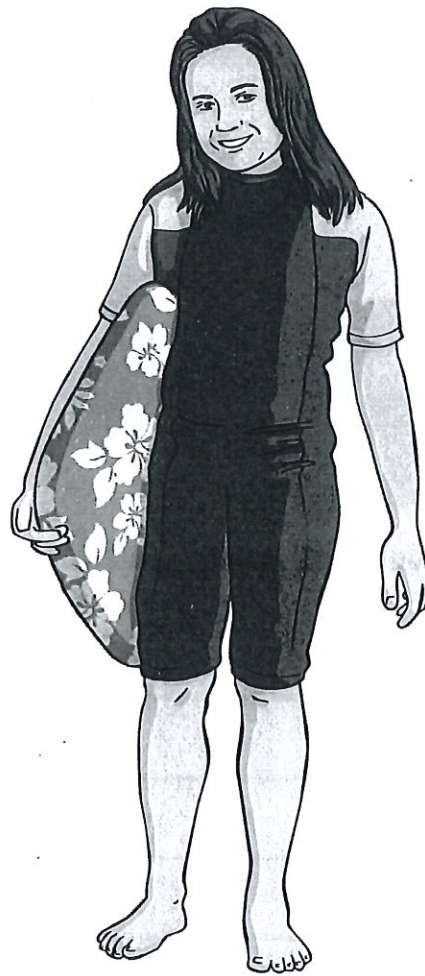


Year 5 Home Learning Pack 2022

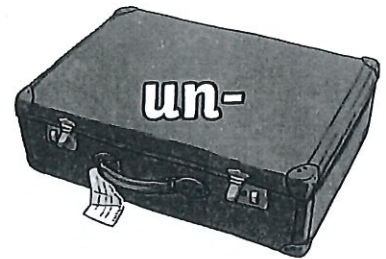


English Activity Booklet



An Incredible Mistake

There has been a huge mix-up at the airport and all of these belongings have fallen out of their suitcases. Can you help by drawing lines to match the root words to the correct prefix?



Write three sentences below which each contain two words beginning with the prefixes dis-, mis- or un-.

Knot Such a Grate E-Male

When you were on holiday, you met a new penpal but their email to you is full of spelling and punctuation mistakes! Can you go through the email and correct all of their errors? Watch out for the tricky homophones.

Compose

Inbox

Sent

Drafts

More ▼

deer frend,

it was grate to meat you on holiday last weak. i reely mist you when you left. there was to much piece and quite. do you remember when you one that meddle for diving in the pool? we could knot use the pool after you left coz of the whether. ive never scene reign like it accept in films!

make shore you keep in touch. i can knot weight to ear from you.

lots of love,

youre knew best mate, Adam

What three tips would you give your new penpal to improve their writing?

The Garden Party by Katherine Mansfield

The weather was ideal. They could not have had a more perfect day for a garden party if they had ordered it. Windless, warm, and the sky without a cloud. The blue was veiled with a haze of light gold, as it is sometimes in early summer. The gardener had been up since dawn, mowing the lawns and sweeping them, until the grass and the daisy plants had seemed to shine. As for the roses, hundreds, yes, literally hundreds, had come out in a single night; the green bushes bowed down as though they had been visited by archangels.

Breakfast was not yet over before the men came to put up the marquee. "Where do you want the marquee put, mother?"

"My dear child, it's no use asking me. I'm determined to leave everything to you children this year. Forget I am your mother. Treat me as an honoured guest."

But Meg could not possibly go and supervise the men. She had washed her hair before breakfast, and she sat drinking her coffee in a green towel, with a dark, wet curl stamped on each cheek. "You'll have to go, Laura; you're the artistic one," she said. Away Laura flew, still holding her piece of bread and butter. It's so delicious to have an excuse for eating out of doors and, besides, she loved having to arrange things; she always felt she could do it so much better than anybody else.

Four men in their shirt-sleeves stood grouped together on the garden path. They carried sticks covered with rolls of canvas, and they had big tool bags slung on their backs. "Good morning," said Laura, copying her mother's voice. It sounded so unusual that she was ashamed, and stammered like a little girl, "Oh—er—have you come—is it about the marquee?"

"That's right, miss," said the tallest of the men, a lanky, freckled fellow. He shifted his tool bag, knocked back his straw hat and smiled down at her. "That's about it."

"Laura, Laura, where are you? Telephone, Laura!" a voice cried from the house.

"Coming!" Away she skimmed, over the lawn, up the path, up the steps, across the veranda, and into the porch, desperate to know what was so urgent.

1. Who do you think was on the phone for Laura and why?

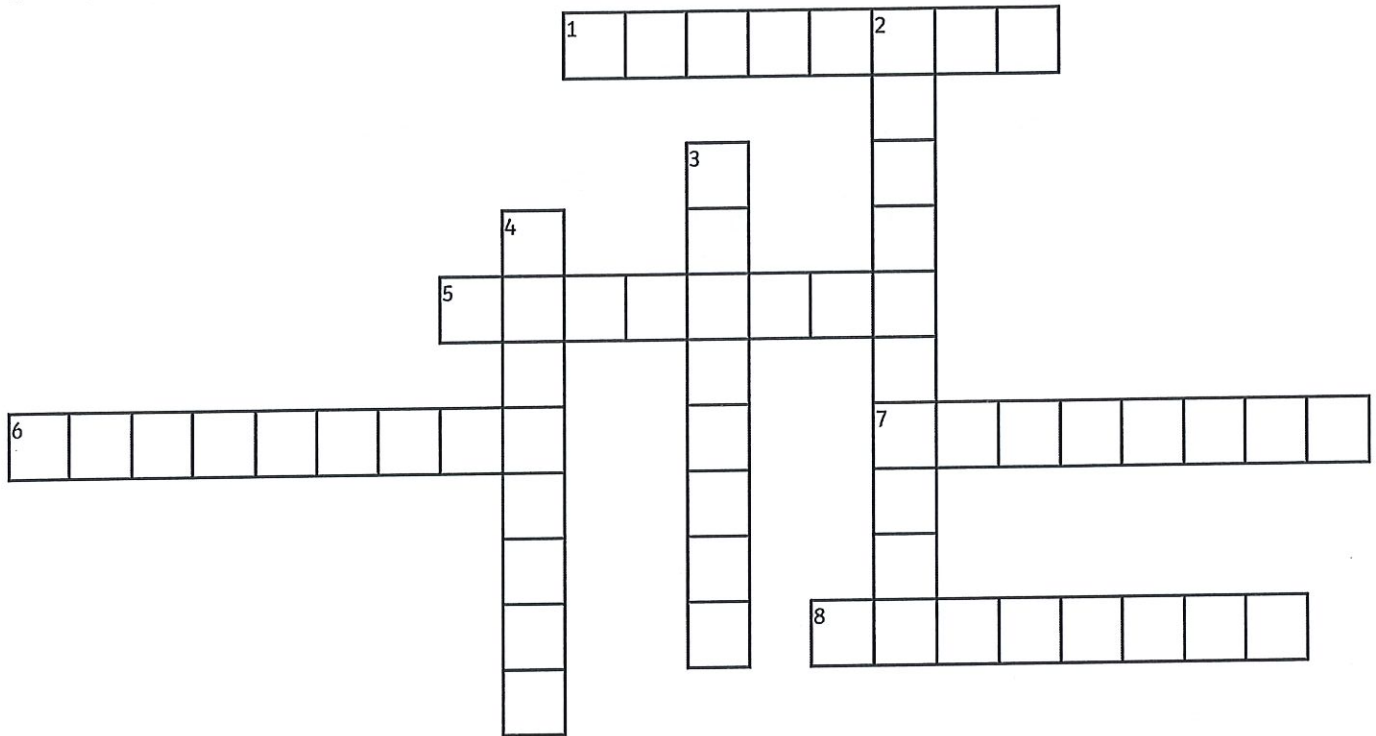
2. 'The blue was veiled with a haze of light gold.' Why do you think that the author described the sky in this way?

3. 'Away Laura flew...' Why do you think the author used 'flew' instead of 'walked'?

