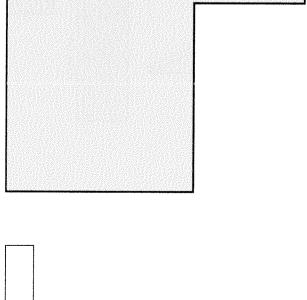
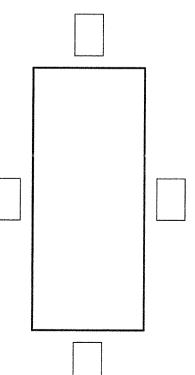
D II Here are two rectangles. Give units with your answer. How much wool did you need for each one? Use a piece of wool to measure the perimeter of each rectangle. D ω 11 $\boldsymbol{\varpi}$

Use a piece of wool to measure the perimeter of the hexagon. How much wool did you need? Give units with your answer.

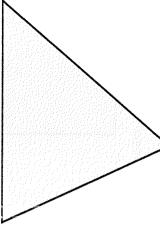


a) Measure each side of the rectangle and label it.



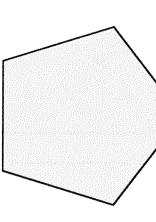
b) What is the perimeter of the rectangle?





perimeter =

<u>5</u>

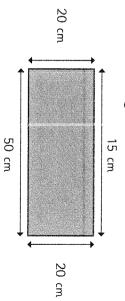


perimeter =

Draw a triangle with a perimeter of 15 cm.

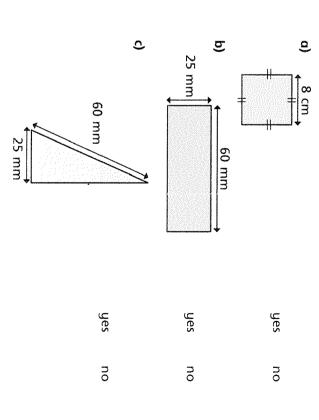


Aisha is working out the perimeter of a rectangle. She measures the length of all 4 sides and labels the rectangle.



How do you know that Aisha's measurements are wrong?

Is it possible to work out the perimeter of each shape? Circle your answer.



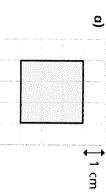
Talk about it with a partner. perimeter of each shape? How do you know whether you can or cannot find the



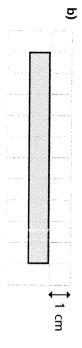




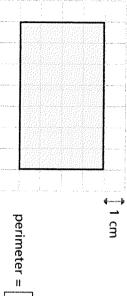
Work out the perimeter of each rectangle.



perimeter =



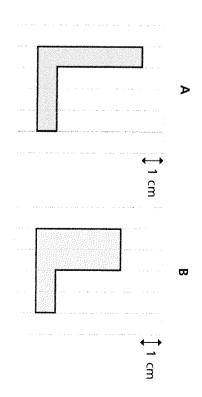
perimeter =



c

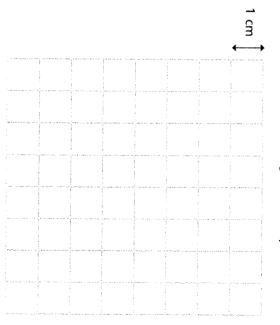
meter =

Which of the hexagons has the greatest perimeter? Show all your workings.

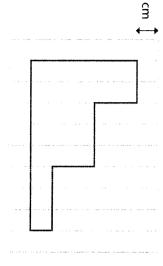


Shape ____ has the greatest perimeter.

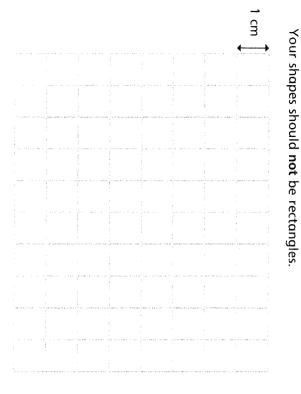
Draw two different rectangles with a perimeter of 14 cm.



