

YEAR 4 – Down the Hatch



Hello, Year 4! We hope you are all continuing to enjoy your learning. We have again certainly enjoyed hearing about and seeing what you have been up to! Please continue to post pictures on Twitter @oldburypark. Did you know elephant tusks are the longest teeth in the animal kingdom? **Also, Toothpaste** has only existed for about 100 years. Before that people cleaned their teeth with things like chalk, charcoal and lemon juice!!! A challenge for you - What was a Penny Black and what was it used for? Have restful half term Have fun! #StaySafe
Ms Condon Mrs Screen Miss Doughty Mrs Sheppard

EVERY DAY

Daily Maths lessons – WEEK 4 please. <https://whiterosemaths.com/homelearning/year-4/>
Mathletics – 15-20 minutes (more if you wish).
Read for at least 15 minutes.

Additional tasks for this week (18/5/20)

English	Topic
<p>Monday https://www.literacyshed.com/teeth.html Watch this video. Explain what happened (verbally) then write a summary of the events that day (one or two paragraphs).</p> <p>Tuesday Re-watch the story from yesterday. If both of the men were to write a diary of what happened that day, would their accounts be the same? Why not? Think about the point of view of each man – how would they be different? Choose one of the men and write his diary entry. Remember to include thoughts and feelings as well as a description of the events.</p> <p>Wednesday https://www.bbc.co.uk/bitesize/topics/zvwwxnb/articles/ztcp97h Complete this activity about using inverted commas to punctuate speech. How many rules for punctuating speech can you remember?</p> <p>Thursday http://www.primaryresources.co.uk/english/pdfs/direct.pdf Practising speech punctuation. Please complete Task 1, Task 2 and Task 5. Parents: The rules for punctuating speech, and the correct terminology that is used in school, are explained clearly on this website. https://www.theschoolrun.com/what-are-speech-marks</p> <p>Friday https://www.literacyshed.com/teeth.htm Re-watch the video. Write a conversation that the men may have had during their fishing trip. Remember to correctly punctuate the speech using inverted commas and to use a new line every time there is a new speaker.</p>	<p>This week we want you to complete at least one of the following – Create a labelled tooth map of your mouths using a mirror. https://www.bbc.co.uk/bitesize/topics/z27kng8/articles/zsp76yc Explain the purpose of each tooth type below the diagram as fully as you can. https://www.twinkl.co.uk/resource/t2-s-1339-all-about-teeth-and-their-functions-powerpoint https://www.twinkl.co.uk/resource/t2-s-1176-human-teeth-cut-and-stick-matching-activity-sheet How can we look after our teeth? Make a list of the things we could do. Does what we eat effect the health of our teeth? https://www.youtube.com/watch?v=3Qvo1nIkQnM Challenge: We all know how important it is to brush our teeth. But what are the real effects of food and drink on our pearly whites? Carry out a simple experiment using egg shells to represent our teeth and demonstrate the effects of water, cola and orange juice over time. Video yourself carrying out your experiment or write it up. Remember to use subheadings, instructions and labelled diagrams! https://sciencing.com/science-fair-project-tooth-decay-6085859.html</p>

This week's English tasks are based on this video <https://www.literacyshed.com/teeth.html>

If you don't have access to the video, you can complete the same activities but using the story below instead.

The Bad Neighbours



There was once a man who went out to look for a job. As he was passing his neighbour's house, an important piece of paper fell out of the man's pocket.

His neighbour happened to be looking out the window. He saw the piece of paper fall, and he thought: "What a disgrace! That guy deliberately let that fall out of his pocket. He's trying to mess up the front of my house, and he's being sneaky about it, too!"

But instead of going out and saying something, the neighbour planned his revenge.

That night, he took his waste-paper basket and went to the man's house. The first man also happened to be looking out the window, and saw what happened. Later, when he was picking up the papers which had been dumped on his porch, he found the important piece of paper that he had lost. It was torn into dozens of pieces. He thought that his neighbour had not only picked his pocket, but had had the cheek to mess up his doorway with rubbish.

He didn't want to say anything. Instead, he started plotting his revenge. That night he phoned a farmer to make an order of ten pigs and a hundred ducks. He asked that they be delivered to his neighbour's house.

Of course, the next day, his neighbour had quite a bit of trouble trying to rid himself of so many animals and their accompanying pong.

Sure that this had been a dastardly trick pulled by his neighbour, as soon as the second man had gotten rid of the pigs and ducks, he again started planning his revenge.

And so it went on.

They continued trying to get their own back on each other, and each time their acts of revenge got bigger and more ridiculous. The dropping of that single piece of paper ended up invoking a rock band, a fire siren, the driving of a lorry into a garden fence, the throwing of a hail of stones at windows, the firing of a canon, and finally the dropping of a bomb which destroyed both men's houses.

Both ended up in a hospital, and had to spend quite some time sharing a room there. At first they refused to speak to each other, but, one day, tired of the silence, they got to talking. As time passed, they became friends, until one day they finally dared discuss the piece of paper incident. They realised that it had all been a misunderstanding, and that if they had talked to each other on the first occasion - instead of jumping to conclusions about bad intentions - then none of this would have happened. Even better, they would still have their houses.

Day	Suggested Activities for this Story
Monday	Read the story. Explain what happened verbally then write a summary (one or two paragraphs) about this story.
Tuesday	Think about the two men in this story. If they were to write a diary about their experience, on the first day of this story, would they both have the same viewpoint? Why not? Choose one of the men and write a diary entry from his point of view. Include thoughts and feelings, as well as a description of the events.
Wednesday / Thursday	See below work on speech punctuation.
Friday	Write a conversation that the two men in this story might have had on that first day, when one man thought the other had deliberately dropped litter. Remember to include the correct speech punctuation and that for each new speaker, you need to start a new line.

Wednesday

Look at these examples of how speech is punctuated. Can you remember the rules?

Speech marks

When you are writing, **inverted commas** or **speech marks** go before and after direct speech, surrounding what was said.

"I'm hungry," she complained.

If another character replies, use another set of inverted commas.

"What's for tea?" she asked. "Delicious ants!" her mum replied.

Punctuation, such as question marks, full stops and exclamation marks go inside the speech marks.

Direct speech is a sentence in which **the exact words spoken are reproduced in speech marks** (also known as quotation marks or inverted commas). For example:

"You'll never guess what I've just seen!" said Sam, excitedly.

"What's that?" asked Louise.

"Our teacher has a broomstick and a black pointy hat in the back of her car. Maybe she's a witch!"

"No, silly! They're for the school play!" replied Louise, sighing.

The **general rules of direct speech** are:

- Each new character's speech starts on a new line.
- Speech is opened with speech marks.
- Each line of speech starts with a capital.
- The line of speech ends with a comma, exclamation mark or question mark.
- A reporting clause is used at the end (said Jane, shouted Paul, replied Mum).
- A full stop goes after the reporting clause.
- If the direct speech in the sentence is broken up by information about who is speaking, add in a comma or question mark or exclamation mark to end the first piece of speech and a full stop or another comma before the second piece (before the speech marks), for example: "It's lovely," she sighed, "but I can't afford it right now." / "I agree!" said Kate. "Let's go!"

Thursday

Direct Speech - Speech Marks

Speech marks (or inverted commas) show when someone is talking. You will see them written in books as “speech” or ‘speech’.

Task One

Copy these sentences into your book and put the speech marks in the correct places. Remember: The speech marks go around what is being said. Copy all the other punctuation correctly.

1. Hello, said the man.
2. What are you doing? said Fred.
3. Stop! shouted the policeman.
4. Wait a minute, said Mark. Don't I know you from somewhere?
5. I know what we'll do, said Lucy. We'll go to the pictures.

Task Two

Put the speech marks in the correct places once again. This time, however, you will also need to add all the other punctuation that is needed as well. Watch out for any questions or exclamations.

1. Hello said Greg
2. You look tired said Martin
3. Can I come in asked the man
4. No screamed the man
5. Come here said Grandma I want to see how much you have grown
6. Is that my bag asked Daniel I thought I'd lost it
7. Run shouted Sally The dog is after us
8. I know what I want for my birthday said Tina A brand new car

Task Five

When you use speech marks you need to remember the rule – new speaker, new line. Copy out this passage into your book. I've put in all the punctuation so make sure you copy that carefully. When you copy out the passage make sure that you put each new speaker on a new line.

"I want to go swimming," said Matthew. "I can't stand staying in doors all day." "I thought you had homework to do," said Mum. "Oh Mum," said Matthew. "I've almost finished it. Can't I just take an hour off." "Yes you can take an hour off," said Mum. "But only when you've finished your work." "But it'll be closed if I don't go soon!" said Bob. "Then you'd better get a move on, hadn't you?" said Mum.

