Write the answer for each question.



Tree 1



Tree 2



Tree 3



Tree 4



Tree 5

- a) Which tree is the tallest? _____
- b) Which trees are shorter than Tree 4? _____
- c) Which tree is shortest? _____
- d) Which trees are taller than Tree 3? _____

Try this

Write the names of people you know to make each sentence true.

_____ is tall.

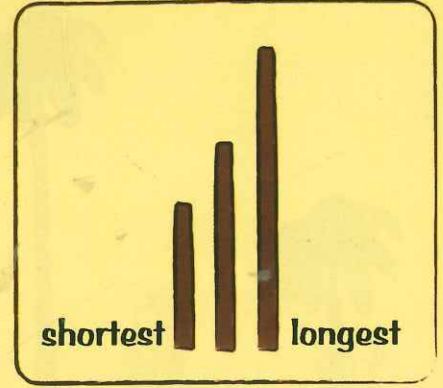
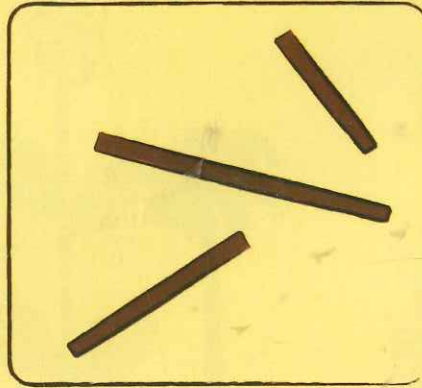
I am shorter than _____.

I am taller than _____.

_____ is short.

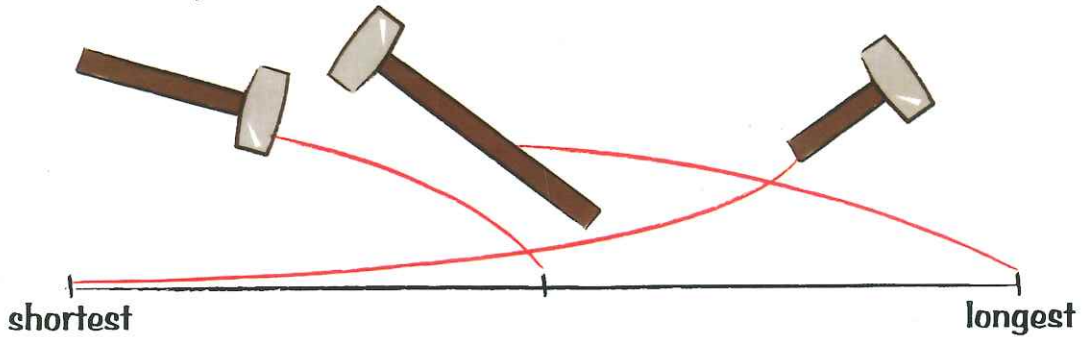
Ordering length

Compare each stick to put them in order.

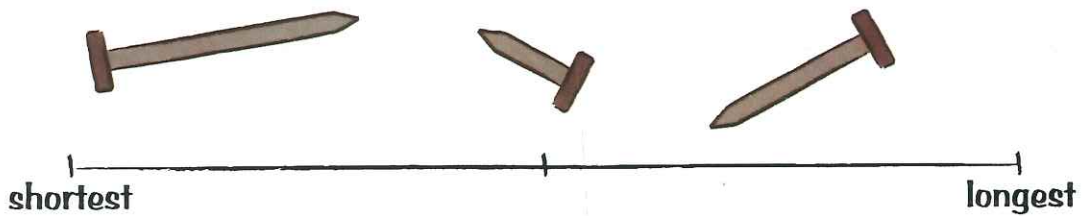


1 Draw lines to put the objects in order of length.

a)



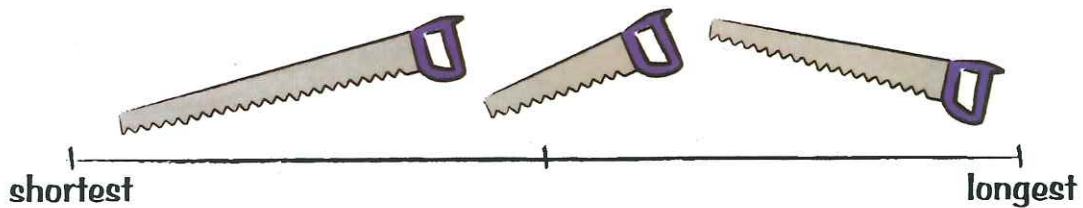
b)



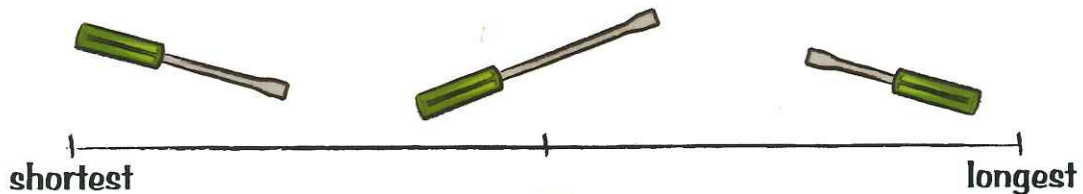
c)



d)

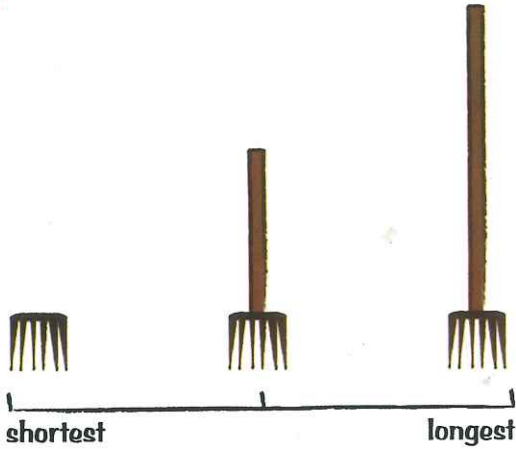


e)

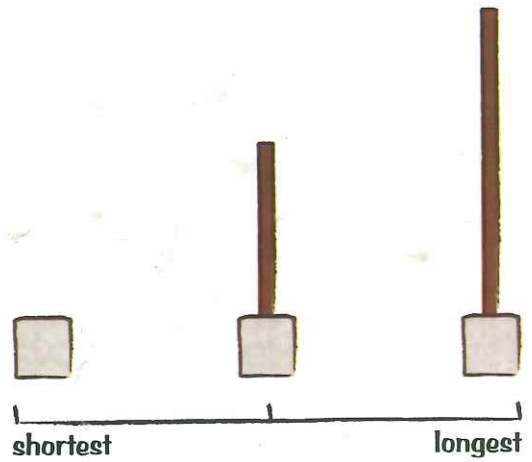


2 Draw the correct length handle to put each set in order.

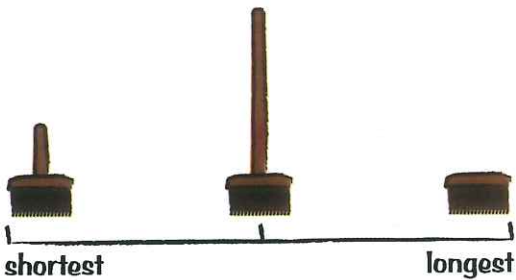
a)



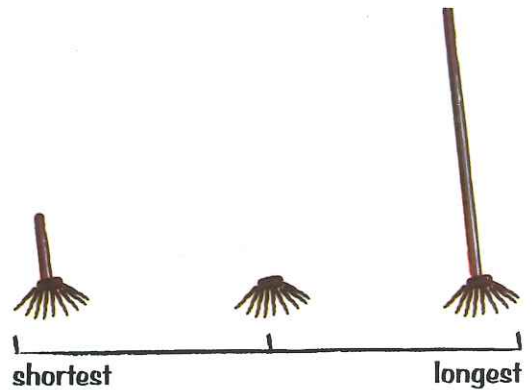
b)



c)