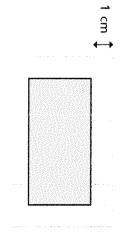
Work out the perimeter of the shape. 1 cm →



Draw two shapes with a perimeter of 20 cm.

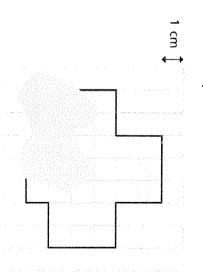


Work out the perimeter of the rectangle.



A shape is drawn on a square grid.

Part of the shape is hidden.



What could the perimeter of the shape be?

Is there more than one answer?





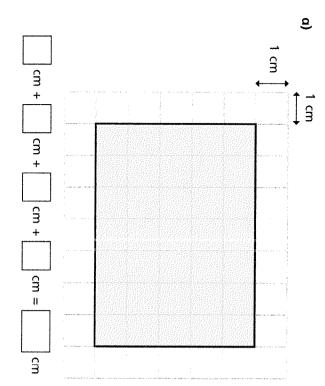




C

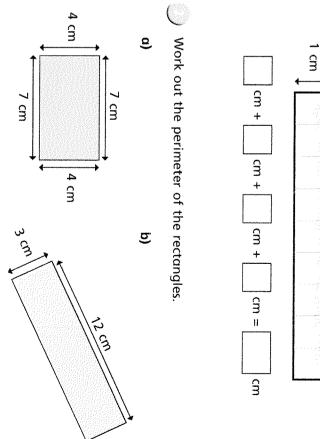
↑<u>~</u>

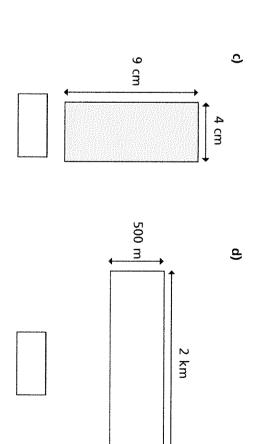
Work out the perimeter of each rectangle.



4 cm

٥





<u>b</u>

↑ 1 G

Cm +

| cm + | | cm + |

Cm =

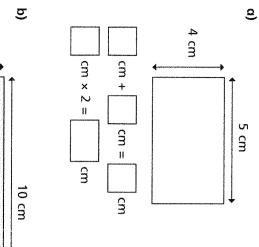
CM

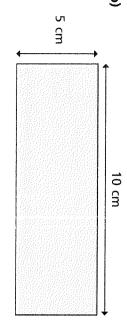
Tommy is working out the perimeter of some rectangles.

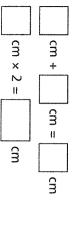
5 cm

8 cm + 5 cm = 13 cm $13 \text{ cm} \times 2 = 26 \text{ cm}$

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



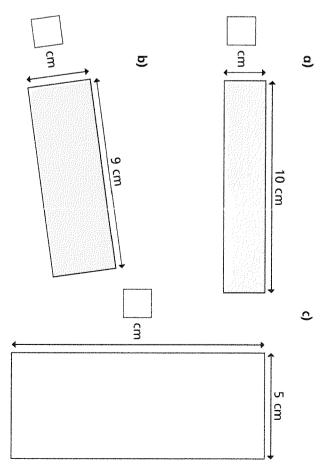








Each of these rectangles has a perimeter of 24 cm.
 Work out the missing lengths and label the diagrams.



What do you notice?

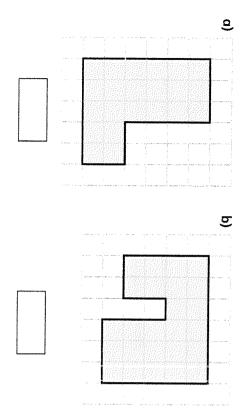
Find any other rectangles that have the same perimeter.