4. Find and copy the name of two flowers from the garden.

Crazy Criss-Cross

Can you solve the tricky clues below to figure out the words in this crossword? Make sure that you spell your answers correctly to reveal the secret hidden word.



Across

1. Something that does not happen on purpose.
5. Something which is very unusual.
6. To suddenly go away.
7. The doctor may prescribe this when you are poorly.
8. Use a ruler to make sure your lines are...

Down

2. You do a lot of this in science lessons.
3. Put your important dates in one of these.
4. The second month of the year.

What does the secret hidden word mean? Ask an adult, use a dictionary or research in your own way.

Write the secret hidden word in a sentence.

Tense Tales

Vera vlogged what she did in the summer holidays so that she could write a blog post about it later, but her vlog was all in the present tense. She's struggling to rewrite it in the past tense – can you help her?

We are walking down the beach and eating an ice cream. The weather is so hot and sunny that I'm getting a tan! We are heading towards the marina and we can see the yachts turning in.

We are finding a restaurant to have our evening meal in. We are looking at all of the menus and deciding what we'd like. Dad is laughing at the prices – it's so much cheaper than at home!

I'm going for a swim in the pool before I go to bed – it is so relaxing.

Think and Write: Summer Showers.

Use this picture as inspiration to carefully think and write a short paragraph about the adventures of Gerome the Gnome.



Sentence 1: Include an expanded noun phrase.

Sentence 2: Include the co-ordinating conjunction 'for'.

Sentence 3: Write a sentence containing inverted commas.

Sentence 4: Write a sentence containing a fronted adverbial.

Subordinating Summer Sentences

Use your super sentence-writing skills to create sentences using different subordinating conjunctions. Read the clauses in the puzzle pieces and add an appropriate subordinating conjunction to link the two clauses together.

We were late for the plane		Johan forgot the passports.
----------------------------	--	-----------------------------

Laura hasn't been abroad		she was a little girl.
--------------------------	--	------------------------

They still had a good time		it rained all week.
----------------------------	--	---------------------

Kim would have been sunburned		Lee hadn't woken her up.
-------------------------------	--	--------------------------

Mum got us some drinks		Dad guarded the sun beds.
------------------------	--	---------------------------

This time, read the subordinating conjunction and the subordinate clause and add a main clause at the beginning of each sentence. The first one is done for you as an example.

We were all so excited	when	the sun came out.
------------------------	------	-------------------

	because	the plane took off too late.
--	---------	------------------------------

	since	the refreshments were free of charge.
--	-------	---------------------------------------

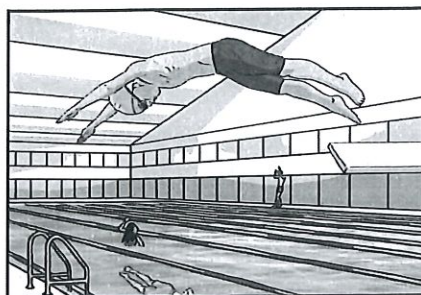
	if	I was given a chance to.
--	----	--------------------------

	although	the lifeguard said we couldn't.
--	----------	---------------------------------

Adverbial Adventures

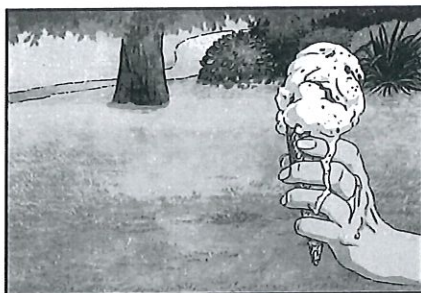
Look at the pictures on the front of these postcards and write a sentence about what is happening using a fronted adverbial. If you need to, use the bank of fronted adverbials below to help you.













above the clouds

bravely

happily

almost unbelievably

beside the sea

having a great time

very sensibly

Write a postcard of your own to tell your teacher what you would do on your dream summer holiday. Use a fronted adverbial in every sentence.

[illegible]

Message in a Bottle

You are on the beach and a message in a bottle has washed up on the shore... but it is nonsense! Your job this summer is to decipher the message. Break the code using the information below. Find the letter from the code word on the top row and swap it for the letter below it. What hidden words are being spelled?

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
w	k	i	g	p	s	o	j	y	c	r	z	h	n	x	u	q	m	v	d	b	f	e	l	a	t

bngaxwtdw

woewkcwnjw

tcvvcjpxz

egffwffcgn

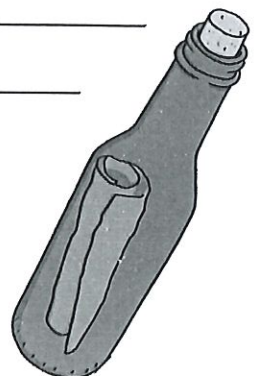
fweykyzw

fpkekcfw

kwcdn

wcdmzm

Write a paragraph below that contains all of the secret words.



Solve the Clues to Guess Whose Is Whose

All of these people have arrived at the hotel lost property office to find something they have lost. Can you solve the clues to match the item to its owner? Write the owner's name with a possessive apostrophe on each tag.



Jess

I've lost something that helps me to see.



Princess

I've lost something which carries my drink to work.



Sue

I've lost the thing that keeps me on time.



Max

I've lost a piece of jewellery that I always wear around my neck.



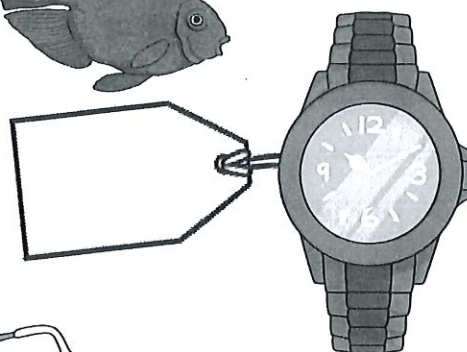
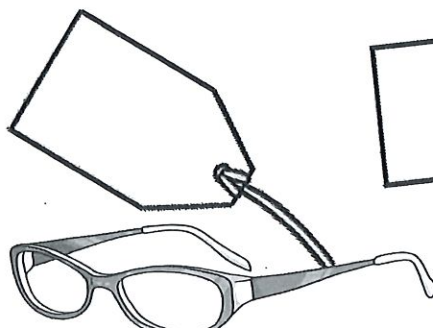
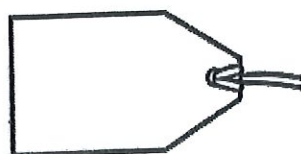
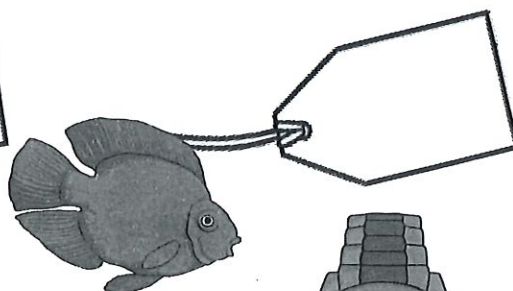
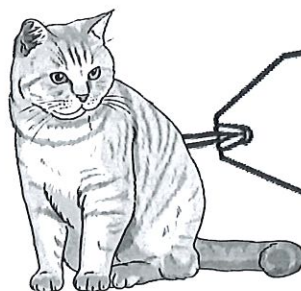
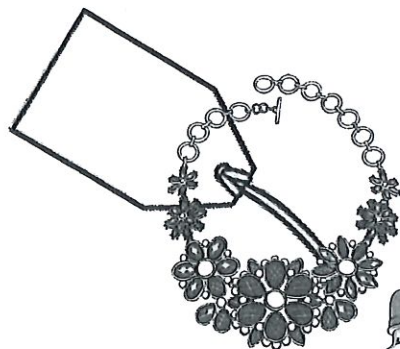
Mrs Lee

We've lost something that needs to live in water.



The Girls

I've lost my fluffy best friend.
Can you help?