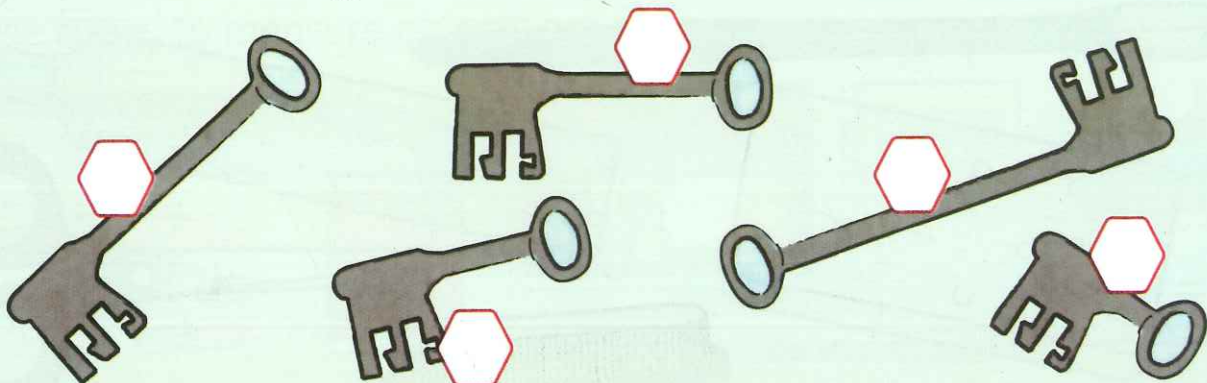


d)

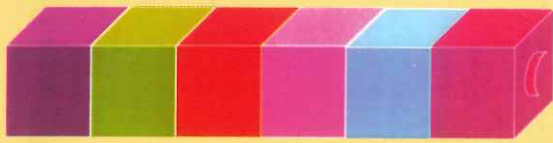


Try this

Compare the lengths of the keys. Write numbers on them to show the order of the lengths. Start with 1 as the shortest.



Using cubes

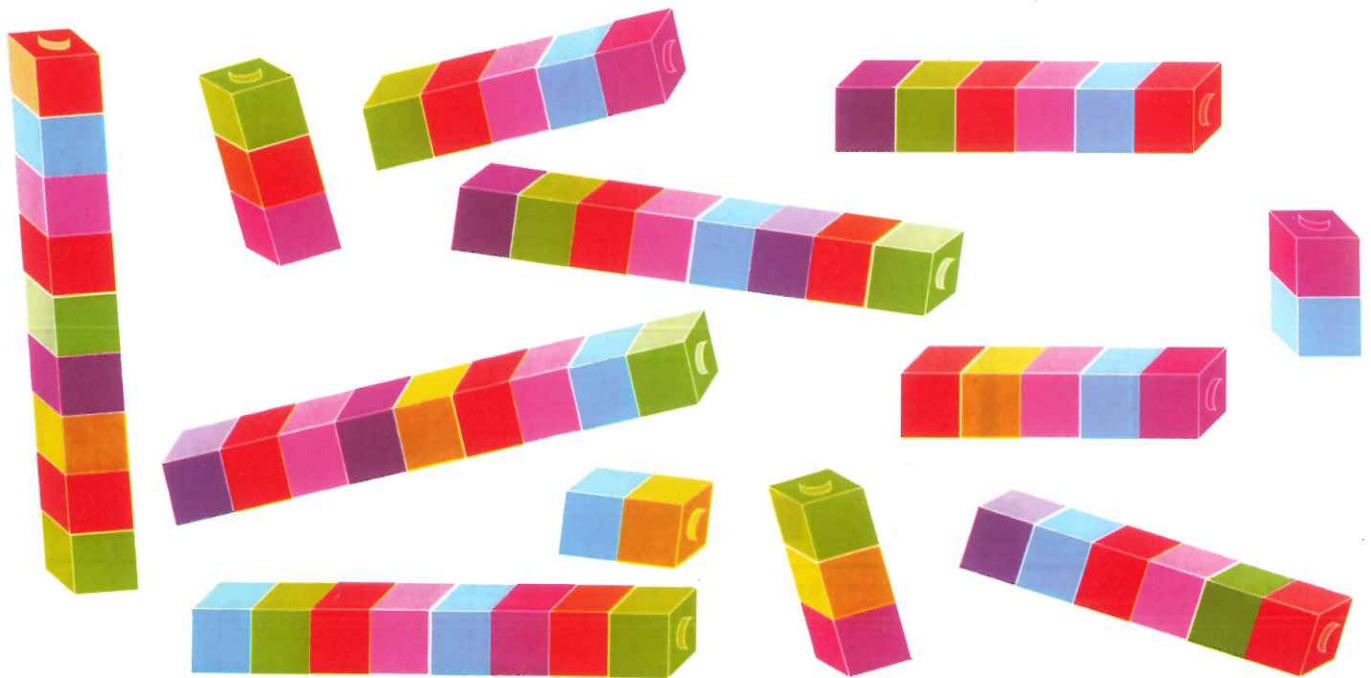


This pencil is 6 cubes long.

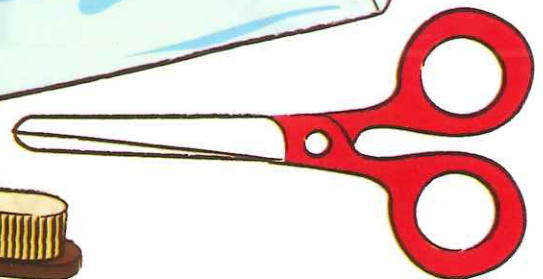
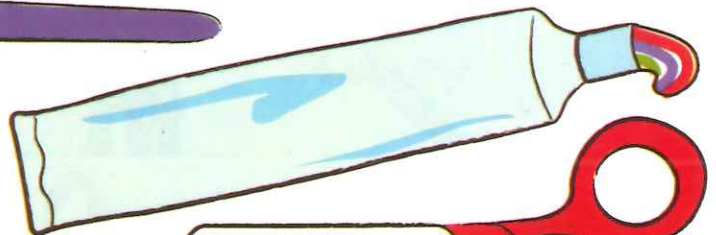
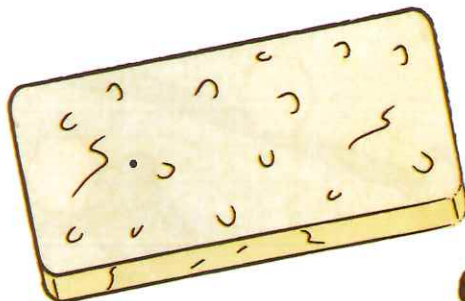


This paintbrush is 8 cubes long.

1 Join sets of cubes that are the same length.



2 Use cubes to measure each of these.



3 Draw lines to match the length of each of these.
 Colour the longest line red.
 Colour the shortest line blue.



4 Tick the rods that are missing.

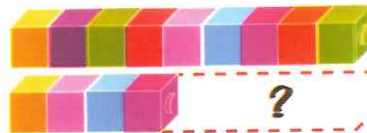
a)



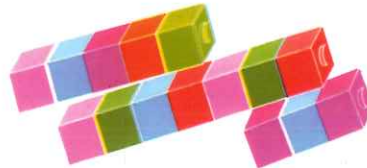
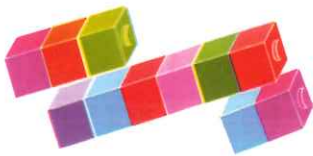
b)



c)

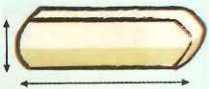
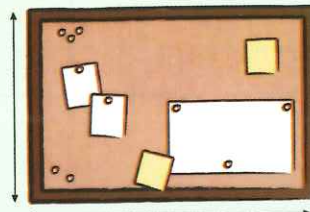
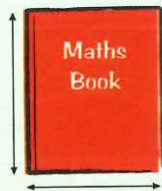
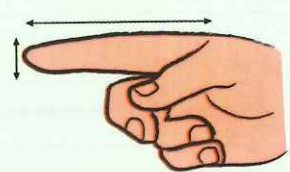


d)