Correspondence problems



- 1 A canteen has 2 types of bread and a choice of 3 sandwich fillings.

Bread	Fillings
white	cheese
brown	tuna
	chicken

- a) List the different sandwiches that can be made. One has been done for you.

cheese on white

- b) Complete the multiplication to represent the number of different combinations of bread and filling.

$\square \times \square = \square$

Complete the sentence.
 There are \square combinations.

- c) How many combinations would there be if there were 4 choices of sandwich filling?

\square

- 2 A pizzeria offers a choice of bases and toppings.

Pizza base	Toppings
deep pan	mushrooms
thin	chicken
	onion
	peppers
	sweetcorn

Complete the multiplication to work out how many different combinations of pizza there are.

$\square \times \square = \square$

Complete the sentence.

There are \square combinations of pizza.

- 3 Mo visits the funfair.

He buys a ticket that allows him to choose 1 ride and 1 game at the fair.

Rides	Games
Big dipper	Hook-a-duck
Dodgems	Basketball
Carousel	Coconut shy
	Lucky dip
	Test-your-strength

- a)

There are 8 different possible choices of rides and games.

Is Mo correct? _____

Explain your answer.

- b) List all the different choices Mo can make.

Mo can make \square different choices.

- 4 Aisha has 3 headbands and 5 hair slides.
 Kim has 2 headbands and 6 hair slides.
 Who has more choices of combinations for wearing one headband and 1 slide?

_____ has more choices.

Talk about it with a partner.

- 5 Here are the activity choices available at Summer Camp.

Sport	Arts and crafts	Outward bound
football	painting	wall climbing
tennis	pottery	kayaking
golf	mosaics	abseiling
	origami	

Each child is allowed to choose 3 activities per day:
 1 sport, 1 arts and crafts and 1 outward bound.

- a) How many activity combinations are there?

\square

- b) Due to a flooded pitch, football is cancelled.
 How many combinations are now possible?

There are \square combinations.

- 6 Tom and Esther are building a snowman.

They have a choice of 5 hats, 4 scarves and 2 pairs of gloves to dress their snowman.

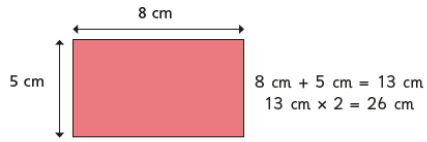
How many different combinations are possible?

$\square \times \square \times \square = \square$

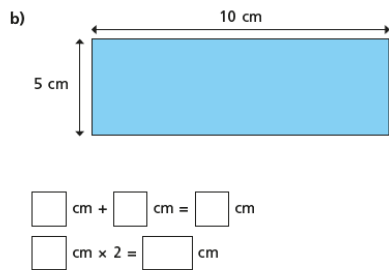
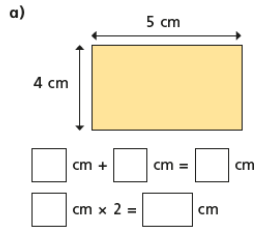
There are \square combinations.



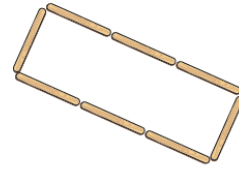
- 3 Tommy is working out the perimeter of some rectangles.



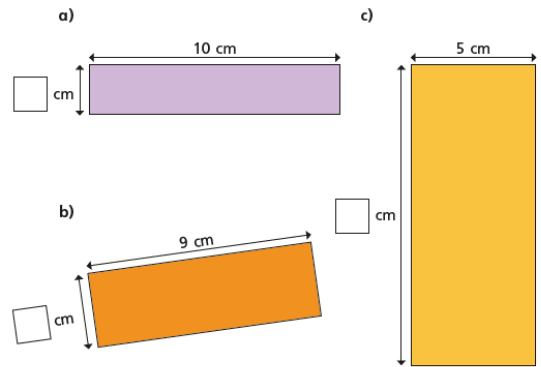
Use Tommy's method to find the perimeter of these rectangles.



- 4 Each lolly stick is 8 cm long.
Find the perimeter of the shape.



- 5 Each of these rectangles has a perimeter of 24 cm.
Work out the missing lengths and label the diagrams.



What do you notice?

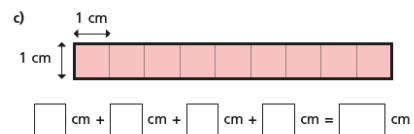
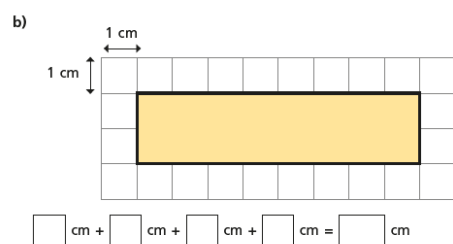
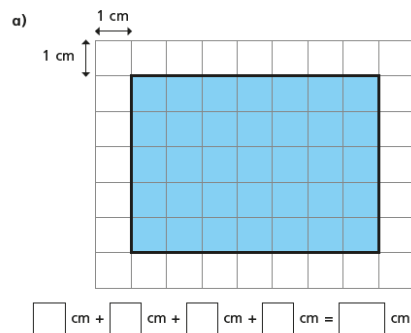
Find any other rectangles that have the same perimeter.



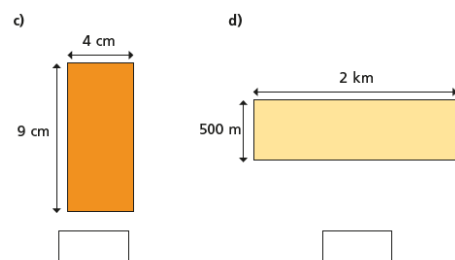
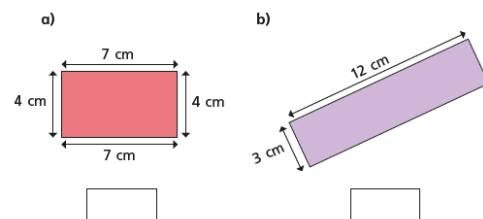
Perimeter of a rectangle



- 1 Work out the perimeter of each rectangle.



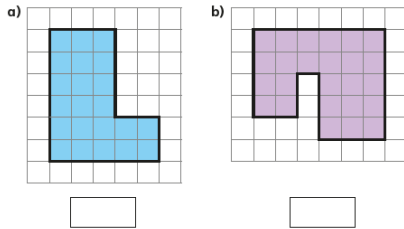
- 2 Work out the perimeter of the rectangles.



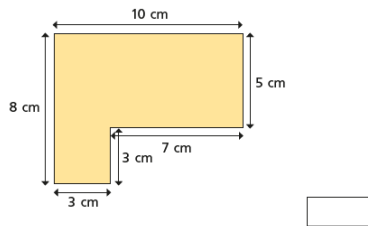
Perimeter of rectilinear shapes



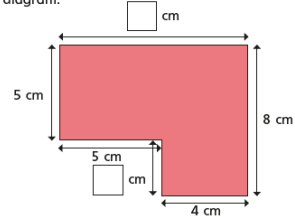
- 1 The length of each square on the grid is 1 cm.
Work out the perimeter of the shapes.



- 2 Work out the perimeter of the shape.

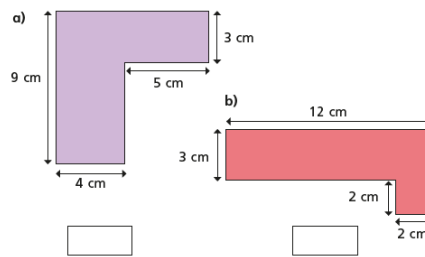


- 3 a) Work out the missing lengths and label them on the diagram.



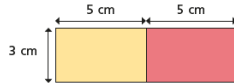
- b) What is the perimeter of the shape?

- 4 Work out the perimeter of each shape.



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- 5 Mo puts two 5 cm by 3 cm rectangles next to each other.

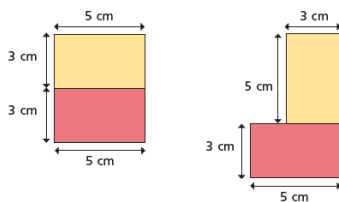


The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be $2 \times 16 \text{ cm} = 32 \text{ cm}$.

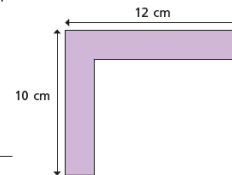
- a) Is Mo correct?