A Child's Book of the Seasons by Arthur Ransome

In summer we go quietly and softly through the little wood at the back of the house, wait at the other side of it and peep over the hedge. There is a steep bank on the other side and then a row of little trees, the remains of an old hedge and then another bank. The other bank is full of holes and the holes are full of rabbits. On summer evenings we go there and watch the little rabbits skipping about and nibbling the grass.

Of course, as the summer goes on, the grass grows very high and, when we walk through it, we can sometimes see nothing but the ears of the little rabbits peeping up above it. You can't imagine how funny they look. Once, Sally fell right over the top of one of them that was hidden in the grass. It jumped out under her feet and she was so startled that she fell forward. She felt something warm and furry wriggling in her hands and found that she had caught a baby rabbit. Sally stroked it until it was not frightened anymore and then she put it on the ground and let it go. It hopped joyfully away through the grass and disappeared into its burrow in the bank.

Besides the rabbits we find all sorts of other charming things in the long grass that swishes so happily around our ankles. Buttercups are there which send a golden light over your chin if you hold them near enough. The fields are full of buttercups, dandelions, purple thistles and wild orchids.



In another bank, not so very far from the home of the rabbits, another little furry creature lives; a pretty, little brown-coated, long-tailed person, who is a great hunter and much feared by the rabbits. He has a long, thin body, a pointy, little head, and a wavy tail. He is a weasel. His bank is just by the side of a pleasant trickling stream and not very far from the wood where the pheasants live. There are plenty of stories about him among the country people. They say that if you whistle near his hole he will come running out to see what is the matter and, if you go on whistling, he will come nearer and nearer until you can catch him with your hands.

1. Find and copy two adverbs from the first paragraph.

2. Why do you think that the rabbit felt frightened when Sally tripped over it?

3. Find and copy the phrase which shows what Sally did to make the rabbit feel better.

4. In the fourth paragraph, the author gives clues about the animal before revealing its name. Why do you think he does that?

Number and Place Value Booklet

Number and Place Value

Use numbers from -20 to 10 000

Counting

Count forwards and backwards in 4, 6, 7, 8, 9, 25, 50, 100 and 1000

7, 14, 21, 28, 35, 42 ...

625, 600, 575, 550, 525 ...

Find 10, 100 or 1000 more or less than a given number

What is 100 less than 1902?

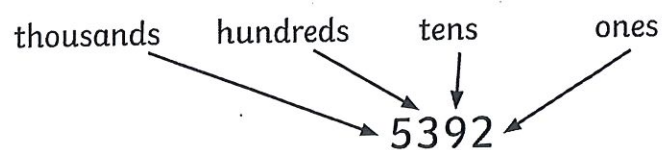
What is 1000 more than 3249?

Count backwards through zero

6, 5, 4, 3, 2, 1, 0, -1, -2, -3 ...

Place Value

Recognise the place value of each digit in up to four-digit numbers



Compare and Order Numbers

Compare using <, > or =

2778 < 2881

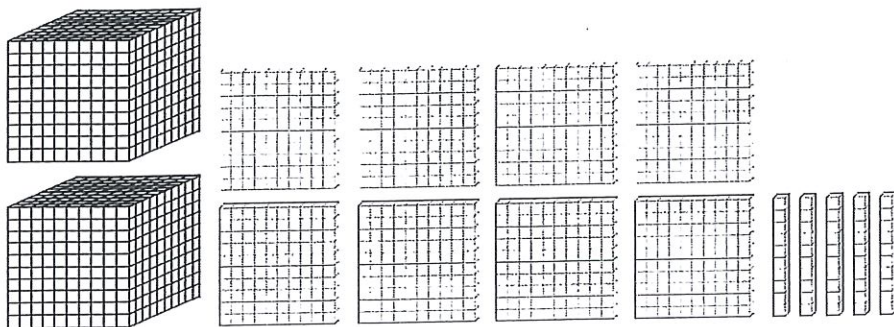
7662 > 7652

Smallest 1112 1121 1212 1222 2121 Greatest

Identify, Represent and Estimate

Use models and representations of numbers

2850 can be represented by



Rounding

Round numbers to the nearest 10, 100 or 1000

Remember 5 rounds up

45 rounded to the nearest 10 is 50

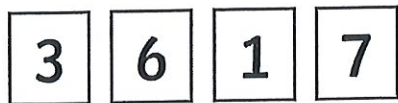
250 to the nearest 100 is 300

Read and Write Numbers in Numerals and Words

4285 is four thousand, two hundred and eighty-five

Solve Problems

Apply the knowledge and understanding from the above to solve problems



What is the largest number that can be made from these digits cards? **7631**

Addition and Subtraction

Add and Subtract Mentally

Add and subtract three-digit numbers and ones, tens and hundreds

$$376 + 3 = 379$$

$$376 + 40 = 416$$

$$376 + 200 = 576$$

Formal Methods

2698 + 1562 becomes

$$\begin{array}{r} 2698 \\ + 1562 \\ \hline 4260 \end{array}$$

Answer: 4260

4935 - 2423 becomes

$$\begin{array}{r} 4935 \\ - 2423 \\ \hline 2512 \end{array}$$

Answer: 2512

6812 - 2364 becomes

$$\begin{array}{r} 6\cancel{8}^1\cancel{1}^0\cancel{2}^1 \\ - 2364 \\ \hline 4448 \end{array}$$

Answer: 4448

Estimate and Inverse

Estimate $4318 + 1298 \approx 4300 + 1300 \approx 5600$

Inverse: check $7932 - 3457 = 4475$, by $3457 + 4475 = 7932$

Solve Problems

Two-step problems

2891 people visit a cinema on one day. There are three films showing. 549 people see an adventure film, 1263 people see a musical and the rest see an animation. How many see the animation?

$$549 + 1263 = 1812 \text{ see the adventure and musical}$$

$$2891 - 1812 = 1079 \text{ see the animation}$$

Multiplication and Division

Multiplication Tables

Multiplication and division facts to 12×12

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	65
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	65
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Multiplying and Dividing

Use place value and known facts: $400 \times 5 = 2000$, $630 \div 7 = 90$

Multiply by 0 and 1 and divide by 1: $285 \times 1 = 285$, $285 \times 0 = 0$, $285 \div 1 = 285$

Factor Pairs and Commutativity

The factor pairs of 56 are 1 and 56, 2 and 28, 4 and 14, 8 and 7.

Use this to solve: 56 pencils are shared between 4 tables. How many pencils does each table receive?

Commutativity means that changing the order of the numbers in a calculation does not change the answer: $5 \times 9 \times 2 = 5 \times 2 \times 9 = 10 \times 9 = 90$

Formal Methods

Use formal methods to multiply 2 and 3 digit numbers by 1 digit numbers

27×4 becomes

$$\begin{array}{r} 27 \\ \times 4 \\ \hline 108 \\ \hline \end{array}$$

Answer: 108

382×7 becomes

$$\begin{array}{r} 382 \\ \times 7 \\ \hline 2674 \\ \hline \end{array}$$

Answer: 2394

Solve Problems

Missing number problems: $\square \times 3 = 45$ or $56 \div \square = 14$

Scaling Problems

One pack of pencils contains 12 pencils. How many pencils are there in 8 packs?

$$12 \times 8 = 96$$

Correspondence Problems

Jenna has 2 t-shirts and 4 pairs of shorts. How many different combinations of the t-shirts and shorts does Jenna have?

Various answers

120 pencils are shared equally between 3 classes. How many pencils will they each receive?