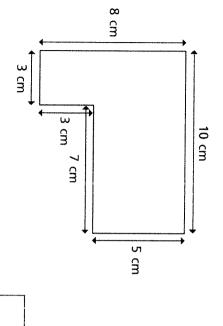




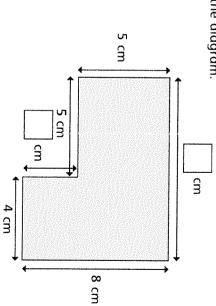
The length of each square on the grid is 1 cm.
Work out the perimeter of the shapes.



Work out the perimeter of the shape.

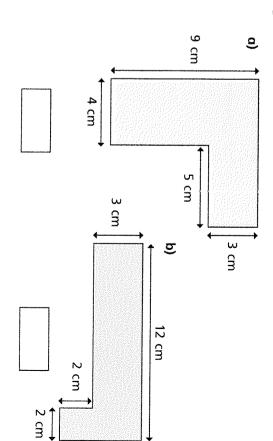


a) Work out the missing lengths and label them on the diagram.

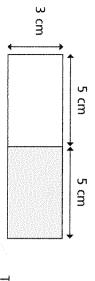


b) What is the perimeter of the shape?

Work out the perimeter of each shape.



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



each small rectangle is 16 cm, larger rectangle must be so the perimeter of my 2×16 cm = 32 cm. The perimeter of



a) Is Mo correct?

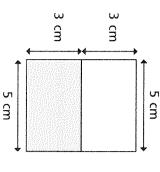
your answer. Work out the perimeter of the larger rectangle to check

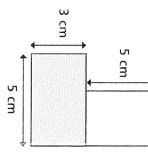


b) Mo puts the rectangles together in different ways.

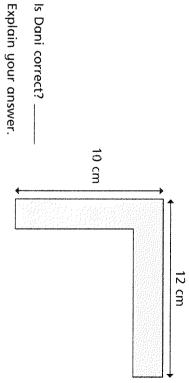
Work out the perimeter of each large shape.

3 cm

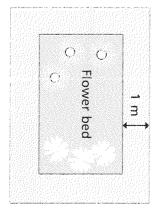




Dani thinks there isn't enough information to work out the perimeter of the shape.



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?





Dora makes a number on a place value chart.

	Th
	I
000	0

a) What number has Dora made?



b) Add 3 ones to Dora's number. What number do you have?



c) Add 2 tens to Dora's number. What number do you have now?



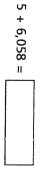
d) Subtract 2 hundreds from Dora's number. What number do you have now?

e) Add 5 thousands to Dora's number.

What number do you have now?



5	1,000s
3	100s
7	10s
8	18



Mo is going to add 100 to each number.

2,450

3,928

4,180

Circle the numbers where the 1,000s will change.

5,905 972

What do you notice?

- Mr Hall has £1,342 in the bank.
- a) Mr Hall puts in £500 more.

bank now? How much money does he have in the



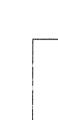
b) Then he puts in £600 more.

How much money does Mr Hall have in the bank now?



c) Then Mr Hall takes out £60

How much money does he have in the bank now?



Is Eva correct?



only the tens will change If I keep taking ten away from the number 2,562



Write the missing numbers.

6,951 -

Which calculations were easy to work out?

Which were more difficult to work out?



together, you can add 1,000 to 3,812 and then add 400 To add 3,812 and 1,400

a) Use Ron's method to work out 3,812 + 1,400

Could you have worked this out mentally?

b) Use Ron's method to complete the calculations.

Rose Moths



Complete the column addition

Complete the column addition.Use base 10 to help you.