Work out the perimeter of the larger rectangle to check your answer.

- b) Mo puts the rectangles together in different ways.
Work out the perimeter of each large shape.

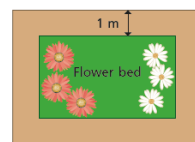


- 6 Dani thinks there isn't enough information to work out the perimeter of the shape.



Is Dani correct?
Explain your answer.

- 7 A rectangular flower bed is 5 m long and 3 m wide.
The path around the flower bed is 1 m wide.



- a) What is the perimeter of the flower bed?

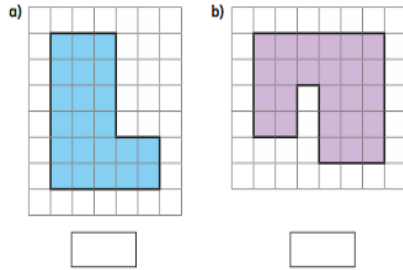
- b) What is the perimeter of the outside of the path?

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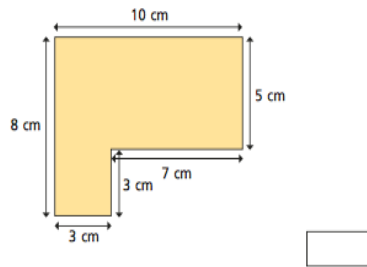


Perimeter of rectilinear shapes

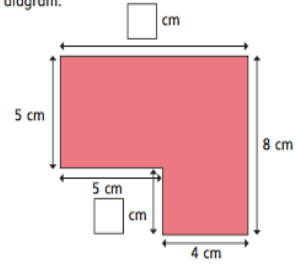
- 1 The length of each square on the grid is 1 cm.
Work out the perimeter of the shapes.



- 2 Work out the perimeter of the shape.

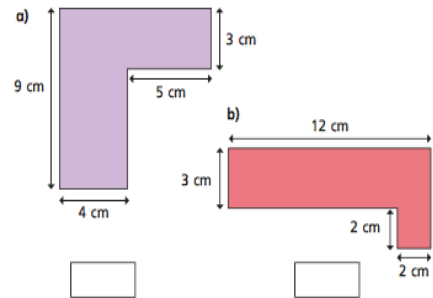


- 3 a) Work out the missing lengths and label them on the diagram.



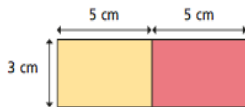
- b) What is the perimeter of the shape?

- 4 Work out the perimeter of each shape.



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- 5 Mo puts two 5 cm by 3 cm rectangles next to each other.



The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be $2 \times 16 \text{ cm} = 32 \text{ cm}$.

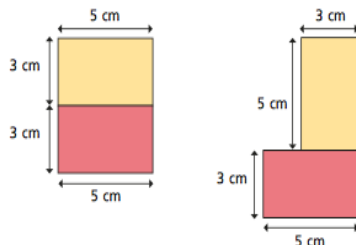


- a) Is Mo correct? _____

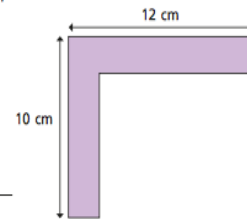
Work out the perimeter of the larger rectangle to check your answer.

- b) Mo puts the rectangles together in different ways.

Work out the perimeter of each large shape.



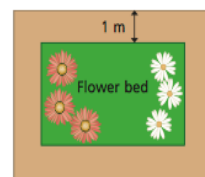
- 6 Dani thinks there isn't enough information to work out the perimeter of the shape.



Is Dani correct? _____

Explain your answer.

- 7 A rectangular flower bed is 5 m long and 3 m wide. The path around the flower bed is 1 m wide.



- a) What is the perimeter of the flower bed?

- b) What is the perimeter of the outside of the path?

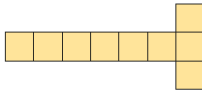
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Counting squares



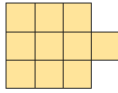
1 Count the squares in each shape to find the area.

A



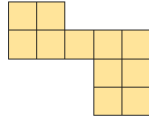
The area is squares.

B



The area is squares.

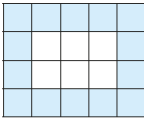
C



The area is squares.

Which shape has the greatest area? _____

2 What is the area of the shaded part of the shape?



The area is squares.

3 Here is a kitchen tile.

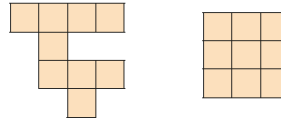


a) What area of the tile is blue? squares

b) What area of the tile is white? squares

c) What is the total area of the tile? squares

4 These two shapes are made up of squares of the same size.



These two shapes have the same area.

Jack

The first shape is bigger as it takes up more space.

Rosie

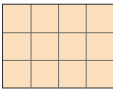


Who is correct? _____

Explain how you know.

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5 Here is a rectangle.

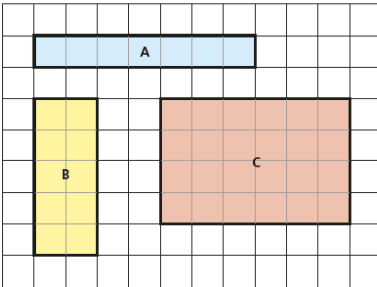


a) The rectangle has rows and columns.

b) What is the area of the rectangle? squares

c) How did you work out the area?

6 Find the area of each rectangle.



A = squares B = squares C = squares

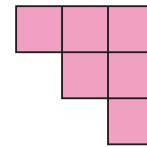
7 Nijah and Eva are making shapes.

They each use 6 squares.

Nijah's shape



Eva's shape

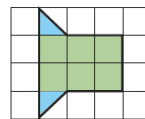


The area of Nijah's shape is equal to the area of Eva's shape.

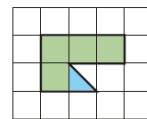
Is this true or false? _____

How do you know?

8 What is the area of each shape?



area = squares



area = squares

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Year 4 Answers

Correspondence problems



- 1 A canteen has 2 types of bread and a choice of 3 sandwich fillings.

Bread	Fillings
white	cheese
brown	tuna
	chicken

- a) List the different sandwiches that can be made.

One has been done for you.

cheese on white cheese on brown
tuna on white tuna on brown
chicken on white chicken on brown

- b) Complete the multiplication to represent the number of different combinations of bread and filling.

$$\boxed{2} \times \boxed{3} = \boxed{6}$$

Complete the sentence.

There are $\boxed{6}$ combinations.

- c) How many combinations would there be if there were 4 choices of sandwich filling?

$\boxed{8}$

- 2 A pizzeria offers a choice of bases and toppings.

Pizza base	Toppings
deep pan	mushrooms
thin	chicken
	onion
	peppers
	sweetcorn

Complete the multiplication to work out how many different combinations of pizza there are.

$$\boxed{2} \times \boxed{5} = \boxed{10}$$

Complete the sentence.

There are $\boxed{10}$ combinations of pizza.

- 3 Mo visits the funfair.

He buys a ticket that allows him to choose 1 ride and 1 game at the fair.

Rides	Games
Big dipper	Hook-a-duck
Dodgems	Basketball
Carousel	Coconut shy
	Lucky dip
	Test-your-strength

There are 8 different possible choices of rides and games.

- a)

Is Mo correct? No

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Explain your answer.

He has done 3+5 not 3x5

- b) List all the different choices Mo can make.

BH BA BC BL BT
DH DB DC DL DT
CH CB CC CL CT

Mo can make $\boxed{15}$ different choices.

- 4 Aisha has 3 headbands and 5 hair slides.

Kim has 2 headbands and 6 hair slides.

Who has more choices of combinations for wearing one headband and 1 slide?

Aisha has more choices.

Talk about it with a partner.

- 5 Here are the activity choices available at Summer Camp.

Sport	Arts and crafts	Outward bound
football	painting	wall climbing
tennis	pottery	kayaking
golf	mosaics	abseiling
	origami	

Each child is allowed to choose 3 activities per day: 1 sport, 1 arts and crafts and 1 outward bound.

- a) How many activity combinations are there?

$\boxed{36}$

- b) Due to a flooded pitch, football is cancelled.

How many combinations are now possible?

There are $\boxed{24}$ combinations.

- 6 Tom and Esther are building a snowman.

They have a choice of 5 hats, 4 scarves and 2 pairs of gloves to dress their snowman.

How many different combinations are possible?

$$\boxed{5} \times \boxed{4} \times \boxed{2} = \boxed{40}$$

There are $\boxed{40}$ combinations.