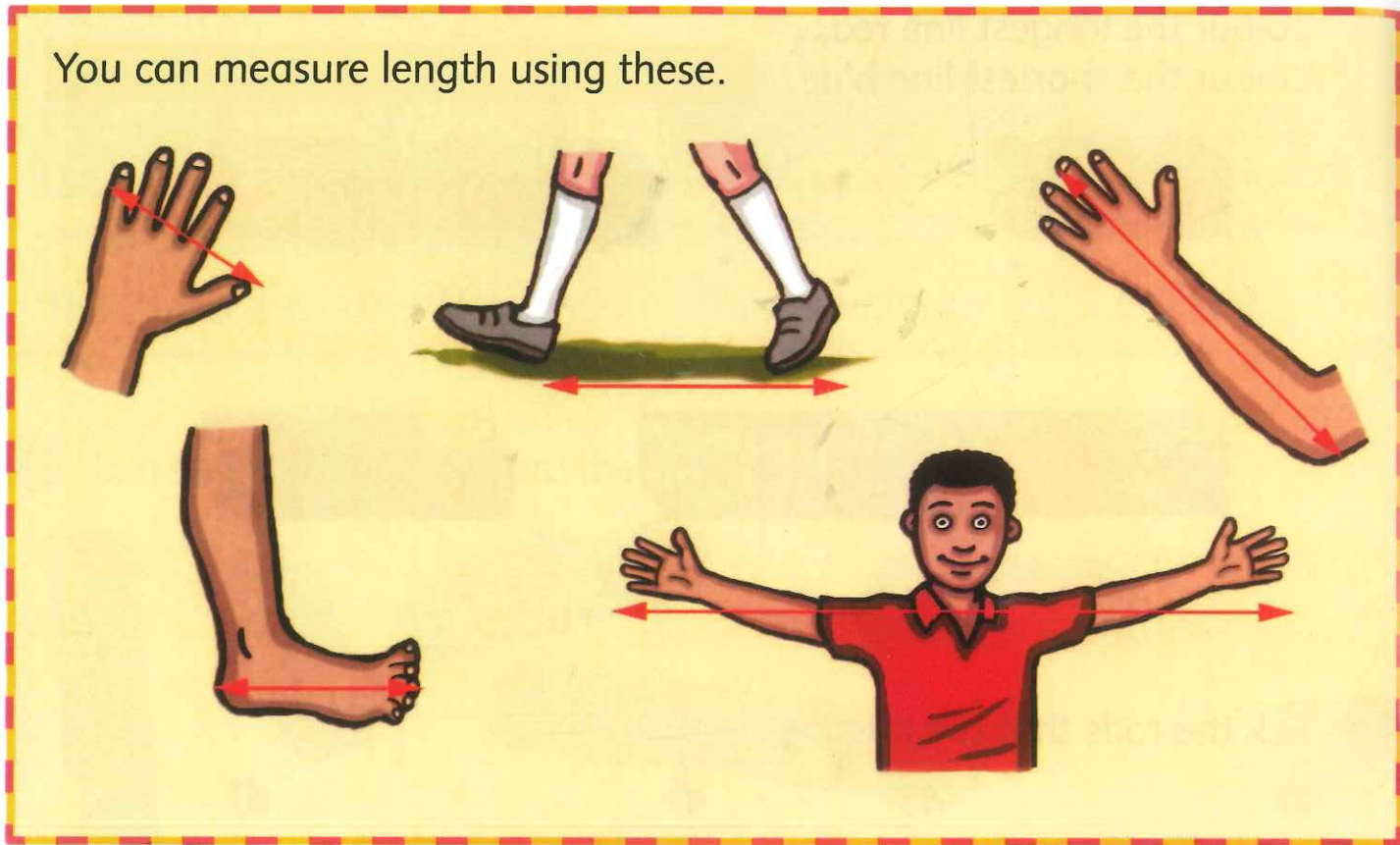
Try this

Use cubes to measure objects around you.





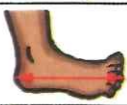
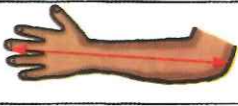
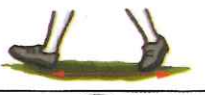



Measuring with non-standard units

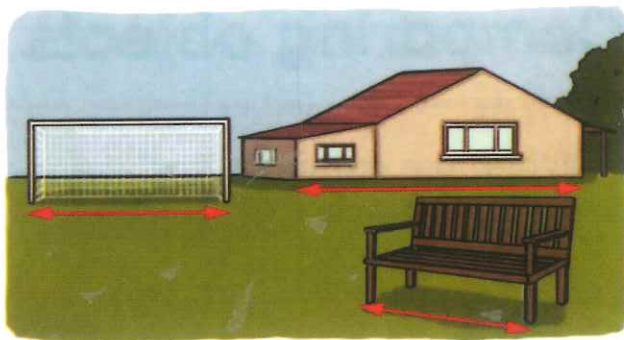
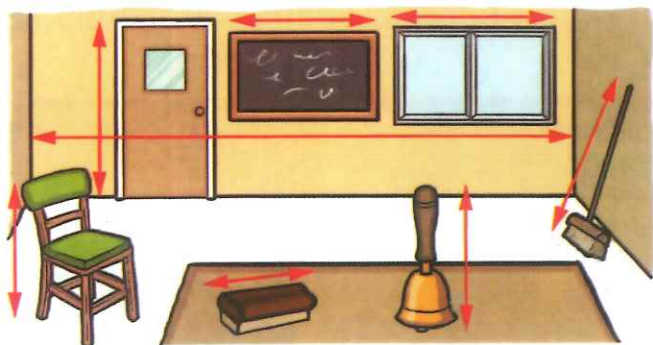
You can measure length using these.



1 Choose body units to measure these objects. Record the lengths.

Unit of measure			
			
			
			
			
			

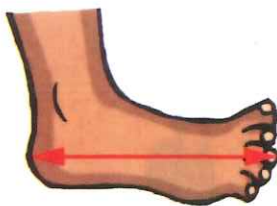
2 Now measure some of these objects.



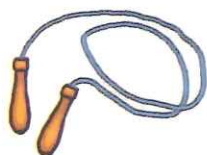
3 Join objects to show if they are longer or shorter than your arm-span or your feet.



longer than your arm span



shorter than your foot



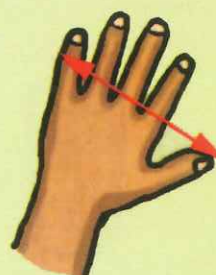
Assessment

Work with a group to measure the length of your desk. Use your hand-spans.

Are all the results the same? _____

Who has the longest hand-span? _____

Who has the shortest hand-span? _____



Comparing objects

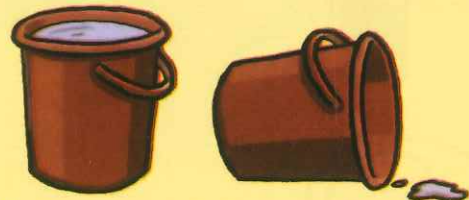
When we compare and measure things, we sometimes find opposites.



Heavy is the opposite of light.



Night is the opposite of day.



Full is the opposite of empty.