Hundreds	Tens	Ones
		5 6 6

	4	I
2	5	
5	ω	0



Kim uses counters and a place value chart to help her work out 362 + 205

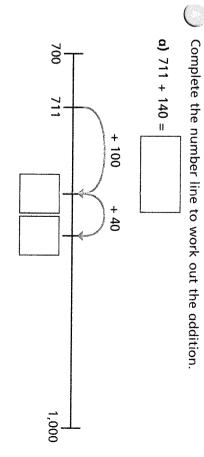
			Hundreds
	0	00	Tens
		0	Ones

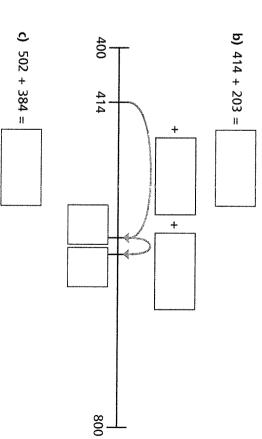
- 3 6 2 + 2 0 5
- a) Draw counters to complete the chart.
- **b)** Complete the column addition.
- c) Which column did you add first? Talk to a partner about your method.



Mrs Morgan drives 230 km on Monday.
On Tuesday she drives 169 km.

How far does she drive in total on Monday and Tuesday?





Complete the additions.

The table shows the number of boys and girls in two schools.

School B	School A	
400	224	Boys
	305	Girls

a) The total number of children in each school is equal.

Without working it out, which school has more girls?

How do you know?

b) How many girls are there in school B?



- Three children each work out an addition problem.
- Each child uses the same six digits.
- Each addition gives the same answer of 888
- Each child adds two different numbers together.

Work out a possible set of addition problems



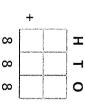
I

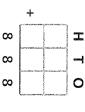
-

0

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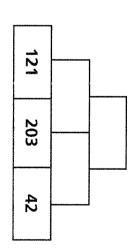




Here is an addition pyramid.

Add the two numbers below to make the number above.

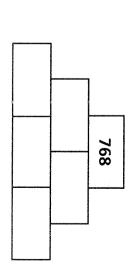
a) Complete the addition pyramid.



b) Complete the addition pyramid

None of the additions should have an exchange.

The total is 768



Compare answers with a partner





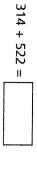




) Calculate 314 + 522

Use the place value chart to help you.

	Γ
0	7
)





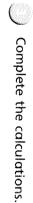
Use the place value chart to help you.

00	Th
0	I
0	+
00	0

b) Now calculate 3,214 + 122 in the same way.

3,214 + 122 =

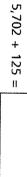
c) What do you notice about your answers to part a) and part b)?



Do you agree with Alex? _____

Explain your answer.

Complete the calculation.





Teddy is travelling from Scotland to France and then	The distance from France to Spain is 1,002 km.	The distance from Scotland to France is 1,550 km.

How far will he travel in total?

France to Spain.

COMMANDA COMMANDA MARIA	

Whitney and Jack are playing a game.

Whitney has 1,323 points.

Jack has 230 points more than Whitney.

How many points do they have altogether?



Fill in the missing digits.

	+		
∞	SIA-TOMASA-AN	ω	-
7	4		7
9		2	-
6	6		C

Complete the calculation.

How does this affect the answer? What do you notice about the numbers in the question?

Think of some more calculations like this.

Try them out with a partner.











Hundreds	Tens	Ones
		5555

+		
	2	ェ
5	ω	-
7	5	0

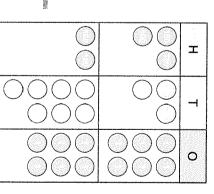
b) 372 + 144

Hundreds	Tens	Ones
		6 6
		8 8 8 8

Tick the additions that need an exchange of ones for a ten.

for a ten? How do you know if an addition needs to exchange 10 ones

Dani uses counters to represent an addition.



a) What addition is Dani trying to work out?

b) Work out the answer to the addition.

 	-

c) How many exchanges did you have to do?

<u>a</u>)	Work out the additions
	tions.