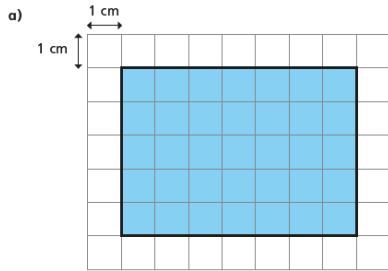
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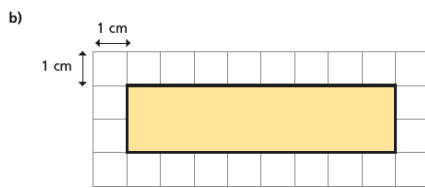
Perimeter of a rectangle



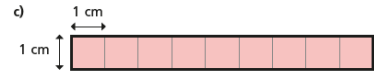
1 Work out the perimeter of each rectangle.



$$5 \text{ cm} + 7 \text{ cm} + 5 \text{ cm} + 7 \text{ cm} = 24 \text{ cm}$$

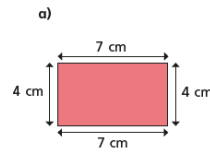


$$2 \text{ cm} + 8 \text{ cm} + 2 \text{ cm} + 8 \text{ cm} = 20 \text{ cm}$$

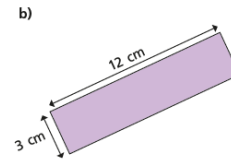


$$1 \text{ cm} + 9 \text{ cm} + 1 \text{ cm} + 9 \text{ cm} = 20 \text{ cm}$$

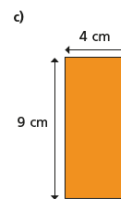
2 Work out the perimeter of the rectangles.



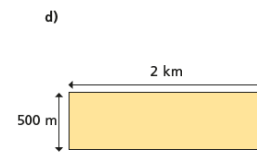
$$22 \text{ cm}$$



$$30 \text{ cm}$$



$$26 \text{ cm}$$



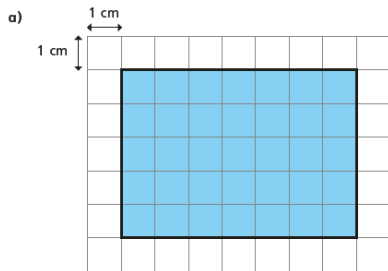
$$5 \text{ km}$$

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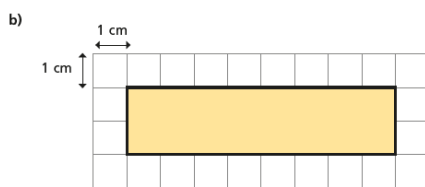
Perimeter of a rectangle



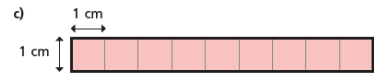
1 Work out the perimeter of each rectangle.



$$5 \text{ cm} + 7 \text{ cm} + 5 \text{ cm} + 7 \text{ cm} = 24 \text{ cm}$$

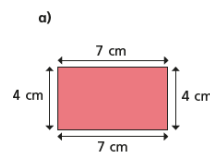


$$2 \text{ cm} + 8 \text{ cm} + 2 \text{ cm} + 8 \text{ cm} = 20 \text{ cm}$$

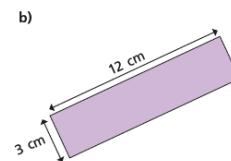


$$1 \text{ cm} + 9 \text{ cm} + 1 \text{ cm} + 9 \text{ cm} = 20 \text{ cm}$$

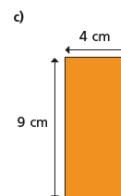
2 Work out the perimeter of the rectangles.



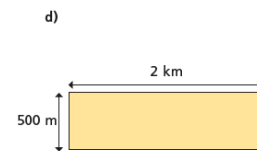
$$22 \text{ cm}$$



$$30 \text{ cm}$$



$$26 \text{ cm}$$



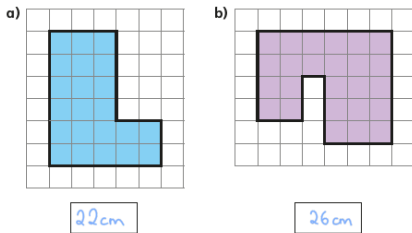
$$5 \text{ km}$$

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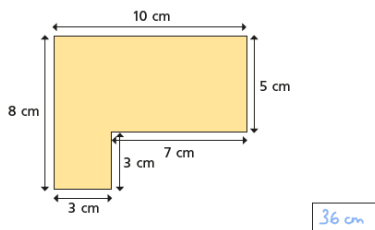
Perimeter of rectilinear shapes



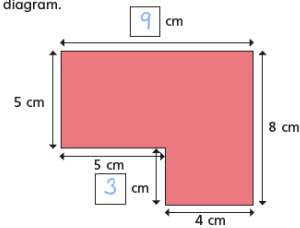
- 1 The length of each square on the grid is 1 cm.
Work out the perimeter of the shapes.



- 2 Work out the perimeter of the shape.



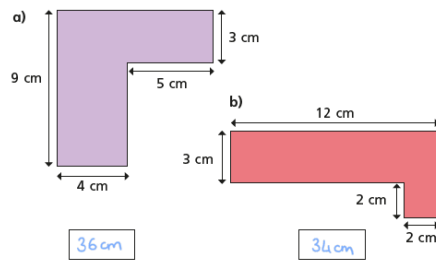
- 3 a) Work out the missing lengths and label them on the diagram.



- b) What is the perimeter of the shape?

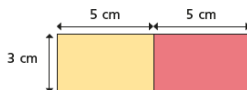
34 cm

- 4 Work out the perimeter of each shape.



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- 5 Mo puts two 5 cm by 3 cm rectangles next to each other.



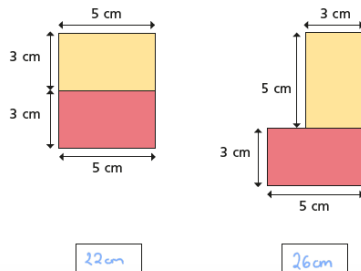
The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be $2 \times 16 \text{ cm} = 32 \text{ cm}$.

- a) Is Mo correct? No

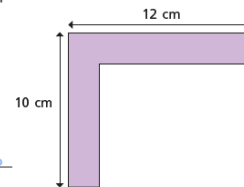
Work out the perimeter of the larger rectangle to check your answer.

26 cm

- b) Mo puts the rectangles together in different ways.
Work out the perimeter of each large shape.

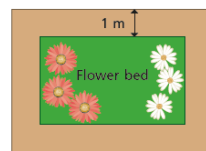


- 6 Dani thinks there isn't enough information to work out the perimeter of the shape.



- Is Dani correct? No
Explain your answer.

- 7 A rectangular flower bed is 5 m long and 3 m wide.
The path around the flower bed is 1 m wide.



- a) What is the perimeter of the flower bed?

16 cm

- b) What is the perimeter of the outside of the path?

24 cm

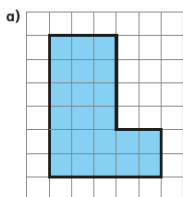
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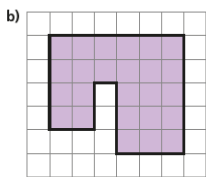
Perimeter of rectilinear shapes



1 The length of each square on the grid is 1 cm.
Work out the perimeter of the shapes.

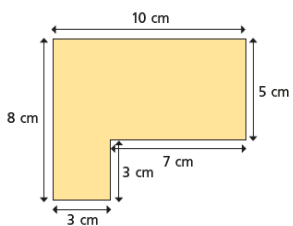


22 cm



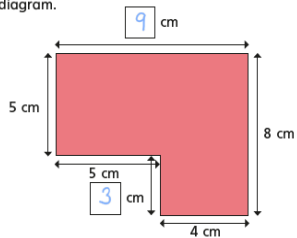
26 cm

2 Work out the perimeter of the shape.



36 cm

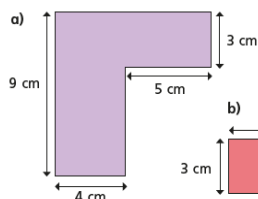
3 a) Work out the missing lengths and label them on the diagram.



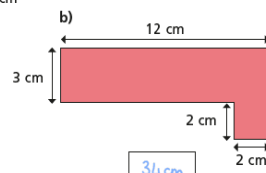
b) What is the perimeter of the shape?

