

07/10/2020

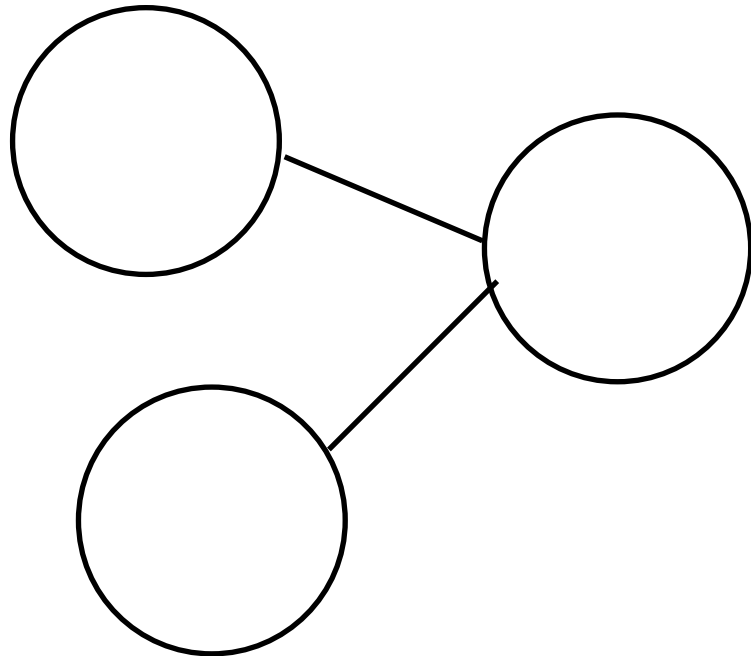
Addition and subtraction.

In this lesson the children will be adding and subtracting multiples of 100. We see two ways of representing these calculations: the part/whole model and the number line.

The first page shows the kind of problem we will be working on and the second pages shows the ways we might solve these problems.

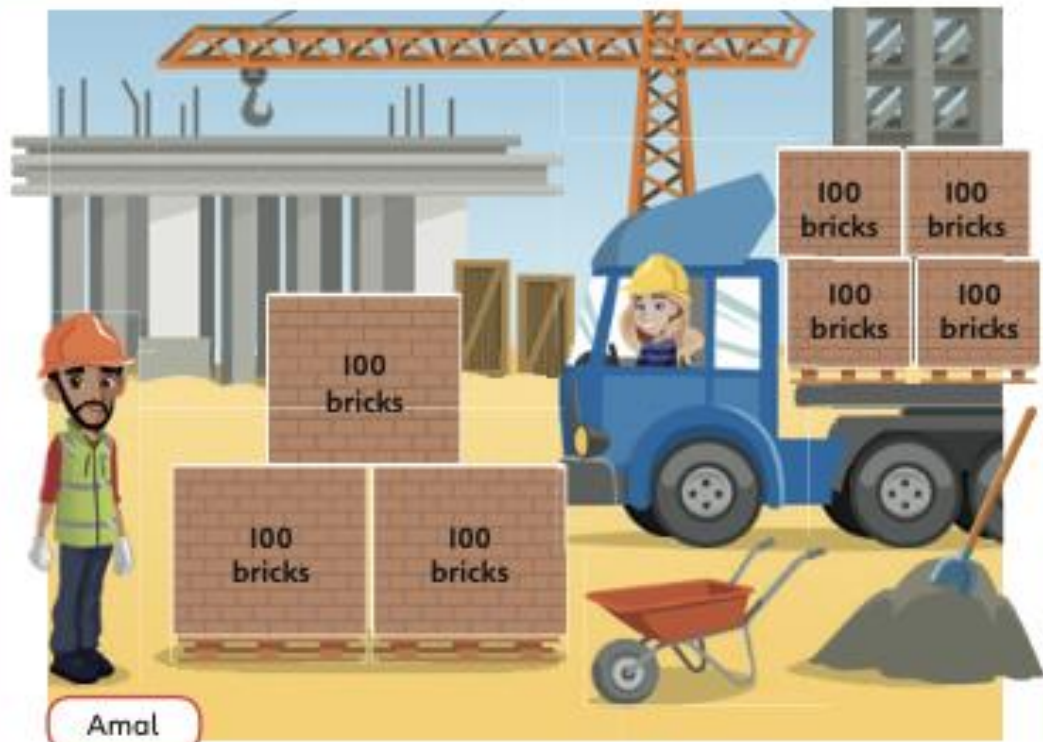
The part /whole model looks something like this, although it could be flipped in any direction. The whole number will always be placed in the single bubble and it will be linked to the parts which can be added to make the whole.