2

3

- 455 + 165317 + 203386 + 184192 + 784319 + 501390 + 177
- b) Did you have to work out all of the additions?
- c) Complete the sentences.

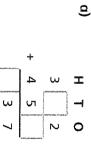
The answer to 175 + 212 ends with a

The answer to 609 + 175 ends with a

The answer to 334 + 178 ends with a

The answer to 716 + ends with a 3

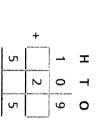
c) 718 + 108



Fill in the missing digits.



0



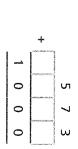
<u>5</u>

9

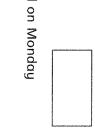
글

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- Dexter bakes 148 biscuits on Monday.
- on Monday. On Tuesday he bakes 273 more biscuits than he did
- a) How many biscuits does Dexter bake on Tuesday?



- b) How many biscuits does he bake in total on Monday and Tuesday?
- Write two addition calculations that have:

1 exchange

2 exchanges.

Compare answers with a partner.





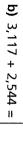


Complete the calculations.

Use the place value charts to help you.

	Th
	Ι
	-1
0000	0





207		
	Th	
	Ι	
	-	
	0	



c) What do you notice about the calculations in part a) and part b)?

Which did you find easier and why?

d) What happens when you have more than 10 counters in one column?

Complete the	

calculations.

Complete the calculations.

٥





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ع

Four children have calculated 4,635 + 183

Rosie's method

Jack's method

$$4,635 + 183 = 4,718$$

Teddy's method

Th H T O
4 6 3 5

$$4,635 + 183 = 4,818$$

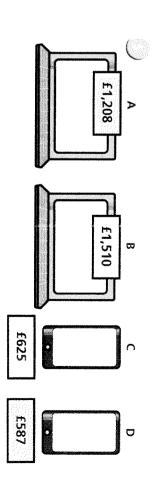
$$4,635 + 183 = 6,465$$

Whose method is correct?

Talk about the mistakes the other children have made.



Nutra Rose Maths

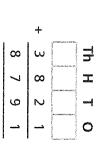


and a laptop. Mr Robson has £2,100 to spend on a mobile phone

to buy? What combinations of laptops and phones can he afford

Fill in the missing digits.

5



ð



There are 100 centimetres (cm) in 1 metre (m).

Use the bar models to complete the sentences.

 100 cr	
<u> </u>	ゴ —

There are	l m
	л ж
cm in 3 m.	1 33

	b
	1 m
	1 m
	1 m
	1 m
	1 3
	3

	There are	
_	cm in 6 m.	

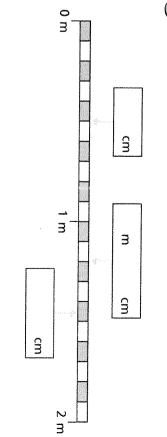
	c
100 cm	

There are 500 cm in m.

Oomplete the table to show equivalent lengths and continue the pattern.

				33	32	31	
cm	cm	cm	cm	330 cm	320 cm	310 cm	S
m and	m and	3 m and 50 cm	3 m and 40 cm	m and	m and	3 m and 10 cm	m and cm
cm	cm	cm	cm	cm	cm	Cm	3

Write the missing measurements.



Draw an arrow to show the position of each measurement.



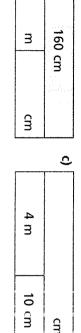


о Ж 20 cm ⋗ 0 m 75 cm œ 130 cm 0

1 m 65 cm O

Complete the bar models.

<u>0</u>



S

ڡ 2 m 5 cm S

<u>5</u>

268 cm

3

CM

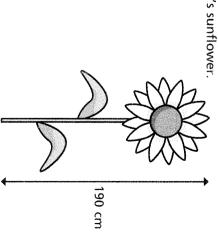
- Complete the sentences.
- **a)** 240 cm = m and S
- **b)** 319 cm =m and S

c) 508 cm = m and

S

- **d)** 2 m and 15 cm = G
- e) 8 m and 3 cm = S

Here is Huan's sunflower.