34 cm

4 Work out the perimeter of each shape.



36 cm



34 cm

Year 3 Maths

The 4 times-table



1 Complete the multiplication.



× =



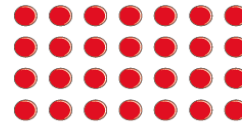
× =

2 Complete the number sentences.

- a) $6 \times 4 = \square$
- b) $4 \times 3 = \square$
- c) $\square = 7 \times 4$
- d) $4 \times \square = 48$
- e) $0 \times 4 = \square$
- f) $4 \times 9 = \square$
- g) $24 \div 4 = \square$
- h) $8 \div 4 = \square$
- i) $0 \div 4 = \square$
- j) $\square \div 11 = 4$
- k) $\square \div 4 = 5$
- l) $1 \times 4 = \square$

3 What multiplication and division statements does the array represent?

Complete the statements.



× =

× =

÷ =

÷ =

4 Complete the number sentences.

- a) $2 \times 4 = \square$
- b) $8 = 4 \times \square$
- $4 \times 4 = \square$
- $16 = 4 \times \square$
- $8 \times 4 = \square$
- $32 = 4 \times \square$
- c) $3 \times 4 = \square$
- $3 \times 8 = \square$
- $3 \times 12 = \square$

What patterns do you notice?



5 Write <, > or = to compare the statements.

- a) $48 \div 12 \bigcirc 4$
- b) $36 \bigcirc 40 \div 4$
- c) $16 \div 4 \bigcirc 4 \times 4$
- d) $4 \div 4 \bigcirc 4 \times 4$
- e) $1 \times 4 \bigcirc 4 \times 1$
- f) $4 \times 2 \bigcirc 32 \div 4$

6 A paper clip is 4 cm long.



How long are 6 of these paper clips?

7 Dexter buys 10 mugs and 4 key rings. How much money does he spend in total?



8 The pictogram shows the animals a group of children have as pets.

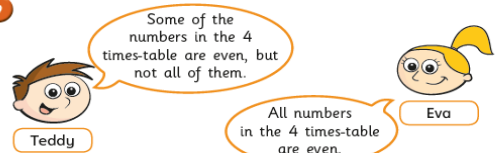
Complete the pictogram.

Animal	Pictogram	Number of animals
cat		
dog		28
bird		
mouse		

= 4 animals



9



Who is correct? _____

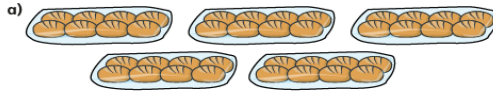
How do you know? Talk about it with a partner.



The 8 times-table



1 How many are there in total?
Complete the multiplications.

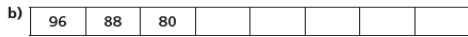
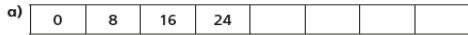


× =

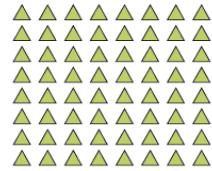


× =

2 Complete the number tracks.



3 Here is an array made up of triangles.



a) What multiplication sentence can you see?

× =

b) What division sentence can you see?

÷ =

4 Complete the calculations.

Try to do the calculations in your head.

- a) $6 \times 8 = \square$
- b) $8 \times \square = 56$
- c) $10 \times 8 = \square$
- d) $\square = 8 \times 4$
- e) $72 \div 8 = \square$
- f) $\square \div 11 = 8$
- g) $\square \div 8 = 5$
- h) $8 \times 1 = \square$

5 What multiplication can you see?

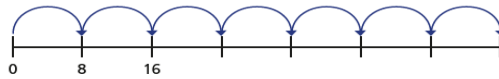


6 Complete the multiplications.

- a) $2 \times 8 = \square$
- b) $8 = 8 \times \square$
- $4 \times 8 = \square$
- $16 = 8 \times \square$
- $8 \times 8 = \square$
- $32 = 8 \times \square$

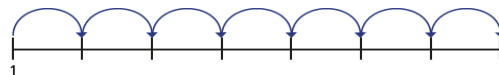
What patterns do you notice?

7 a) Amir draws 7 jumps of 8 on a number line.



What number does Amir end on?
Explain how you worked it out.

b) This time, Amir makes 7 jumps of 8, but starts from 1



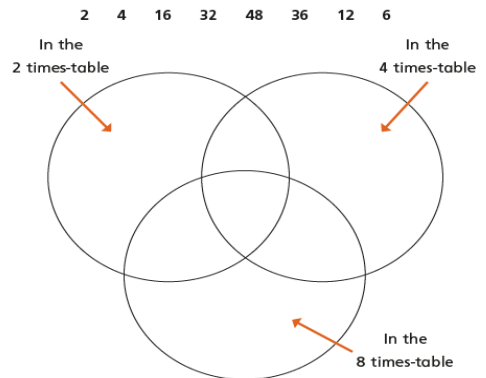
What number does Amir end on this time?
Explain how you know.

8 Boats can be hired on a lake.
There are 5 large boats and 8 small boats on the lake.
Each boat is full.

How many people are on the lake?



9 Put the numbers into the sorting diagram.



Are any of the parts empty? Why?
Talk about it with a partner.



Multiply 2-digits by 1-digit (2)

- 1 There are 23 marbles in a jar.
There are 5 jars.



Tens	Ones

How many marbles are there in total?

$$5 \times 3 \text{ ones} = \square$$

$$5 \times 2 \text{ tens} = \square$$

$$\square + \square = \square$$

$$5 \times 23 = \square$$

There are \square marbles in total.

- 2 Work out 4×15

Tens	Ones

$$4 \times 5 = \square$$

$$4 \times 10 = \square$$

$$4 \times 15 = \square$$

- 3 Complete the multiplications.

a) $4 \times 24 = \square$

b) $3 \times 17 = \square$

c) $3 \times 25 = \square$

d) $34 \times 4 = \square$

- 4 Complete the column multiplications.

Tens	Ones

	T	O
	2	4
x		3

Tens	Ones

	T	O
	3	5
x		4

- 5 Work out the multiplications.

a) 25×5

	T	O
	2	5
x		5

c) 5×26

b) 35×6

	T	O
	3	5
x		6

d) 4×36

- 6 Tommy works out 37×2

	T	O
	3	7
x		2
	6	14

What mistake has Tommy made? Work out the correct answer.

- 7 Find the missing numbers.

	2	2
x		
	8	8

		1
x		
	1	24

- 8 Here are some digit cards. 1 2 3 4 5 8

- a) Use the digit cards to create a multiplication and work out the answer.

$$\square \square \times \square = \square$$

- b) Work with a partner to find calculations that have:

- an odd product
- an even product
- an exchange in the ones column
- an exchange in the ones and tens columns.

Divide 2-digits by 1-digit (2)



1 Rosie has 56 pencils.

a) Draw base 10 to represent the pencils.

Rosie shares the 56 pencils equally between 4 pots.

b) Draw base 10 on the place value grid to share the pencils.

Tens	Ones

c) How many pencils are in each pot?

d) Did you have to make an exchange?

2 Eva has this money.



She wants to share the money equally between 3 people.

a) Use the place value chart to show how Eva can share the money.

Tens	Ones

b) How much money does each person get?

3 Divide 72 by 3



Tens	Ones

Use the place value counters to help you.

$72 \div 3 = \square$

4 Use base 10 or counters to work out the divisions.

a) $45 \div 3 = \square$

b) $57 \div 3 = \square$

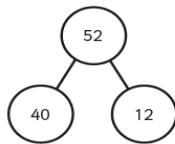
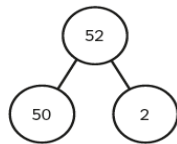
c) $92 \div 4 = \square$

5 Rosie and Tommy are working out $52 \div 4$

They both use a part-whole model.

Rosie

Tommy



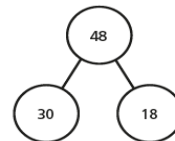
a) Whose part-whole model will help them with the division? _____

How do you know?

b) Use a part-whole model to work out $52 \div 4$

6 Use the part-whole models to complete the divisions.

a) $48 \div 3 = \square$

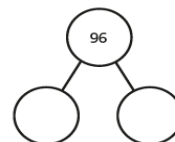


$30 \div 3 = \square$

$18 \div 3 = \square$

$48 \div 3 = \square$

b) $96 \div 4 = \square$



c) $65 \div 5 = \square$

d) $75 \div 3 = \square$

7 Here are 3 divisions.

$96 \div 8$

$96 \div 4$

$96 \div 2$

a) What is the same about the questions? What is different?

b) Complete the divisions.