Using the distributive law $39 \times 7 = 30 \times 7 + 9 \times 7 = 210 + 63 = 273$

Fractions

Tenths

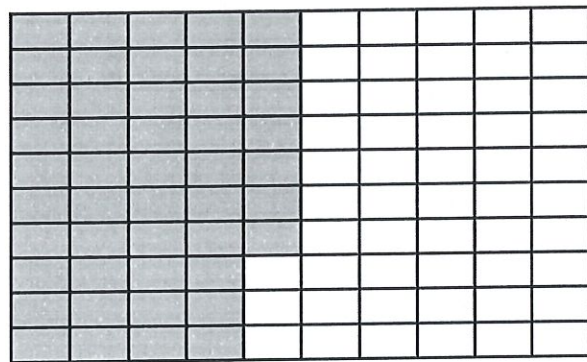
Counting: $\frac{7}{10}, \frac{6}{10}, \frac{5}{10}, \frac{4}{10}, \dots$

Dividing into 10 equal parts or by 10



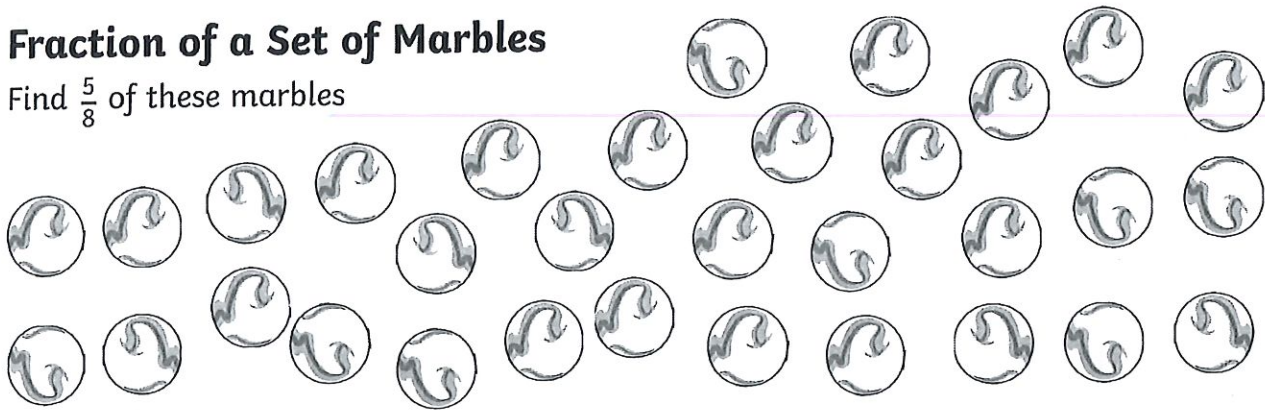
Counting: $\frac{47}{100}, \frac{46}{100}, \frac{45}{100}, \frac{44}{100}, \dots$

Dividing into 100 equal parts or by 100 or tenths by 10



Fraction of a Set of Marbles

Find $\frac{5}{8}$ of these marbles



$$32 \div 8 = 4$$

$$4 \times 5 = 20$$

Equivalent Fractions



$$\frac{3}{4}$$

=



$$\frac{6}{8}$$

=



$$\frac{12}{16}$$

1							
$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

1											
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$
$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$

1															
$\frac{1}{5}$				$\frac{1}{5}$				$\frac{1}{5}$				$\frac{1}{5}$			
$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	
$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$

Add and Subtract Fractions with the Same Denominator

Add or subtract the numerator, keeping the denominator the same. The answer can be expressed as an equivalent fraction.

$$\frac{1}{8} + \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$$



$$\frac{5}{8} - \frac{3}{8} = \frac{2}{8} = \frac{1}{4}$$



Compare and Order

Unit fractions

smallest

$\frac{1}{8}$

$\frac{1}{6}$

$\frac{1}{4}$

$\frac{1}{3}$

greatest

Fractions with the same denominator

$$\frac{1}{5} < \frac{3}{5}$$

Decimal Equivalents

Tenths and hundredths:

$$\frac{7}{10} = 0.7$$

$$\frac{43}{100} = 0.43$$

$$\frac{1}{4} = 0.25$$

$$\frac{1}{2} = 0.5$$

$$\frac{3}{4} = 0.75$$

Division by 10 and 100

$$2 \div 10 = 0.2$$

$$2 \div 100 = 0.02$$

$$25 \div 10 = 2.5$$

$$25 \div 100 = 0.25$$

Rounding Decimals

To the nearest whole number:

0.5 rounds to 1 because the 5 rounds up

2.35 rounds to 2 because the 3 rounds down (ignoring the 5)

Comparing Decimals

With the same number of decimal places

$$0.8 > 0.5$$

$$0.45 < 0.53$$

Solve Problems

Adil divides his marbles into tenths. He wants to give two friends a number of the tenths of his marbles and keep the rest himself. Write 3 ways that he could share the marbles.

$$\text{Eg. } \frac{4}{10} + \frac{1}{10} + \frac{5}{10}$$

Measure and Money Problems

Ellie buys a new shirt for £4.75 and a pair of trousers for £3.50 in a sale. She pays with a £10 note. What change will she receive?

A bag of potatoes weigh 2.45kg. How much will 4 bags cost that all weigh the same?

Measurement

Estimate, Measure, Compare, Add and Subtract

In all cases, be able to estimate with some accuracy prior to measuring

Lengths (mm/cm/m)

Measure and draw lines using a ruler in centimetres (cm) or millimetres (mm).

This line is 9.5cm or 95mm long.

Mass (g/kg)

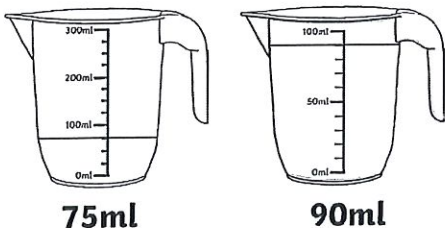
Measure the mass of objects using different scales

3 apples weigh 435g. One is eaten, and the 2 remaining apples weigh 285g. What is the mass of the eaten apple?

$$435\text{g} - 285\text{g} = 150\text{g}$$

Capacity (ml/l)

Which jug has more water?



Convert between units

Length: 1 km = 1000m, 1m = 100cm or 1000mm. 1cm = 10mm

Mass: 1kg = 1000g

Capacity/ Volume: 1l = 1000ml

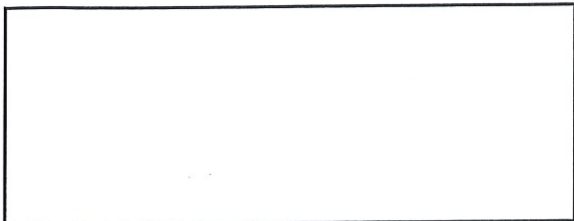
Time: 1 year = 365 days (leap year 366 days), 1 week = 7 days,

30 days hath September,
April, June and November.
All the rest have 31,
Excepting February alone
Which only has but 28 days clear
And 29 in each leap year.