Dani's sunflower is 2 m and 30 cm.

and Dani's. Tom's sunflower is exactly halfway between Huan's

How tall is Tom's sunflower?

Write your answer in metres and centimetres.

m and S





There are 10 millimetres (mm) in 1 centimetre (cn Use the bar models to complete the sentences.

	∄.	
 10 mm	1 cm	

 ت
1 cm
1 cm
1 cm

There are mm in 3 cm.

9
1 cm

There are mm in 7 cm.

	C
10 mm	

There are 40 mm in



Match the equivalent lengths.

1 cm 3 mm 3 cm 1 mm 30 mm

33 mm

30 cm

300 mm

13 mm

31 mm

3 cm 0 mm

3 cm 3 mm

How long are the scissors?



The scissors are cm and mm long.

The scissors are mm long.



Find three items in your classroom.

Measure them and complete the table.

One has been done for you.

	toy car	Item
	9 cm 6 mm	Length in cm and mm
	96 mm	Length in mm



b) Kim's tower is 300 mm tall.

How many cubes does she use?

Filip and Kim are building towers using cubes. Each cube is 3 cm high.

3 cm	Filip's tower is mm tall.		Give your answer in millimetres.	How tall is Filip's tower?	a) Filip uses 6 cubes.	
)/6 3\6)/()/(/ <u>(</u>	

	Kim uses
-	cubes.

Complete the bar models.

	$\boldsymbol{\varepsilon}$
cm	62 mm
mm	

	0
30 cm	
1 mm	mm

	ತಿ
30 cm	
10 mm	mm







There are 1,000 metres (m) in 1 kilometre (km). Use the bar models to complete the sentences.

9

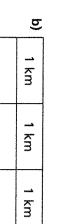
1 km

1 km

There are

m in 2 km.

1,000 m	1 km



There are
m in 3 km.

Complete the state
statements.

b) 9,000 m =

Ŕ

e) 7 km =

3

Complete the statements.

3

3

9 km 50 m =

3

Complete the bar models.

<u>a</u> 3 1 km 700 m e)

1 km

3

400 m

Ð

<u>5</u> m | 300 m | 400 m 1 km

C 800 m 1 km 3 km 3

> 9) 800 m 1,200 m 3 3 km 2 km 1,600 m 3

2,800 m ŝ き 900 m

2,200 m

<u>a</u>

3,600 m 3 2 km

Write >, < or = to make the statements correct.</p>

6 km **c)** 3 km

<u>e</u>

700 m

1 2 km 500 m

2 km 600 m

b) 5,000 m 5 km **d)**

One morning, Filip walks 6 km.

In the afternoon, he walks another 3,800 m.

How far does Filip walk altogether?

Complete the table.

Teddy	Nijah	Kim	Scott	Dani	Pupil
1 3/4 km		$\frac{1}{2}$ km		2 km	How far they live from school (km)
	2,500 m		7,000 m		How far they live from school (m)

Aisha lives $1\frac{1}{2}$ km away from school.

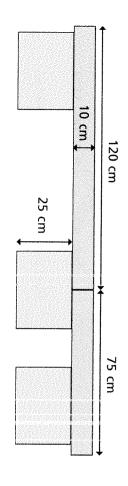
a) How many metres is that?

She walks to and from school 5 days a week.

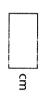
b) Does Aisha walk more than 10 km in a week? Show your workings.



Scott builds a bridge using planks.



a) What is the total length of his bridge?



b) What is the height of his bridge?



Complete the additions.

d) 52 mm +

| mm = 6 cm

- Brett is 115 cm tall. Write your answer in metres and centimetres. His brother is 20 cm taller. How tall is Brett's brother?

m and S

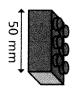
Dora builds a tower that measures 1 m and 5 cm. How tall is their new tower? They put their towers together to make one high tower. Dexter builds a tower that measures 95 cm. Annie builds a tower that measures 80 cm.