1 Join the pairs of opposites.



2 Which of the objects are **heavy** and which are **light**?
Circle the **heaviest** in each pair.

a)



b)



c)



d)



e)



Try this

Draw pictures for these pairs of opposites

in - out

up - down

big - small

morning - evening

empty - full

on - off

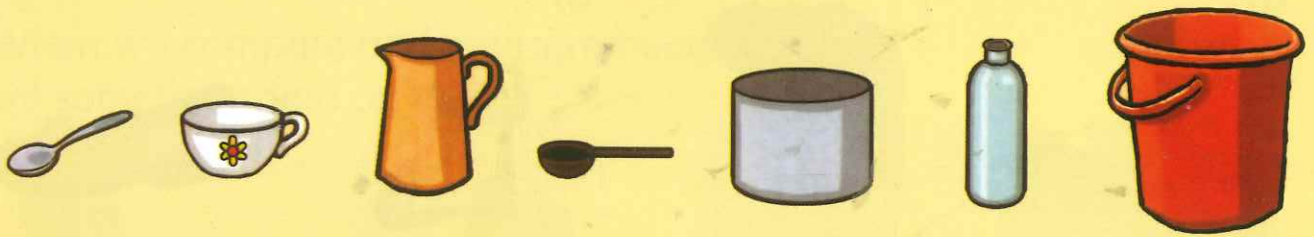
day - night

long - short

heavy - light

Capacity

We use different containers to measure capacity.



The jug has a **greater** capacity than the cup.
The spoon has a **smaller** capacity than the bottle.

1 Circle the object with the **smaller** capacity.

a)



b)



c)

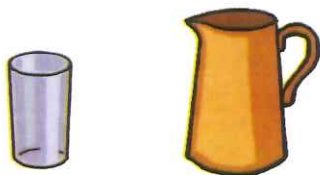


d)

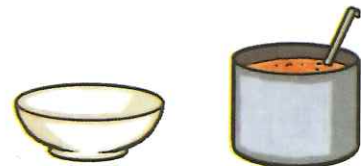


2 Tick the object with the **greater** capacity.

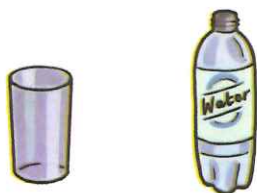
a)



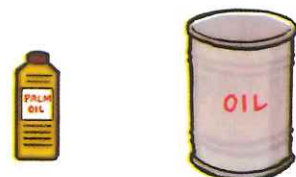
b)



c)



d)



3 Write the words **more** or **less** to make each sentence true.



a) A cup holds _____ than a teaspoon.



b) A glass holds _____ than a bottle



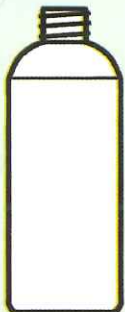
c) A bucket holds _____ than a saucepan.



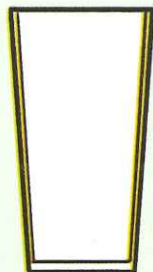
d) A teaspoon holds _____ than a pot.

Try this

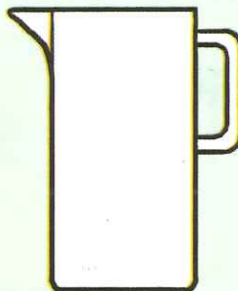
Colour each container to make it full, half-full or empty.



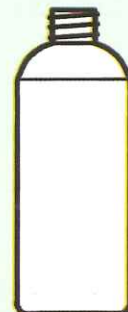
half-full



full



empty



full

Weight



This book is **heavy**.

The book is **heavier** than the paper.



This paper is **light**.

The paper is **lighter** than the book.

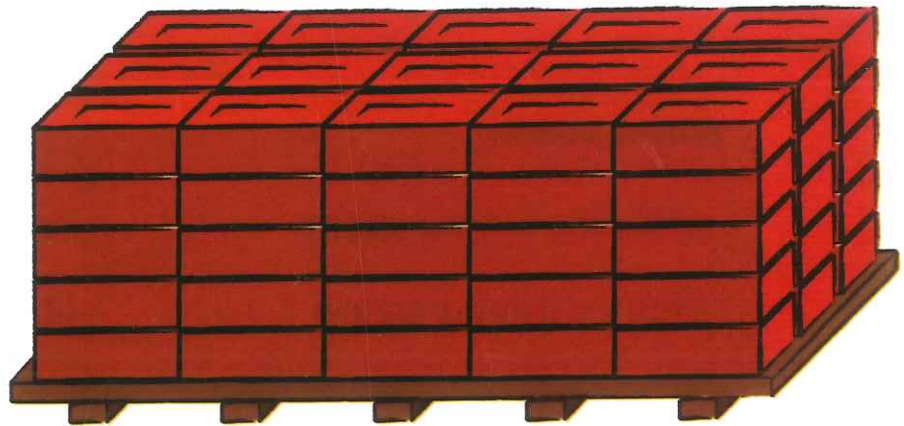
1 Circle each one that is **heavier**.



2 Circle each one that is **lighter**.

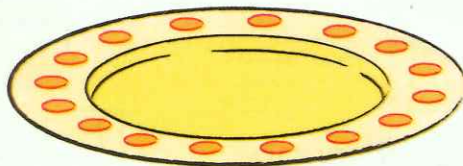


3 Join these in order of weight, starting with the lightest.



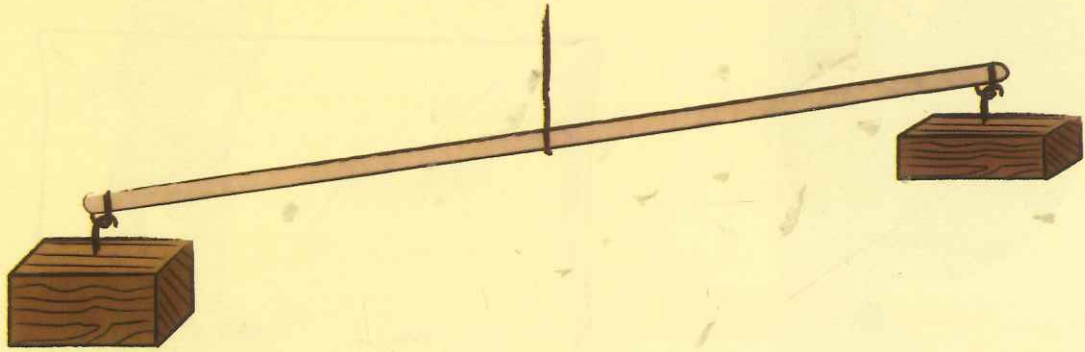
Try this

Draw something heavier and something lighter than each of these.



Balancing

This balance can compare weights.



The lower piece of wood is heavier. The higher piece of wood is lighter.

- 1** Make a balance with a teaspoon on one end.
Tick to show if each object was heavier or lighter than the teaspoon.

a)



- heavier than a spoon
 lighter than a spoon

b)



- heavier than a spoon
 lighter than a spoon

c)



- heavier than a spoon
 lighter than a spoon

d)



- heavier than a spoon
 lighter than a spoon

e)