1 day = 24 hours, 1 hour = 60 minutes, 1 minute = 60 seconds

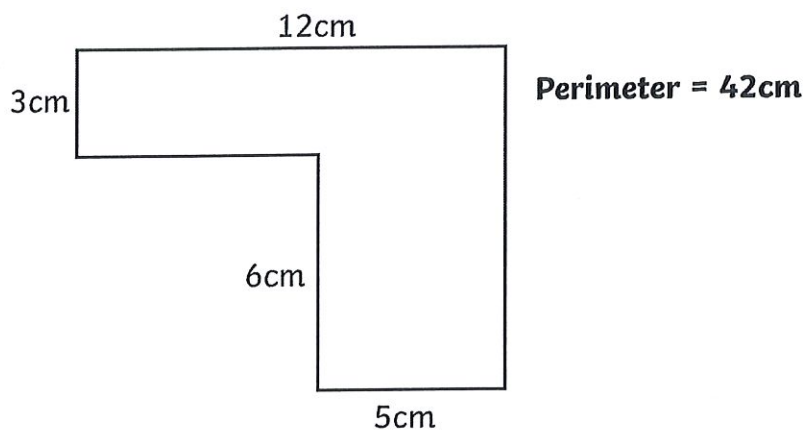
Perimeter

The perimeter is the measurement around the edge of a shape



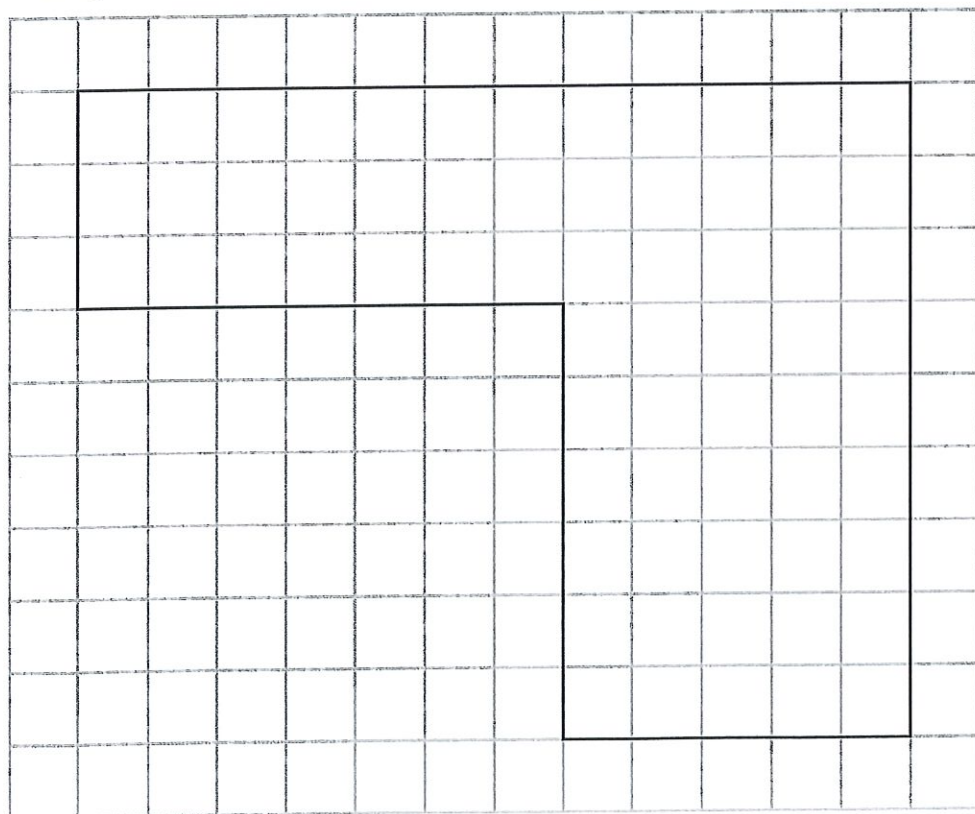
The sides of this rectangle are 8cm and 3cm, so the perimeter is 22cm.

Measure and calculate the perimeter of rectilinear shapes (including squares)



Area

Area of rectilinear shapes by counting squares



Area = 66cm²

Money

Add and subtract giving change

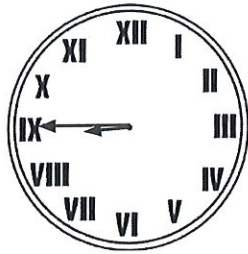
Jude buys an apple and an orange costing 25p and 15p. How much change from 50p?

Estimate how much money in a hand in £ and pence.

Time

Analogue clocks and 12/24 hour time

These clocks show quarter to nine:



Record time in hours, minutes and seconds

The maths lesson lasted 1 hour and 5 minutes. The art lesson was one hour and twenty minutes. The art lesson was longer than the maths lesson.

Morning is am, afternoon is pm

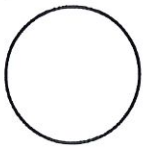
A film lasts 136 minutes. How long is the film in hours and minutes?

2 hours and 16 minutes

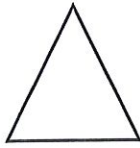
Geometry – Shape

2D Shapes

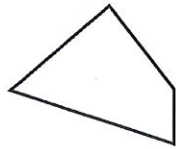
Main shapes: circle, triangle, quadrilateral, square, rectangle, rhombus, parallelogram, pentagon, hexagon, octagon, decagon