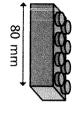
This is the same as The new tower is m and cm tall.

CM.



Red bricks are 50 mm long. Blue bricks are 80 mm long.





a) Whitney and Eva make patterns using the bricks. How long is each pattern?



Give your answers in centimetres.





Whitney

Eva

Whitney's pattern is cm long.

Eva's pattern is



b) Draw some red and blue bricks to make a pattern that would be exactly 36 cm long.



Alex

75 cm

75 cm

3

child travelled jump competition. Jack, Tommy and Alex took part in a hop, skip and Their distances are shown in the table below. Complete the table to show the total distance each Tommy Name Jack 80 cm 70 cm Hop 60 cm Skip <u>-</u>3 1 m 10 cm 1 m 20 cm dmnr

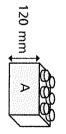
Total

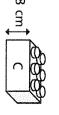


Esther builds a tower using some bricks.

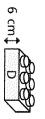
Her tower is 24 cm tall.

Which bricks could she have used?









How many different answers can you find?









How many sweets are there?









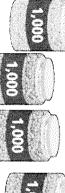


Write your answer in numerals and words.

There are sweets.

There are _ sweets.

Class 4B are collecting pennies in jars. Each jar contains 1,000 pennies.







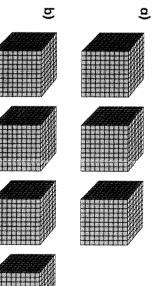
How many pennies are there in total?

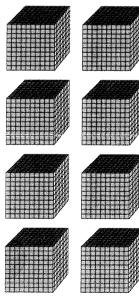
Write your answer in numerals and words.

There are pennies

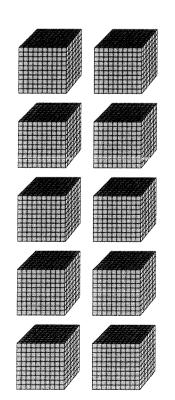
There are pennies.

What numbers are represented?





O Circle 9,000



Complete the number tracks.

2,000 3,000 6,000

9,000	
ĺ	
7,000	
7,000 5,000	

5,000
6,000
1,500
3,999

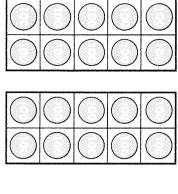
1,000

10,000

15,000

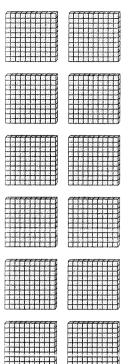
700

— How many thousands are represented?



Explain how you know.

______ Circle 1,000





If I count in thousands from zero, I will always say an even number.

Is Rosie correct?
How do you know?

Dexter and Amir collect stickers. Each sticker is worth 1,000 points.		
		and the state of t
	Annual Committee of the	and and a department

a) Dexter collects 9 stickers.
How many points does he have?



b) Amir has 4 more stickers than Dexter.
How many points does Amir have?







<u>5</u>

How many nails are there? 100

There are nails.

What numbers are represented?

9

Mo is trying to make the number 3,250

He represents it on a place value chart.

	Th
	I
3 G S	0

is Mo correct?

How do you know?

Use base 10 or place value counters to make these numbers.

a) 2,391

b) 1,050

d) 3,303

Circle the base 10 or counters to show each number. What number is represented? Write your answer in words. Write your answer in numerals. **b)** 5,124 a) 2,053 ᆉ анини шшш 0 Here are some clues to a 4-digit number. Write a 4-digit number with 7 tens. Write the value of the digit in bold. d) 6**7**1 you find? What could the number be? How many possible numbers can e) 5,918 c) 2,004 **b)** 3,**9**15 Write a 2-digit number with 7 tens. Write a 3-digit number with 7 tens. a) 7,120 The sum of the digits is 12 There are more tens than ones. There are 6 hundreds.