- heavier than a spoon
 lighter than a spoon

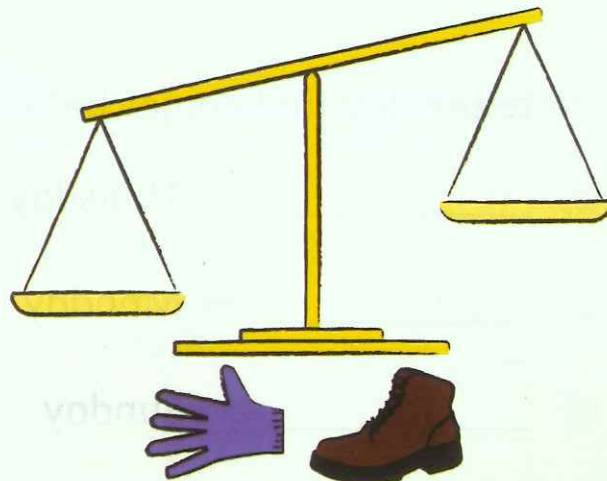
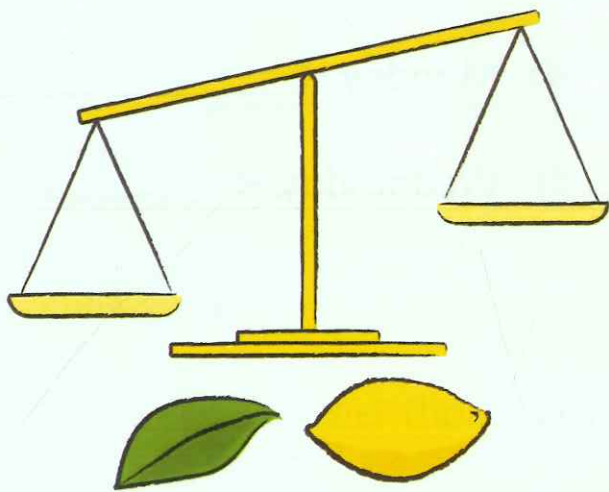
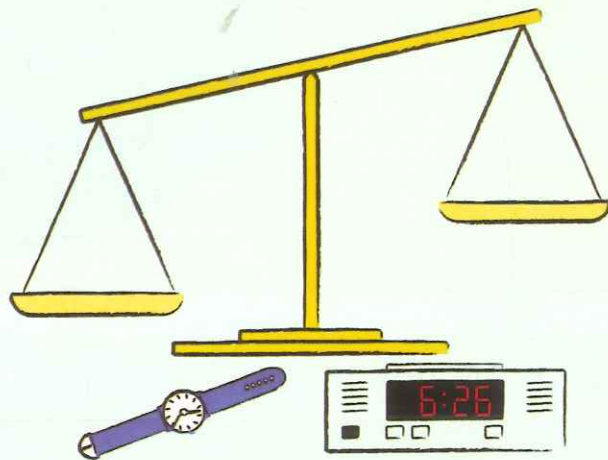
f)



- heavier than a spoon
 lighter than a spoon

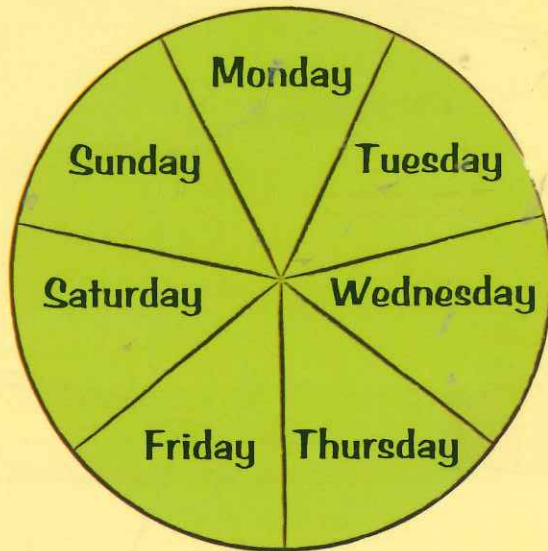
Try this

Draw these objects on the correct places on each balance.



Time: days of the week

Learn the names and order of the days of the week.



1 Write the day that follows these.

a) Tuesday → _____

b) Saturday → _____

c) Friday → _____

d) Monday → _____

e) Thursday → _____

f) Wednesday → _____

g) Sunday → _____

2 Write the day that comes before these.

a) _____ → Thursday

b) _____ → Wednesday

c) _____ → Monday

d) _____ → Tuesday

e) _____ → Sunday

f) _____ → Saturday

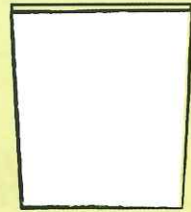
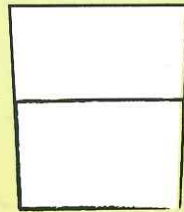
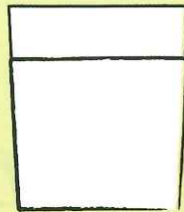
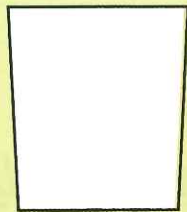
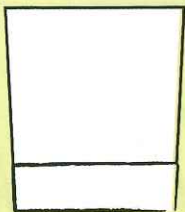
g) _____ → Friday

3 Join these days in order. Start with Monday.



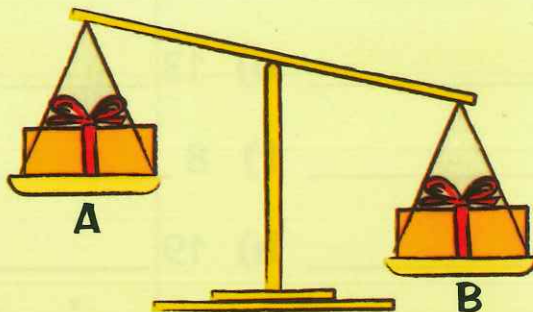
Assessment

1 Join the glasses in order. Start with the full glass.



2 Complete this sentence.

Box is heavier than box .



Unit 23 Number problems

Tallying

You can use tally marks when you count objects.