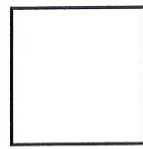
circle



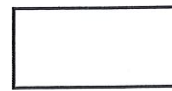
triangle



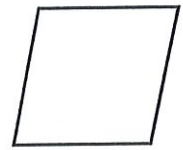
quadrilateral



square



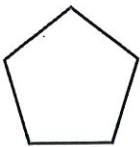
rectangle



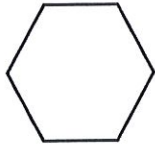
rhombus



parallelogram



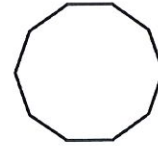
pentagon



hexagon

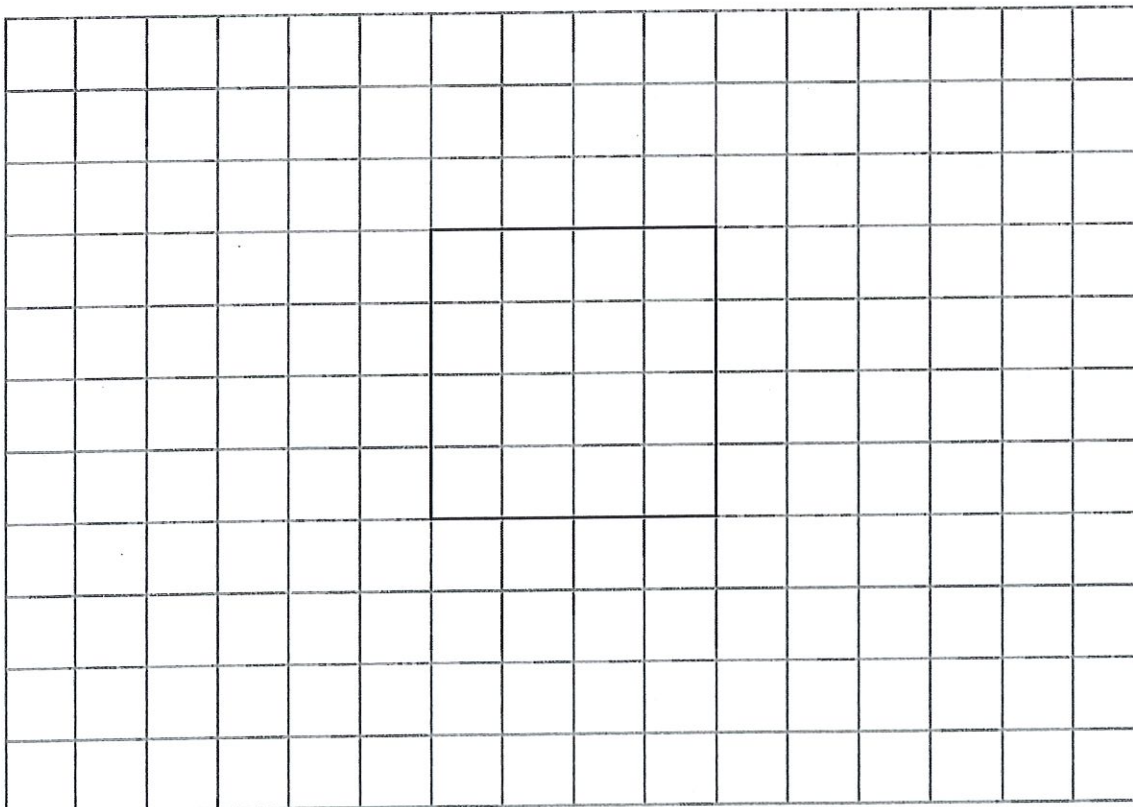


octagon

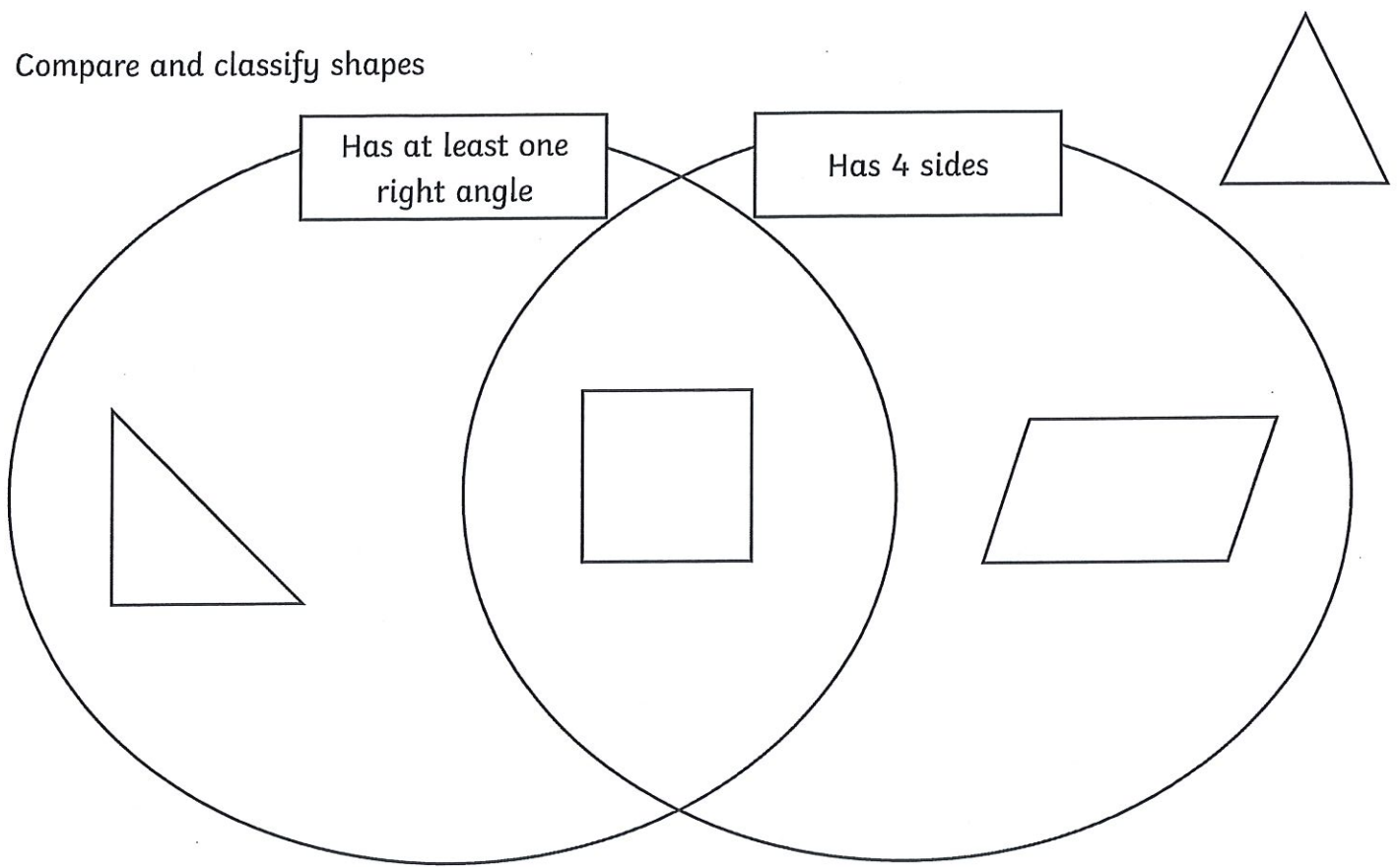


decagon

Draw a square on 1cm squared paper with sides of 4cm.



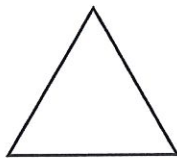
Compare and classify shapes



The 4 shapes are classified in this Venn diagram.

Triangles

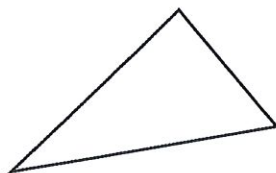
Equilateral (all sides and angles equal)



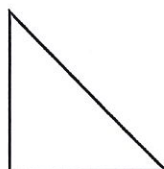
Isosceles (2 sides and angles equal)



Scalene (no sides and angles equal)



Right-angled triangle (one angle a right angle)



3D Shapes

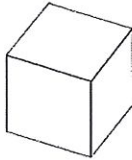
Main shapes: sphere, cylinder, cube, cuboid, tetrahedron, square-based pyramid, triangular prism, pentagonal prism, hexagonal prism



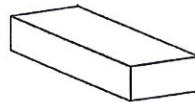
sphere



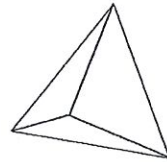
cylinder



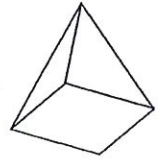
cube



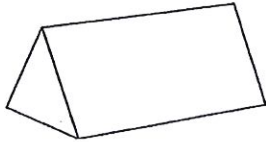
cuboid



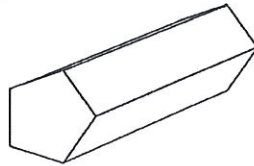
tetrahedron



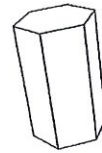
square-based
pyramid



triangular prism



pentagonal prism

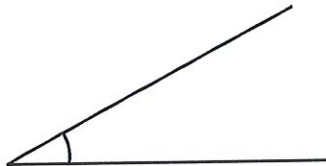


hexagonal prism

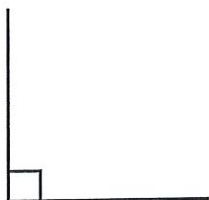
Recognise 2D representations and make models from modelling materials

Angles

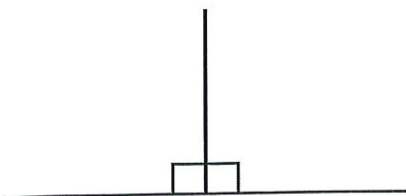
An angle measures a turn



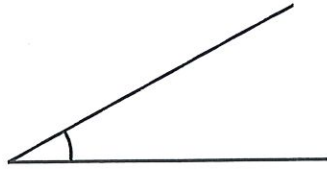
A right angle is the corner of a square



2 right angles make a straight line



An acute angle is less than a right angle (90°)



An obtuse angle is between a right angle and a straight line.

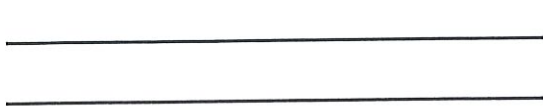


Lines

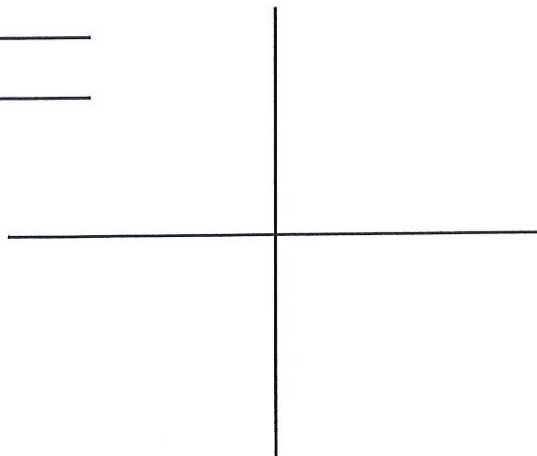
Horizontal 

Vertical 

Parallel Lines

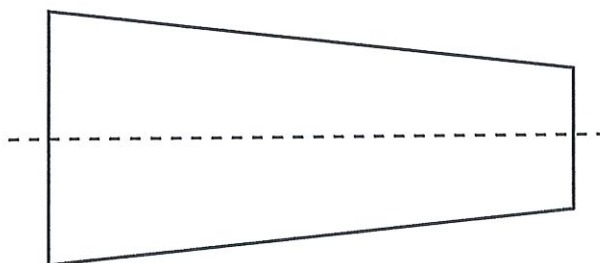
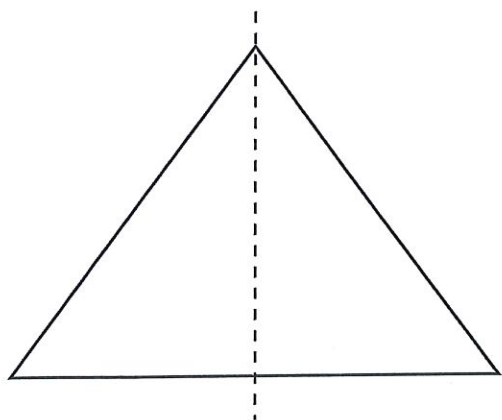