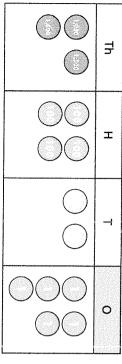








Dora makes a number on a place value chart.

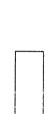


a) What number has Dora made?



b) Add 3 ones to Dora's number.

What number do you have?



c) Add 2 tens to Dora's number.

What number do you have now?



d) Subtract 2 hundreds from Dora's number.

What number do you have now?



e) Add 5 thousands to Dora's number.

What number do you have now?

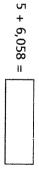
Complete the calculations.

Use the place value chart to help you.

	,
5	1,000s
3	100s
7	10s
8	1s

a) 5,378 + 200 =

Complete the calculations.



Mo is going to add 100 to each number.

Circle the numbers where the 1,000s will change.

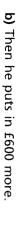
2,450

What do you notice?

- Mr Hall has £1,342 in the bank.
- a) Mr Hall puts in £500 more.

bank now? How much money does he have in the





How much money does Mr Hall have in the bank now?



c) Then Mr Hall takes out £60

How much money does he have in the bank now?



Is Eva correct?



only the tens will change If I keep taking ten away from the number 2,562



Write the missing numbers.

6,951 –

Which calculations were easy to work out?

Which were more difficult to work out?



together, you can add 1,000 to 3,812 and then add 400 To add 3,812 and 1,400

a) Use Ron's method to work out 3,812 + 1,400



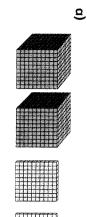
Could you have worked this out mentally?

b) Use Ron's method to complete the calculations.





Omplete the number sentences.



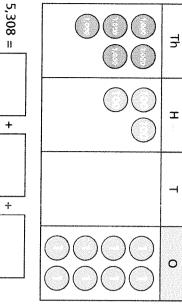
3,472 = 1,000 +

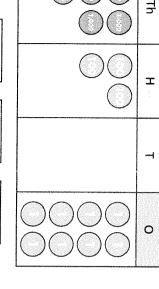
+

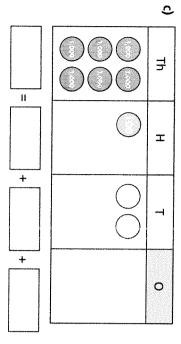
+

2,156 = 2,000 +

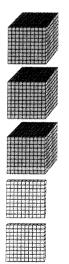
<u>b</u>

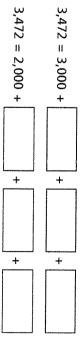




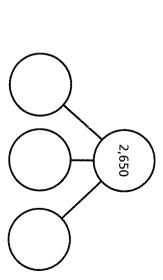


Omplete the number sentences.





Complete the part-whole models.



<u>5</u>



Complete the sentences.

a) 2,348 is equal to 2 thousands, hundreds,

tens

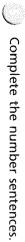
and ones.

b) 5,072 is equal to thousands, hundreds,

tens

- and ones.

 c) is equal to 2 thousands, 7 hundreds and 6 tens
- c) is equal to 2 thousands, 7 hundreds and 6 tens.
- d) is equal to 8 thousands and 2 ones.
- e) 54 ones is equal to tens and ones.
- f) 28 tens is equal to hundreds tens.





Explain why 20 hundreds is equal to 2,000

Alex has 4 digit cards.

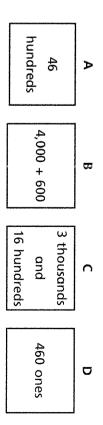
2	
7	7
9]

She makes a 4-digit number.

Her number has 7 thousands and 1 ten.

What numbers could Alex have made?

Jack has some number cards.



- a) Which number card is not equal to the others? Card
- **b)** Write another number card that is equal to Card B.