1	2	3	4	5	6	7	8	9	10
				/	/	/	/	/	/
									/

1 Write numbers to match these tally marks.

a) ||||

b) ||||/ ||

c) ||||/

d) ||||/ ||||

e) ||||/ ||||/ ||

f) ||||/ ||||/ ||||/ ||||/ ||||

g) ||||/ ||||/ ||||/

h) ||||/ ||||/ ||||/ ||||

i) ||||/ ||||/ ||||/ ||||/ ||||/

j) ||||/ ||||/ ||||/ ||||/ ||||/ ||

2 Draw tally marks for each of these.

a) 6 _____

b) 10 _____

c) 3 _____

d) 13 _____

e) 16 _____

f) 8 _____

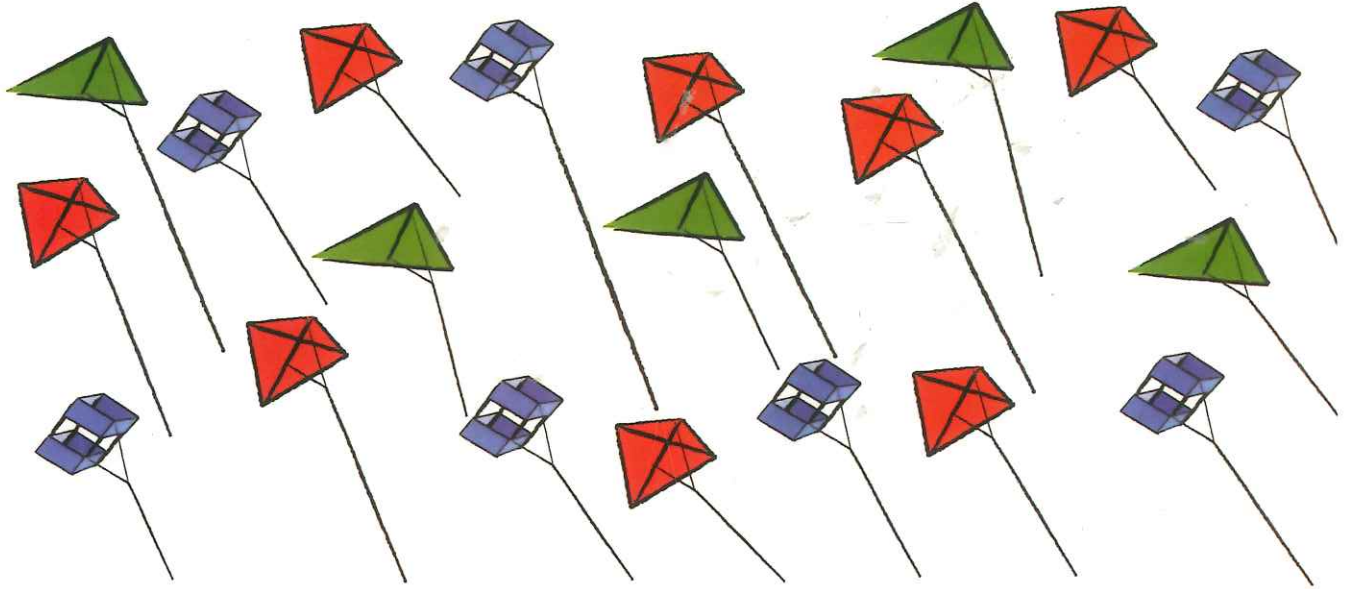
g) 11 _____

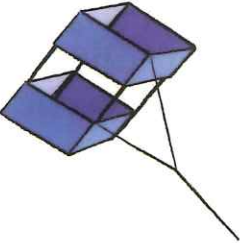


h) 19 _____

i) 17 _____

j) 21 _____

3 Complete the table by counting the kites.
Tick off each kite as you tally it.



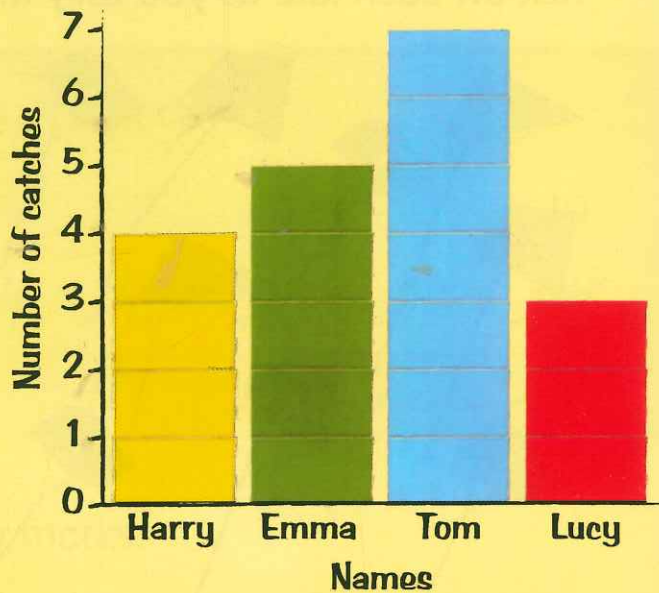
Kite	Tally	Total
		
		
		

Reading block graphs

Block graphs show information in a simple way.

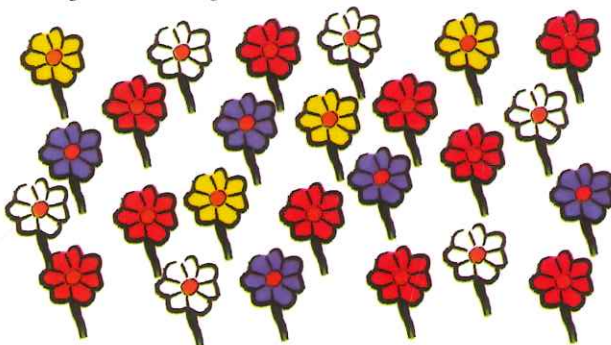
Count the blocks or read across for the amounts.

This graph shows the number of catches that some children made when playing a game.



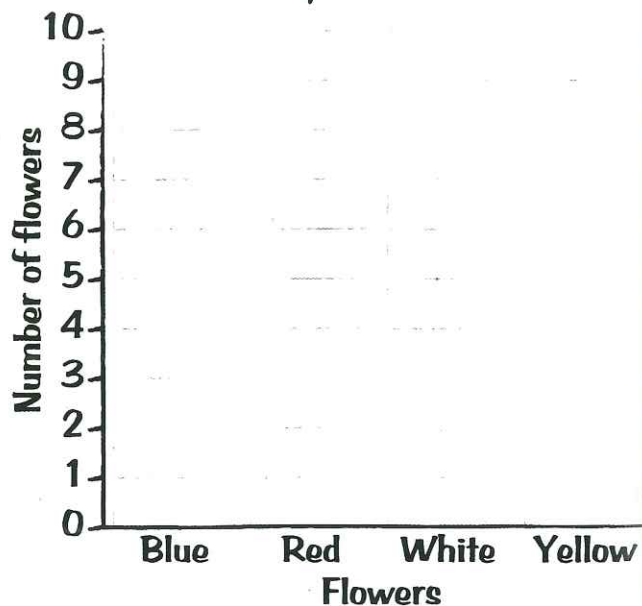
How many more catches did Emma make than Lucy?

- 1** Complete the table by counting the flowers. Tick off each flower as you tally it.

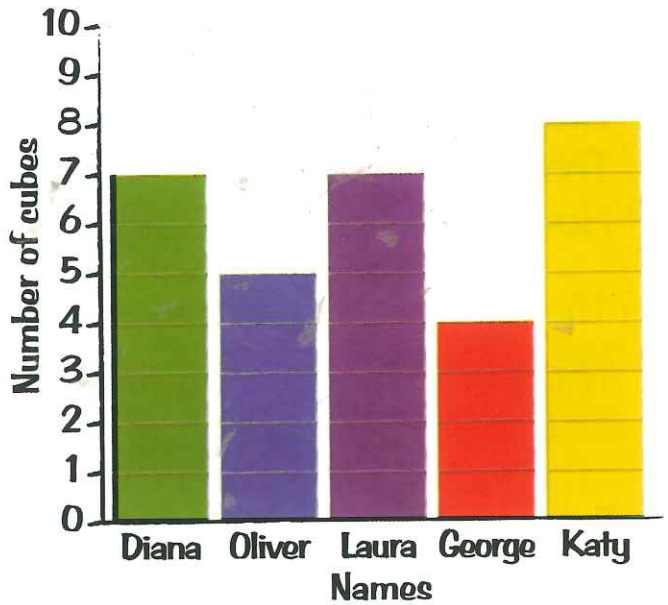
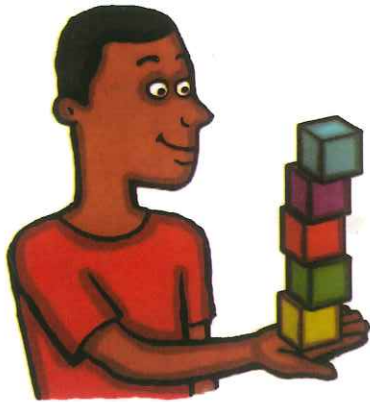


Flower	Tally	Total

- 2** Complete this graph to show the totals for each flower in question 1.



3 A group of children tested how many cubes they could hold in one hand.



- a) Who held the most cubes? _____
- b) How many cubes did Oliver hold? _____
- c) Who held the fewest cubes? _____
- d) Which two children held the same number of cubes? _____
- e) How many more cubes did Katy hold than George? _____
- f) How many fewer cubes did Oliver hold than Diana? _____

Try this

Carry out your own cube test with a group of friends.
 Draw tally marks to count the total.
 Show your results as a block graph.

Name	Tally	Total

Addition and subtraction problems

Example 1

There are 15 people on a bus. Another 4 people get on. How many are there altogether?

$$15 + 4 = \square$$

$$10 + 5 + 4 = \square$$

$$10 + 9 = 19$$

There are 19 people on the bus altogether.

Example 2

A lorry carries 27 boxes of tools. 3 boxes are taken off the lorry. How many boxes are left on the lorry?

$$27 - 3 = \square$$

$$20 + 7 - 3 = \square$$

$$20 + 4 = 24$$

$$\begin{array}{r} \text{T U} \\ 27 \\ - 3 \\ \hline 24 \end{array}$$

24 boxes are left on the lorry.

1 Answer these.

- a)** A driver has \$20 and is given another \$30. How much money does he have altogether?

\$



- b)** A lorry has 20 oil drums and 6 of the drums are empty. How many more full drums are there?

c) In a traffic jam there are 15 red cars and 12 blue cars.




How many cars are there in total?

d) A van has 8 boxes of mangoes and 22 boxes of pineapples. How many boxes of fruit are there altogether?

e) There are 20 people on a bus. The bus stops and picks up 11 more people. How many people are on the bus now?



2 This chart shows the different ways that some children come to school.

	Walk	Bus	Car
			
Tally			
Total			

a) Write the totals for each way that the children come to school.

b) How many more children walk than travel by car?

c) How many children travel by bus and car altogether?

d) How many children are there altogether?

Missing number problems

Remember that you can work out missing number problems. You can use the numbers you have to help you.