$96 \div 8 = \square$

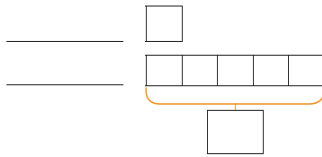
$96 \div 4 = \square$

$96 \div 2 = \square$

c) What do you notice? Talk about it with a partner.

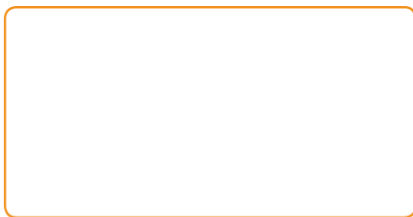


- 5 The red rope is 8 m long.
The blue rope is 5 times as long.
a) Label and complete the bar model.



- b) How long is the blue rope?
The blue rope is m long.

- 6 Ron has 5 bananas.
Esther has 6 times as many bananas as Ron.
Draw a bar model to work out how many bananas Esther has got.



Esther has got bananas.

- 7 Complete the sentences.
45 is times greater than 5
 \times 5 = 45
5 is times smaller than 45
45 \div 5 =

- 8 The children are weighing out flour.



Use the clues to work out which child used which scales.

- Eva has twice as much as Alex.
- Dexter has 9 times as much as Alex.
- Annie has 3 times as much as Eva.
- Tommy has twice as much as Eva and 4 times as much as Alex.

	Alex	Eva	Dexter	Annie	Tommy
Scales					

Scaling

- 1 Aisha has some fruit.



Complete the sentences to describe the fruit.

- There are apples.
There are strawberries.
There are times as many strawberries as apples.

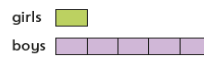
- 2 Huan is comparing 2 pieces of ribbon.



Complete the sentences to describe the ribbon.

- The spotty ribbon measures
The plain ribbon measures
The plain ribbon is times as long as the spotty ribbon.

- 3 Match the bar models to the statements.
Write the missing statement.



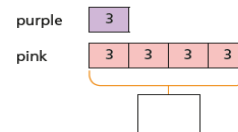
There are 4 times as many boys as girls.



There are 3 times as many boys as girls.



- 4 There are 3 purple balloons.
There are 4 times as many pink balloons.
Complete the bar model to show how many pink balloons there are.



Year 3 Answers

The 4 times-table



1 Complete the multiplication.



$$8 \times 4 = 32$$

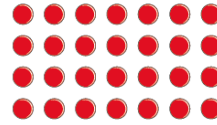


$$4 \times 3 = 12$$

2 Complete the number sentences.

- a) $6 \times 4 = 24$
- b) $4 \times 3 = 12$
- c) $28 = 7 \times 4$
- d) $4 \times 12 = 48$
- e) $0 \times 4 = 0$
- f) $4 \times 9 = 36$
- g) $24 \div 4 = 6$
- h) $8 \div 4 = 2$
- i) $0 \div 4 = 0$
- j) $44 \div 11 = 4$
- k) $20 \div 4 = 5$
- l) $1 \times 4 = 4$

3 What multiplication and division statements does the array represent?



$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 7 = 4$$

$$28 \div 4 = 7$$

4 Complete the number sentences.

- a) $2 \times 4 = 8$
- b) $8 = 4 \times 2$
- c) $3 \times 4 = 12$
- d) $4 \times 4 = 16$
- e) $8 \times 4 = 32$
- f) $16 = 4 \times 4$
- g) $3 \times 8 = 24$
- h) $3 \times 12 = 36$
- i) $32 = 4 \times 8$

What patterns do you notice?

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5 Write $<$, $>$ or $=$ to compare the statements.

- a) $48 \div 12 = 4$
- b) $36 > 40 \div 4$
- c) $16 \div 4 < 4 \times 4$
- d) $4 \div 4 < 4 \times 4$
- e) $1 \times 4 = 4 \times 1$
- f) $4 \times 2 = 32 \div 4$

6 A paper clip is 4 cm long.



How long are 6 of these paper clips?

24cm

7 Dexter buys 10 mugs and 4 key rings. How much money does he spend in total?



£52

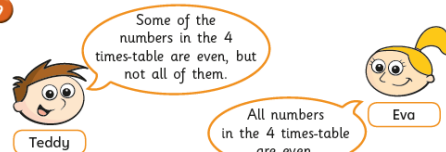
8 The pictogram shows the animals a group of children have as pets.

Complete the pictogram.

Animal	Pictogram	Number of animals
cat		16
dog		28
bird		20
mouse		4

= 4 animals

9



Who is correct? Eva

How do you know? Talk about it with a partner.

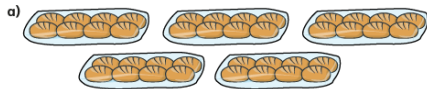
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The 8 times-table



1 How many are there in total?
Complete the multiplications.

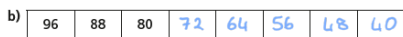
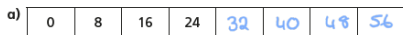


$$5 \times 8 = 40$$

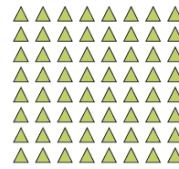


$$4 \times 8 = 32$$

2 Complete the number tracks.



3 Here is an array made up of triangles.



a) What multiplication sentence can you see?

$$8 \times 8 = 64$$

b) What division sentence can you see?

$$64 \div 8 = 8$$

4 Complete the calculations.

Try to do the calculations in your head.

a) $6 \times 8 = 48$ e) $72 \div 8 = 9$

b) $8 \times 7 = 56$ f) $88 \div 11 = 8$

c) $10 \times 8 = 80$ g) $40 \div 8 = 5$

d) $32 = 8 \times 4$ h) $8 \times 1 = 8$

5 What multiplication can you see?



6 Complete the multiplications.

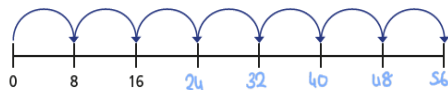
a) $2 \times 8 = 16$ b) $8 = 8 \times 1$

$4 \times 8 = 32$ $16 = 8 \times 2$

$8 \times 8 = 64$ $32 = 8 \times 4$

What patterns do you notice?

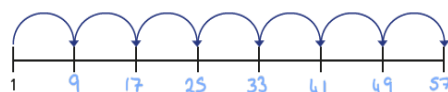
7 a) Amir draws 7 jumps of 8 on a number line.



What number does Amir end on? 56

Explain how you worked it out.

b) This time, Amir makes 7 jumps of 8, but starts from 1



What number does Amir end on this time? 57

Explain how you know.

8 Boats can be hired on a lake.

There are 5 large boats and 8 small boats on the lake.

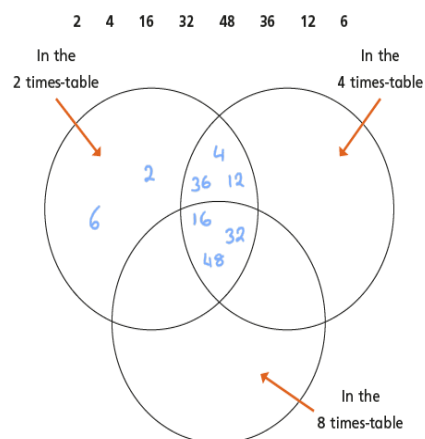
Each boat is full.

How many people are on the lake?

$$72$$



8 Put the numbers into the sorting diagram.



Are any of the parts empty? Why?

Talk about it with a partner.



Multiply 2-digits by 1-digit (2)

White Rose Maths

- 1 There are 23 marbles in a jar.
There are 5 jars.



Tens	Ones
20	3
20	3
20	3
20	3
20	3

How many marbles are there in total?

$$5 \times 3 \text{ ones} = 15$$

$$5 \times 2 \text{ tens} = 100$$

$$15 + 100 = 115$$

$$5 \times 23 = 115$$

There are 115 marbles in total.

- 2 Work out 4×15

Tens	Ones
10	5
10	5
10	5
10	5

$$4 \times 5 = 20$$

$$4 \times 10 = 40$$

$$4 \times 15 = 60$$

- 3 Complete the multiplications.

a) $4 \times 24 = 96$

b) $3 \times 17 = 51$

c) $3 \times 25 = 75$

d) $34 \times 4 = 136$

- 4 Complete the column multiplications.