Perpendicular lines (at a right angle)

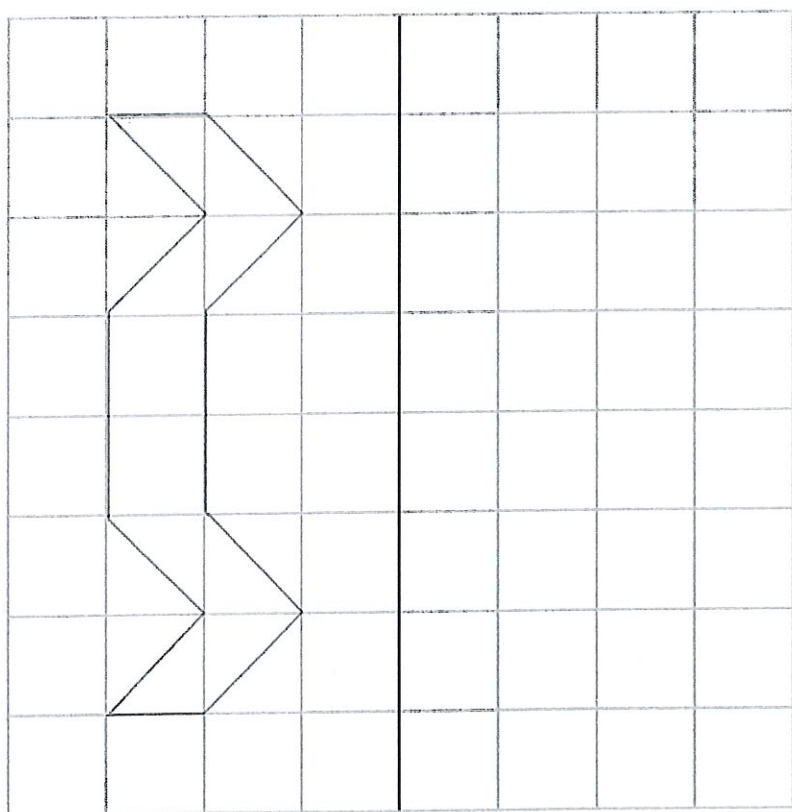


Symmetry

Identify lines of symmetry

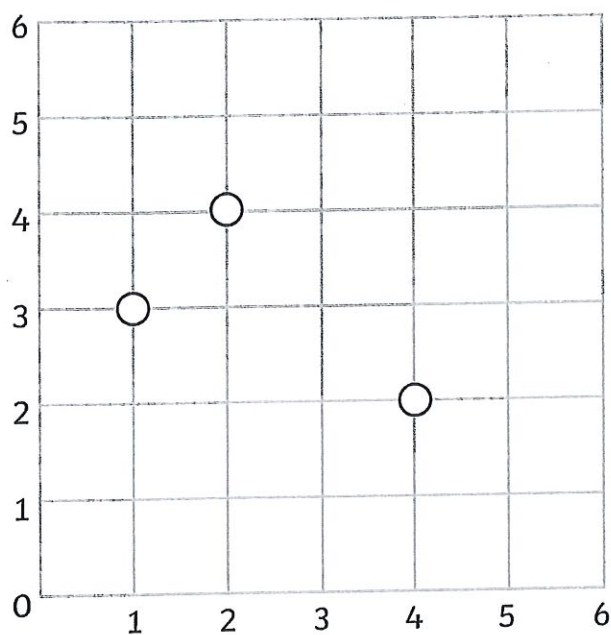


Complete a symmetrical figure



Geometry – Position and Direction

Coordinates



Label A, B and C

The coordinates are

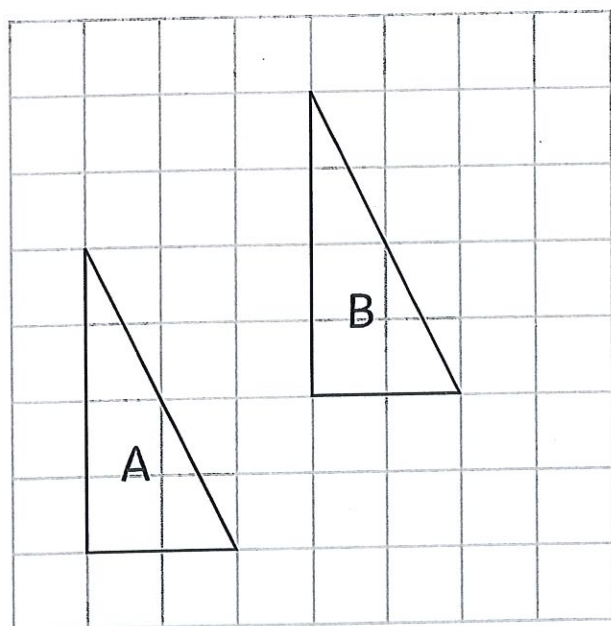
A (1,3)

B (2,4)

C (4,2)

What are the coordinates of the point that will complete a rectangle? **(3,1)**

Translation

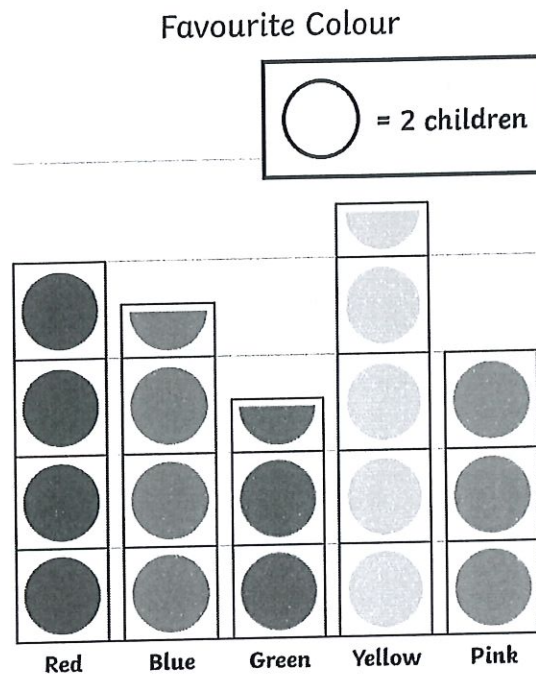


The triangle A is translated three squares to the right and two squares up to triangle B.

Statistics

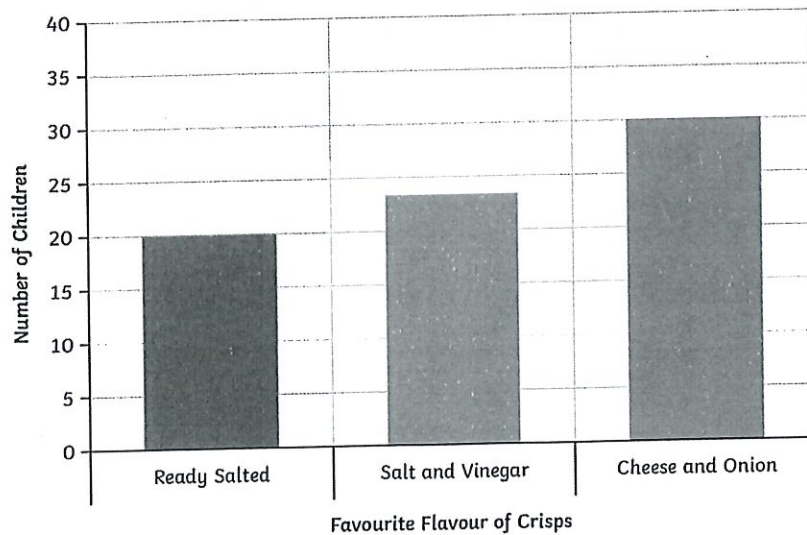
Present data in these graphs and tables and solve problems:

Pictograms



How many children chose their favourite colour? **35**

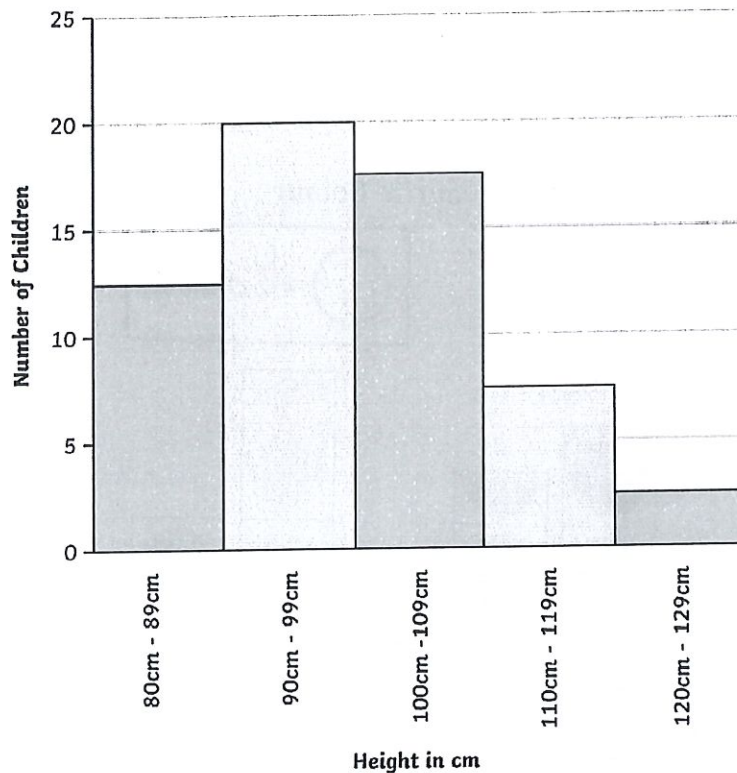
Bar Charts



How many more children chose cheese and onion as their favourite crisps than ready salted?

Continuous data can have any value – usually a measurement

The Height of Children



How many children are shorter than 1m? (Add the first 2 bars)

Tables

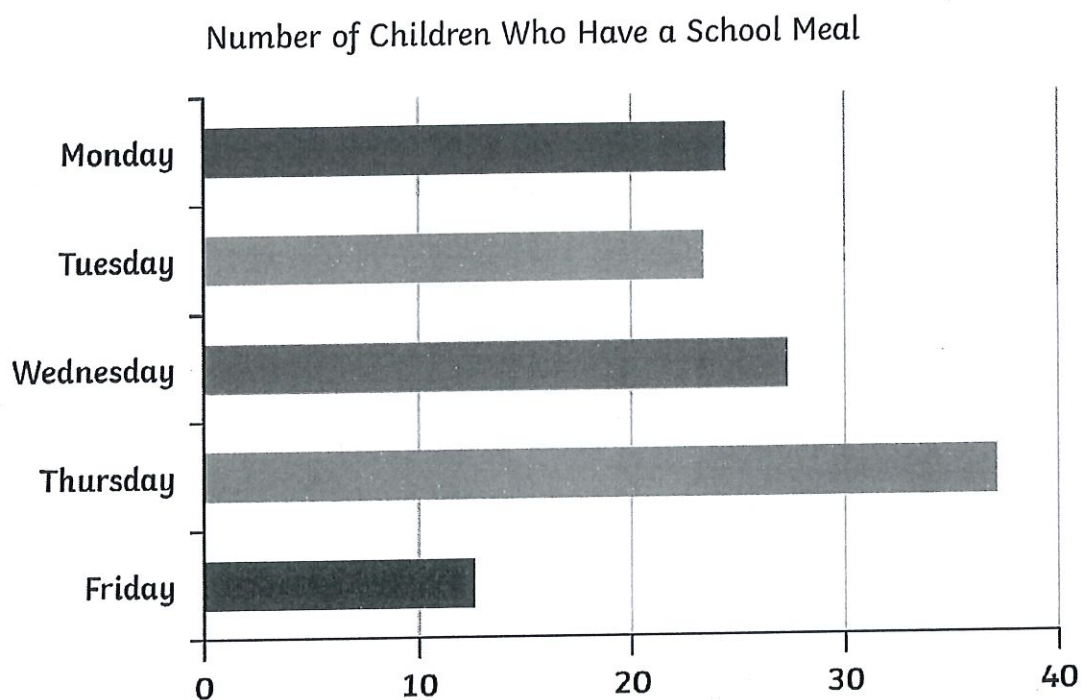
Here is a table of the chocolate bars sold to customers in a shop over 4 days.

	Monday	Tuesday	Wednesday	Thursday
Saturn	2	1	3	4
Twin	0	2	2	3
Stars	5	3	2	0
Cluster	2	2	2	2
Treasure	1	3	5	0
Tiger	6	3	4	1
Plimmy	1	3	2	2

Which chocolate bar is the most popular? **Tiger**

Time Graphs

Time graphs show the changing of data over time. These often take the form of line graphs but can also be a bar chart.

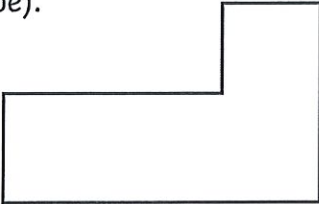


How many school meals were served during the week?

Important Vocabulary

This list is not exhaustive. Some vocabulary is described above.

Vocabulary	Meaning
2D shapes	Flat shapes with no thickness. In theory a 2D shape cannot be picked up, but in practice shapes made of paper are counted as 2D. (A list of shapes is included in the section on shape.)
3D shapes	A shape with 3 dimensions that can be picked up. (A list of shapes is included in the section on shape.)
Analogue	A clock face with hands.
Area	The amount of space taken up by a shape.
Calculation	The working out of an answer using addition, subtraction, multiplication or division.
Capacity	How much a container holds.
Commutativity	The answer is the same no matter which way the calculation is completed: e.g. $2 + 4 = 4 + 2$ or $2 \times 4 = 4 \times 2$.
Denominator	The bottom part of a fraction.
Digit	A single symbol used to make a numeral: 7 (All numbers are made from the ten digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0.)
Digital	A clock using digits to tell the time.
Discrete	A whole number of a set of objects.
Equivalent fraction	A fraction which has the same value but is divided into a different number of parts: e.g. $\frac{1}{2} = \frac{2}{4}$
Factor	A factor of a number is a number into which the number can be divided with no remainders: e.g. the factors of 8 are 1, 2, 4, and 8.
Factor pairs	Factor pairs are 2 factors that are multiplied together to make the number: e.g. the factor pairs of 8 are 1 and 8, 2 and 4.
Fraction	A number express as the number of parts into which the whole has been divided: e.g. $\frac{3}{4}$ represents 3 parts out of 4.
Integer	A whole number with no parts: e.g. 5, 18, 109.
Inverse	An inverse operation is the opposite or reverse of an operation: e.g. the inverse of $6 - 4 = 2$ is $2 + 4 = 6$ or the inverse of $6 \div 3 = 2$ is $2 \times 3 = 6$.
Mass	Often known as weight – how much matter is in an object.
Numeral	A symbol, symbols, word or words that stand for a number: 37 or thirty-seven.

Numerator	The top part of a fraction.
Perimeter	The measurement around an object.
Place value	The value of each digit in any number: In 27 the 2 represents 2 tens.
Polygon	A 2D shape with any number of sides.
Quadrant	A quarter of the space represented by coordinates, bordered by the x and y axes.
Quadrilateral	Any four sided shape.
Rectilinear	<p>A shape with all angles as right angles (the right angle can be inside or outside the shape).</p> 
Scale	The mathematical relationship between different measurements or number of objects.
The Distributive Law	Multiplying 2 numbers by a number and adding, gives the same answer as multiplying the sum of the 2 numbers by the other number: e.g. $4 \times (3 + 2) = 4 \times 3 + 4 \times 2$.
Translation	The movement of a shape without rotation or reflection.
Volume	The amount of space taken up by an object.
Weight	Mass is measured by how much something weighs, but this can change in different locations.