Addition and subtraction are inverses, or opposites.

Example 1

$$1\square + 3 = 15$$

$$\begin{array}{r} 1\square \\ + \quad 3 \\ \hline 15 \end{array}$$

If you subtract 3 from 15, you can find the missing digit.

$$15 - 3 = 12$$

$$\text{So } 12 + 3 = 15$$

Example 2

$$1\square - 4 = 11$$

$$\begin{array}{r} 1\square \\ - \quad 4 \\ \hline 11 \end{array}$$

If you add 11 and 4, you can find the missing digit.

$$11 + 4 = 15$$

$$\text{So } 15 - 4 = 11$$

1 Complete these.

a) $\square + 6 = 14$

b) $\square + 5 = 12$

c) $9 + \square = 13$

d) $11 + \square = 16$

e) $\square - 4 = 9$

f) $\square - 8 = 3$

g) $18 - \square = 11$

h) $14 - \square = 6$

2 Complete these.

a)
$$\begin{array}{r} 1 \square \\ + \quad 8 \\ \hline 19 \end{array}$$

b)
$$\begin{array}{r} 1 \square \\ + \quad 6 \\ \hline 18 \end{array}$$

c)
$$\begin{array}{r} 1 \square \\ + \quad 3 \\ \hline 17 \end{array}$$

d)
$$\begin{array}{r} 1 \square \\ + \quad 4 \\ \hline 19 \end{array}$$

e)
$$\begin{array}{r} 1 \square \\ - \quad 4 \\ \hline 14 \end{array}$$

f)
$$\begin{array}{r} 1 \square \\ - \quad 7 \\ \hline 11 \end{array}$$

g)
$$\begin{array}{r} 1 \square \\ - \quad 6 \\ \hline 17 \end{array}$$

h)
$$\begin{array}{r} 1 \square \\ - \quad 5 \\ \hline 19 \end{array}$$

3 a) Use each of the digits **2**, **3**, **4** and **5** to complete these.

$$\square + 2 = \square$$

$$\square - 2 = 2$$

$$6 - \square = 4$$

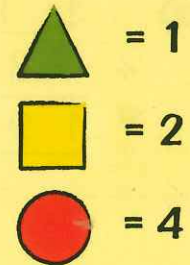
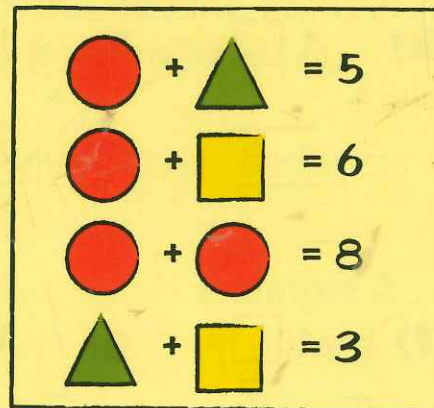
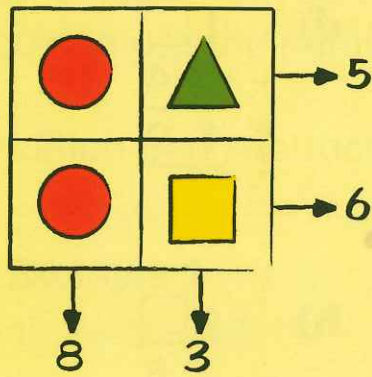
b) Use each of the digits **1**, **2**, **3**, **4** and **5** to complete these.

$$\square + 1 = \square$$

$$\square + 5 = 7$$

$$9 - \square = 6$$

Number puzzles



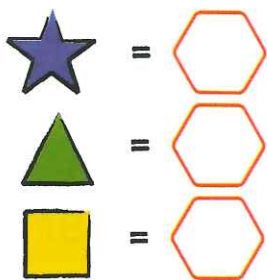
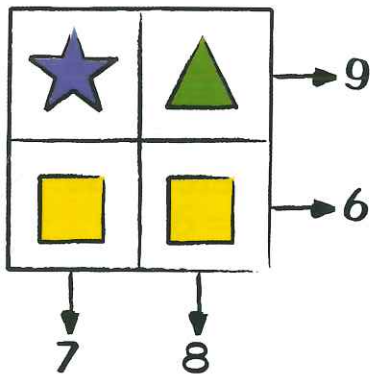
Each shape stands for a number.

The numbers shown are the totals of the two numbers in the row or column.

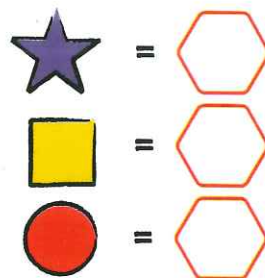
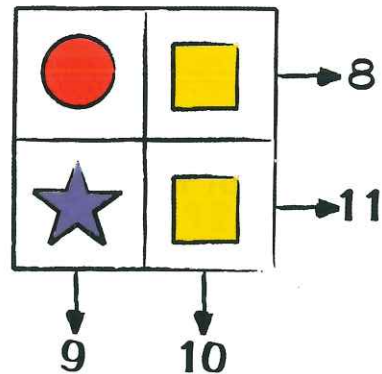
You can work out the number that each shape stands for.

1 Work out the number for each shape.

a)



b)

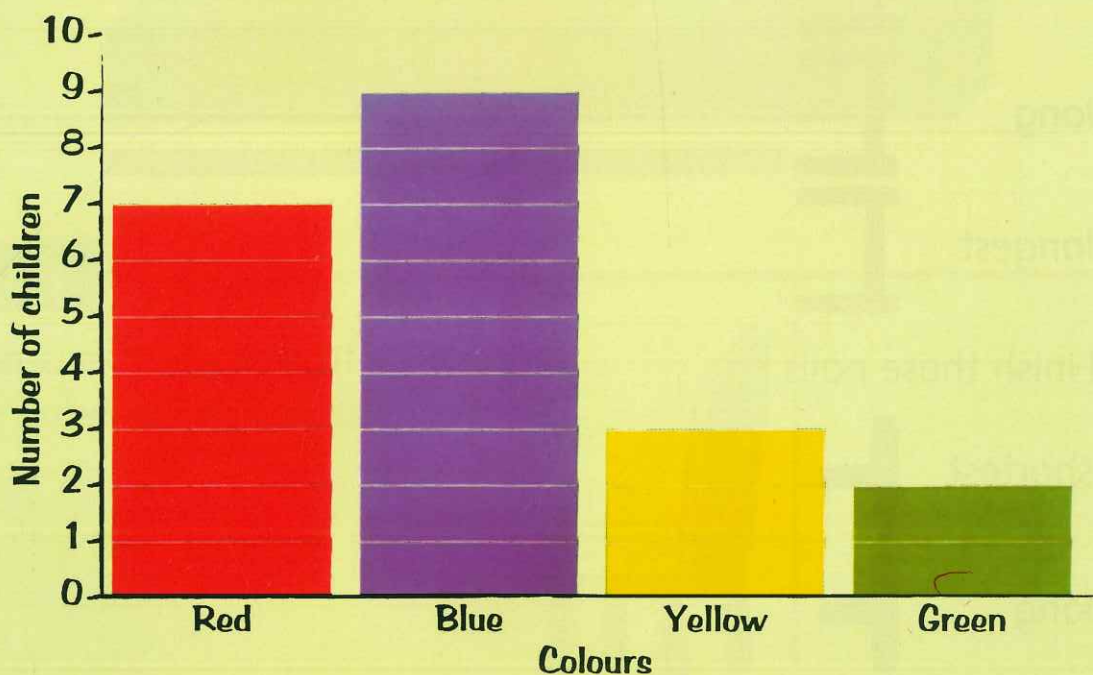


1 Answer these.

- a) How many more red flowers are there than white flowers?
- b) How many white and blue flowers are there altogether?
- c) How many yellow and red flowers are there in total?
- d) How many flowers are there altogether?
- e) The blue flowers are taken out. How many flowers are left?