Tens	Ones
10 10	1 1 1 1 1
10 10	1 1 1 1 1
10 10	1 1 1 1 1

T	O
2	4
x	3
<hr/>	
7	2
<hr/>	
1	

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Tens	Ones
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1

T	O
3	5
x	4
<hr/>	
1	4
<hr/>	
2	

- 6 Tommy works out 37×2

T	O
3	7
x	2
<hr/>	
6	1
<hr/>	
1	4

T	O
3	7
x	2
<hr/>	
7	4
<hr/>	
1	

What mistake has Tommy made? Work out the correct answer.

- 5 Work out the multiplications.

a) 25×5

T	O
2	5
x	5
<hr/>	
1	2
<hr/>	
2	

c) 5×26

T	O
2	6
x	5
<hr/>	
1	3
<hr/>	
3	

b) 35×6

T	O
3	5
x	6
<hr/>	
2	0
<hr/>	
3	

d) 4×36

T	O
3	6
x	4
<hr/>	
1	4
<hr/>	
2	

- 7 Find the missing numbers.

T	O
2	2
x	4
<hr/>	
8	8

T	O
3	1
x	4
<hr/>	
1	2
<hr/>	
4	

- 8 Here are some digit cards: 1 2 3 4 5 8

- a) Use the digit cards to create a multiplication and work out the answer.

Eg. $32 \times 5 = 160$

- b) Work with a partner to find calculations that have:

- an odd product
- an even product
- an exchange in the ones column
- an exchange in the ones and tens columns.

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White Rose Maths

Divide 2-digits by 1-digit (2)

1 Rosie has 56 pencils.

a) Draw base 10 to represent the pencils.



Rosie shares the 56 pencils equally between 4 pots.

b) Draw base 10 on the place value grid to share the pencils.

Tens	Ones

c) How many pencils are in each pot?

14

d) Did you have to make an exchange?

2 Eva has this money.



She wants to share the money equally between 3 people.

a) Use the place value chart to show how Eva can share the money.

Tens	Ones
£10	£1 £1 £1 £1
£10	£1 £1 £1 £1
£10	£1 £1 £1 £1

b) How much money does each person get?

£14

3 Divide 72 by 3



Tens	Ones
10 10	1 1 1 1
10 10	1 1 1 1
10 10	1 1 1 1

Use the place value counters to help you.

$72 \div 3 = 24$

4 Use base 10 or counters to work out the divisions.

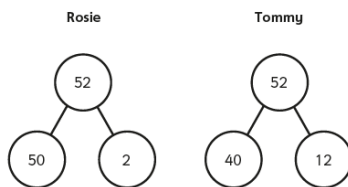
a) $45 \div 3 = 15$

b) $57 \div 3 = 19$

c) $92 \div 4 = 23$

5 Rosie and Tommy are working out $52 \div 4$

They both use a part-whole model.



a) Whose part-whole model will help them with the division?

Tommy

How do you know?

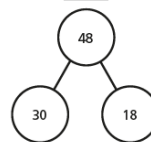
40 and 12 are both divisible by 4

b) Use a part-whole model to work out $52 \div 4$

13

6 Use the part-whole models to complete the divisions.

a) $48 \div 3 = 16$

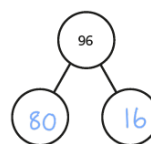


$30 \div 3 = 10$

$18 \div 3 = 6$

$48 \div 3 = 16$

b) $96 \div 4 = 24$



c) $65 \div 5 = 13$

d) $75 \div 3 = 25$

7 Here are 3 divisions.

$96 \div 8$

$96 \div 4$

$96 \div 2$

a) What is the same about the questions? What is different?

b) Complete the divisions.

$96 \div 8 = 12$

$96 \div 4 = 24$

$96 \div 2 = 48$

c) What do you notice? Talk about it with a partner.

Divide 2-digits by 1-digit (2)

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b) Draw base 10 on the place value grid to share the pencils.

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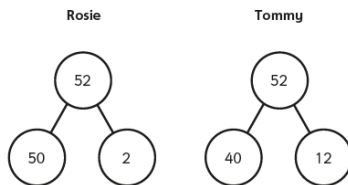
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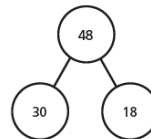
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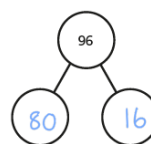


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$48 \div 3 = 16$

b) $96 \div 4 = 24$



c) $65 \div 5 = 13$

d) $75 \div 3 = 25$

7 Here are 3 divisions.

$96 \div 8$

$96 \div 4$

$96 \div 2$

a) What is the same about the questions? What is different?

b) Complete the divisions.

$96 \div 8 = 12$

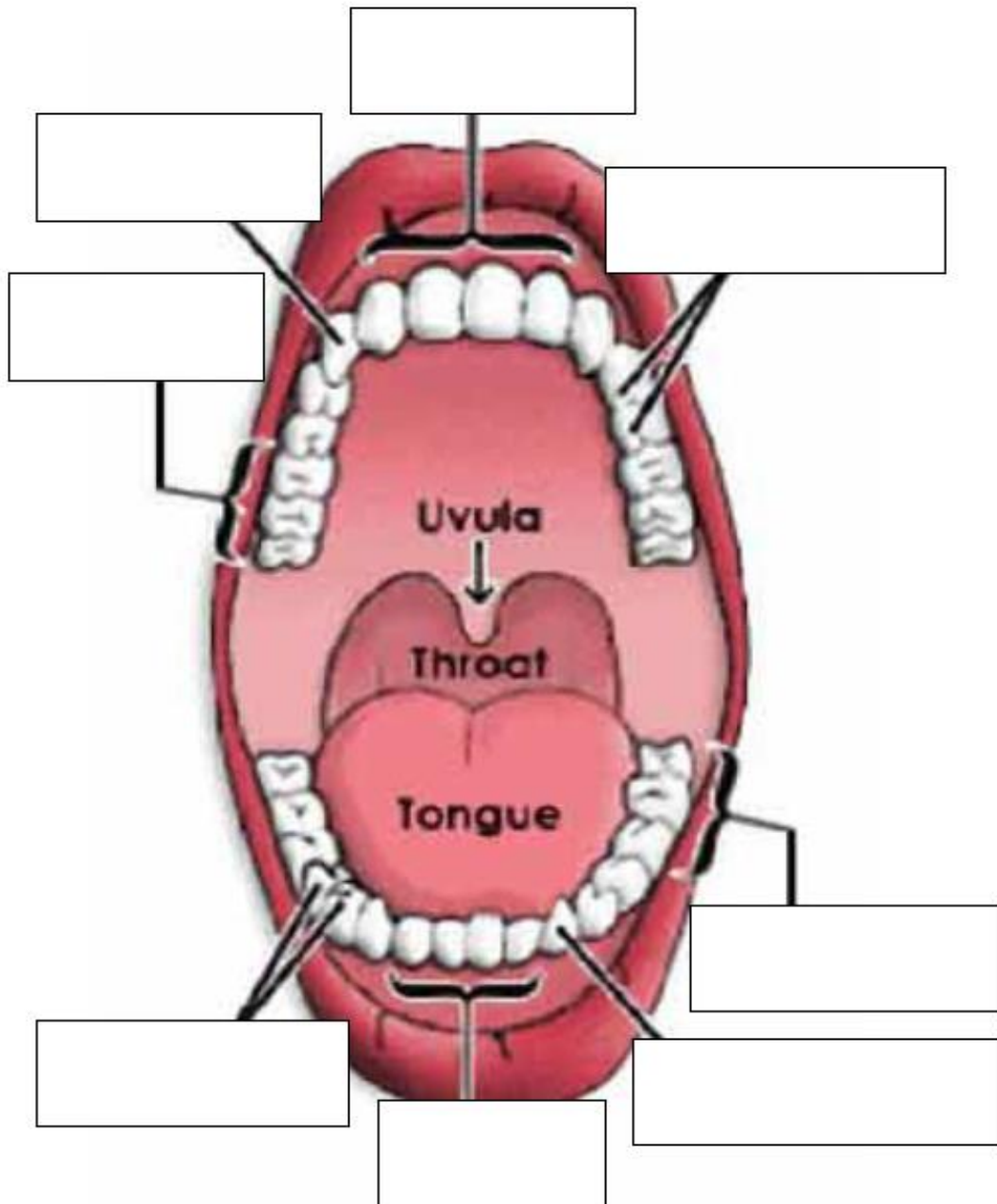
$96 \div 4 = 24$

$96 \div 2 = 48$

c) What do you notice? Talk about it with a partner.

Topic

Types of Teeth



Use the powerpoint to help you.

Explain the purpose of each tooth type in the diagram as fully as you can.

How can we look after our teeth? Make a list of the things we could do. Does what we eat effect the health of our teeth?

Challenge:

Eggsperiment!!! To see the different effects what we drink have on our teeth.

You will need 1 egg shell- remove the egg.(Try yourself-your adults will be able to help you- life skill!)

5 cups

5 different liquids that you drink

Comparing Beverages

Compare the effects of different drinks on your teeth using eggshell as substitutes for teeth.

Choose a variety of drinks to test, such as milk, juice, coke, coffee and sports drinks. For each drink, place a piece of eggshell in a glass.

Make sure you use the same size eggshell in each glass.

Fill each glass half-full with the different drink.

Each day, remove the eggshell from each glass and examine it.

Write down what changes have occurred. Repeat this for five to seven days.

You can use the table below or make your own- remember if you run out of space continue writing on the back- it doesn't matter.

REMEMBER-WRITE YOUR PREDICTION FIRST TO SEE IF YOU WERE RIGHT AT THE END OF YOUR EXPERIMENT- GOOD LUCK OUR YOUNG SCIENTISTS.

The Great EGG-Speriment!!!

LO: To discover if the acid in drinks really weaken your teeth?

SC: To work scientifically.

Our Investigation:

+

<u>Focus</u>	We are investigating
<u>Our Question</u>	We want to find out.....
<u>I predict</u>	I predict that.....
<u>Materials</u>	We will need.....
<u>Fair Test</u>	We will keep the test fair by.....
<u>Evidence</u>	We will measure.....
<u>Method</u>	We.....
<u>Results</u>	
<u>Conclusion</u>	We found out that.....
<u>Evaluation</u>	This tells us that.....

The Great EGG-Speriment!!!

Diagram to show.....

My results: You can either describe the effect or draw a diagram to show what happened to the egg shell (tooth enamel). Remember to write like a scientist!

Liquid used	

HeadsUP

Mental Health Awareness Ltd

Mindfulness

Mindfulness is a really simple idea. It is about paying attention. The part of the brain that is in charge of your attention keeps you aware of what is happening inside you and around you. In mindfulness the idea is to try and focus on one thing at a time. This can sometimes be really tricky to do because we are used to having busy thoughts going around our minds. Sometimes we need to have a break from having all those thoughts whizzing around our heads and that is what mindfulness is all about.



There are many ways to practice mindfulness, but we are going to be looking at two of them.

- Breathing Exercises
- Superhero Poses

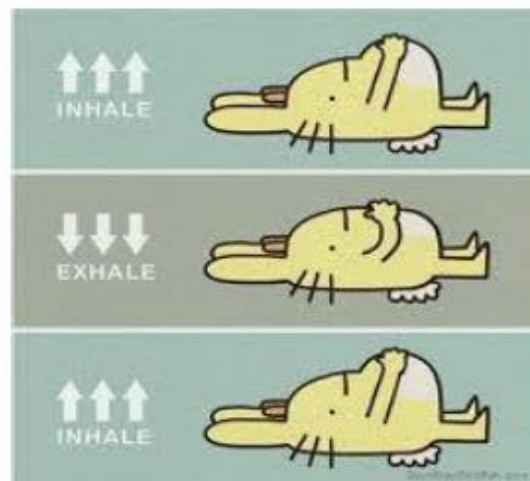
Breathing Exercises

Breathing exercises are really good at getting us to focus on one thing: our breathing. It is something that happens automatically to us, we very rarely think about it, so by just focusing on your breathing, it helps us to be calm and let all other thoughts and emotions come and go.

Balloon Belly:

- 1) Lay down in a warm, comfortable, and quiet place.
- 2) Pretend that your belly is like a balloon.
- 3) Take in a slow, strong breath.
- 4) Notice how the balloon gets bigger as it inflates with air.
- 5) Slowly breath out.
- 6) Pay attention to how the balloon gets smaller as it deflates.
- 7) Take a few moments to practice slowly inflating and deflating your balloon.

(You could put a teddy on your belly and watch the teddy go up and down)



Hot Chocolate:

- 1) In a nice quiet room stand up tall, with your shoulders down away from your ears.
- 2) Pretend you are holding a mug of hot chocolate between both of your hands.
- 3) Pretend to bring the mug up towards your face.
- 4) Take a slow breath in for 1, 2, 3, 4, 5. Imagine you are smelling the yummy comforting chocolate smell.
- 5) Slowly, gently, breath out for 1, 2, 3, 4, 5. Pretending to blow the steam from the hot chocolate to cool it.
- 6) Repeat five or six times.



Hug Tight:

- 1) In a nice quiet room, you can either sit tall cross legged on the floor or stand nice and tall.
- 2) Spread your arms nice and wide either side of you. Put your head up a little and take a deep breath in.
- 3) Breathe out and put your arms around yourself. Give yourself a hug. Move your head so you are looking down and close your eyes if you would like to.
- 4) Repeat this 5 or 6 times.

(This is a really lovely one to do right now. You might be missing cuddles and hugs from people you would normally see: friends, grandparents, cousins etc. So you can think about them whilst you are doing your Hug Tight breathing).



Superhero Poses

These are great for getting you to focus on what your body is doing and to have a break from our busy minds.

Have a think how you feel before you do the poses and then after.

These poses will help make you feel strong, brave and happy!

The Superman / Wonder Woman: Stand up tall with your legs slightly wider than your hips. Put your hands on your hips and head looking slightly up. Take a deep breath in for 1, 2, 3, 4, 5 and then a breath out for 1, 2, 3, 4, 5. Repeat 3 times and see how you feel.



The Spidey Senses: Get into your best Spiderman pose (make sure it is one you can stay in for a few minutes). Turn on your Spidey Senses and focus on what you hear, what you can see, what you can smell, what you can taste and what you can feel or touch. Pause on each sense and really focus on that thing before moving onto the next one.



Dealing with Anger

We have all felt anger at some point in our lives. It is a very common emotion to feel and it is perfectly normal to feel anger in certain situations.

You may have found yourself getting angry a bit more since the schools have been closed, again this is very common. We have been spending a lot more time than usual at home and with our family members. We can often annoy each other when we spend lots of time together, especially when there is no where else to go to get away from the situation.

Here are some things that might make you angry (especially at the moment):

- **My brother or sister annoying me.**



- **My parents telling me off**
- **Being hungry**
- **Being tired**
- **Being worried about things that are happening.**
- **When people don't listen to me.**
- **Not being able to be with my friends.**

What are your anger warning signs?

Whenever you start to get angry your body sends you warning signs. It is important to pay attention to these warning signs so that you know when to start using a calming down skills.

Colour in the warning signs that happen to you (and remember everyone is different) and add any others that you have in the empty thought bubbles.

My hands become fists

My face becomes hot and red

I hit out

I want to cry

I shout

My heart beats really fast

My chest feels tight

I get sweaty

I breathe quickly

I get tummy ache

My body starts to shake

Ways to calm down

Everyone has different techniques they use to calm down. The way that works for you may not work for someone else. When your body gives you the warning signs that you are getting angry try to give one of these a try and see which works better for you!

- 1) **Blowing out the candles:** Have your fingers and thumbs up in front of you, these are your candles. Take a deep breath in through your nose and then slowly blow out towards one of your fingers (or candles) and put that finger down. Take another breath in and do the same with the next finger/candle. Carry on with your deep breathes in and your slow blowing out until all your fingers and thumbs are down. This should help slow down your breathing and calm you down.



- 2) **Squeeze and stretch:** Interlace your fingers and squeeze gently together (not too hard) and hold for 5 seconds. Then put your arms straight out in front of you, palms facing out, fingers still interlaced for another 5 seconds. Then stretch your arms and hands up high, going onto your tip toes if you want. Release your arms down slowly to your side making a rainbow shape.



This helps to release the tension in your arms when you are angry and reduces that urge to hit out.

- 3) **Exercise:** Do some star jumps, kick a football against the wall outside, run around the garden or on the spot, go on a trampoline, take a walk, punch a pillow, skipping, whatever exercise you can find that helps. It can help you let off so steam and gives your body a chance to focus on something else.



- 4) **Write it down:** Write down why you are angry then scribble all over it, tear it up, and put it out for recycling! **OR** write down why you are angry and when you are calm come back to it and see how you feel about it then.



- 5) **Listen to music:** Get your favourite song, put on your headphones and listen. Dance like nobody is watching and let some steam out. Focus on the song and the lyrics and this will distract you from what was making you angry.



Below have a go at making your own Calm Wheel!

In the different sections of the wheel write ways that you know help you calm down. Fill it up as time goes on and then you will have a choice of ways to let off steam and help you relax. Make it bright and colourful and keep it somewhere handy so you can grab it when you are angry.

My Calm Wheel