2 Carry out a survey of the favourite colours in your class. Draw a tally chart of your survey. Draw a block graph to show your results.



Measuring length

1 Tick the longest shoelace in each set.



2 Finish these drawings. Draw them in order, starting with the shortest.

a) Finish these walking sticks.

shortest



long



longest



b) Finish these ladders.

shortest



long



longest



c) Finish these nails.

shortest



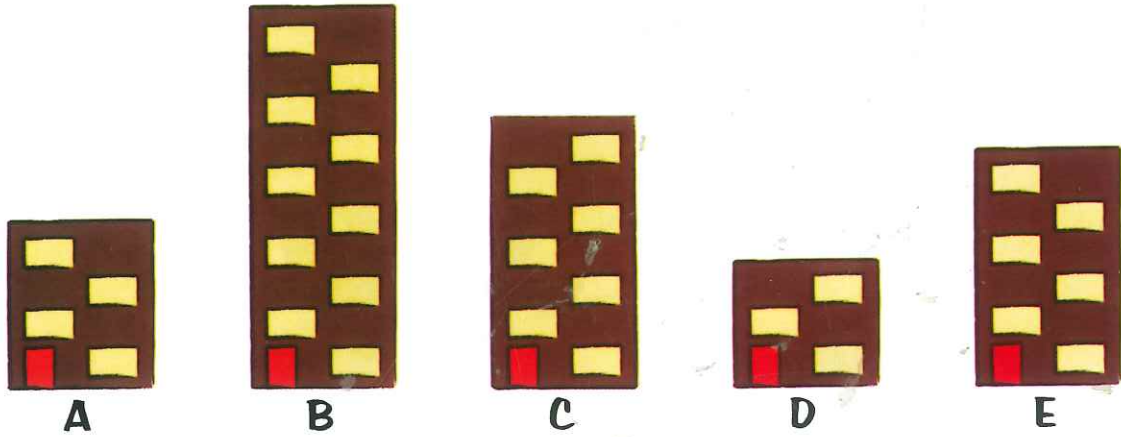
long



longest



3



a) Which is the tallest building?

b) Which is the shortest building?

c) Write the buildings in height order, starting with the tallest.

4

How many cubes long is this stick? cubes



Try this

Measure the height of your chair.
Use cubes or your hand-span.



Measures problems

1 Tick the object with the **greater** capacity.

a)



b)



c)

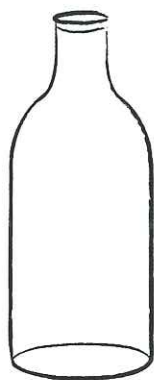


d)



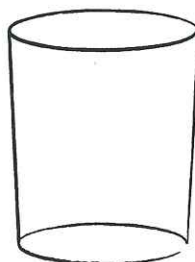
2 Colour each container to make it full or half-full.

a)



half-full

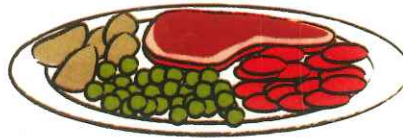
b)



full

3 Circle the one that is heavier.

a)



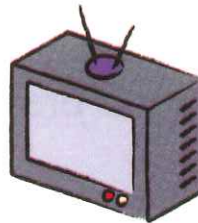
b)



c)



d)



4 Complete these to write the days of the week in order.

M o _ _ _ y

T u e _ _ _ y

W _ _ _ _ _ a y

T h _ _ _ _ _

F _ _ d a y

S a _ _ r d _ y

S u _ _ a y

Number problems

1 Answer these word problems.

a) Sam makes a necklace with 18 beads.

He puts on another 11 beads.

How many beads are there in total?

b) Anna's necklace is broken.

It had 16 beads but now only has 9 beads.

How many beads did she lose?

c) Jack is making a necklace that has 18 beads.

He has 9 blue beads. He wants the rest to be red.

How many red beads will he need?

d) Sophie has a necklace that has 17 beads.

She adds on 6 beads.

How many beads are now on the necklace?

2 Answer these.

a) A man has \$20 and is given another \$20.

How much money does he have altogether?

\$

b) A lorry has 19 full oil drums and 11 empty drums.

How many more full drums are there than empty ones?

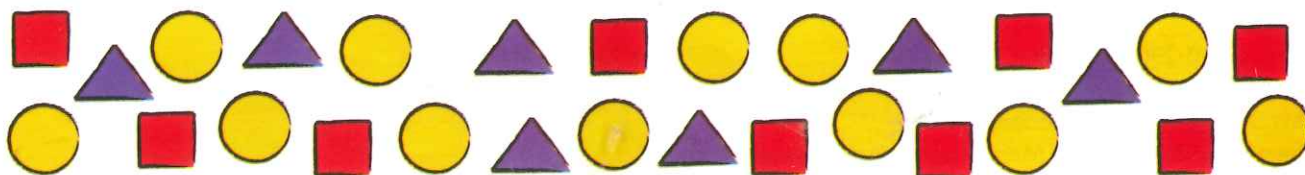
c) In a traffic jam there are 12 red cars and 14 blue cars.

How many cars is this in total?

d) A van has 19 boxes of oranges. It leaves 13 boxes at a market stall.

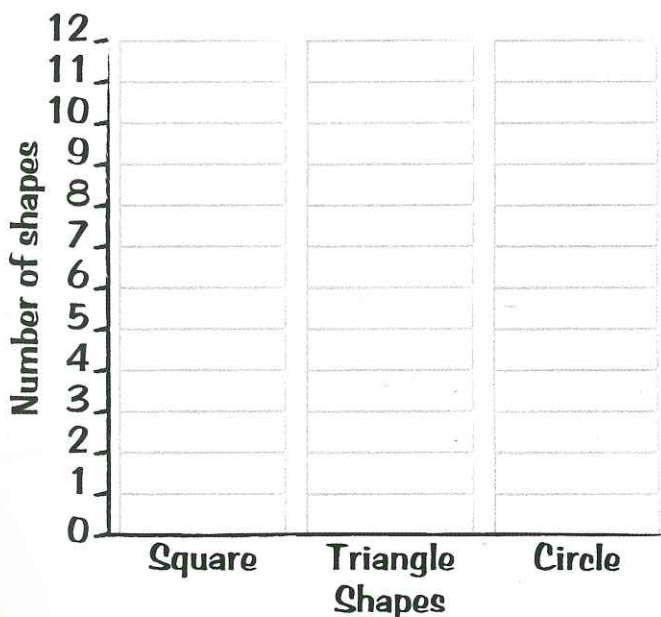
How many boxes are left on the van?

- 3 a) Complete the table by counting the shapes.
Tick off each shape as you tally it.

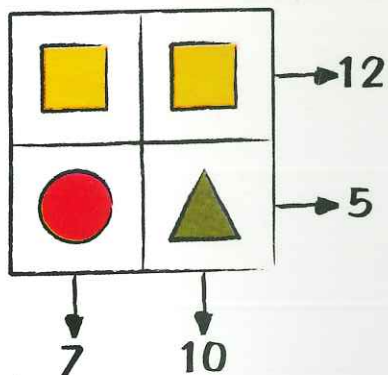


Shape		Tally	Total
Square			
Triangle			
Circle			

- b) Draw a block graph to show your results.



- 4 Work out the number for each shape.



Circle =

Square =

Triangle =

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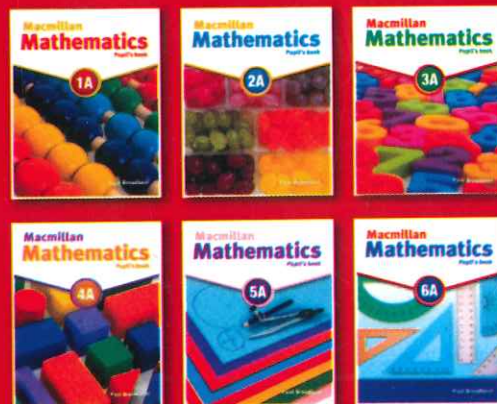
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