Sometimes you might see this kind of model with the whole number and one of the parts inserted so the children have to find the missing part.



Adding and subtracting 100s

Discover

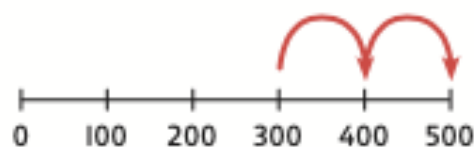
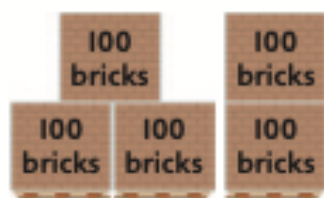


- 1** a) The lorry delivers 2 more packs of bricks. Each pack holds 100 bricks.
How many bricks does Amal now have in total?
- b) How many bricks are left on the lorry?

Share

- a) There are 100 bricks in each pack and 2 more packs were delivered.

I will count in 100s.

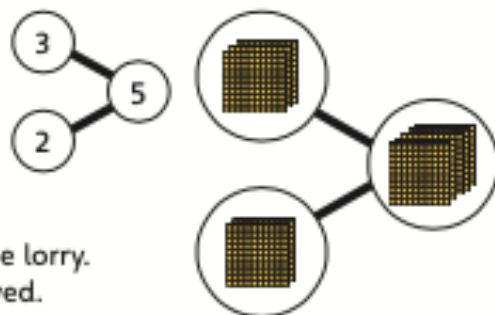


I will use number bonds to add the 100s.
I know that $3 + 2 = 5$. So, there are 5 hundreds in total.

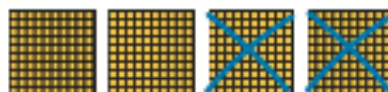
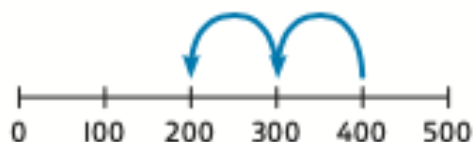
There are 3 hundreds and 2 hundreds.

$$300 + 200 = 500$$

Amal has 500 bricks now.



- b) There were 4 hundreds on the lorry.
Then 2 hundreds were removed.

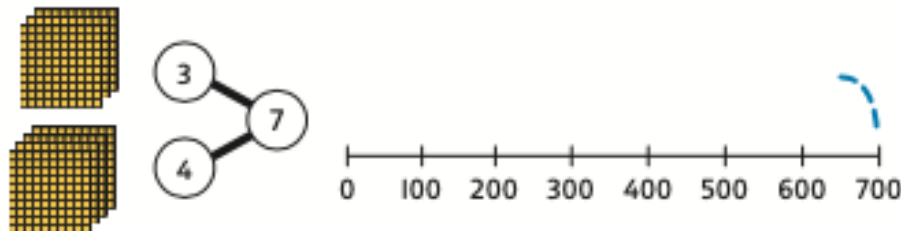


$$400 - 200 = 200$$

200 bricks are left on the lorry.

Think together

- 1 There are 7 boxes. There are 100 hinges in each box.
3 boxes have been used up. How many hinges are left?



$$7 \text{ } \ominus \text{ } 3 = \square$$

There are hundreds left.

$$\square \text{ } \ominus \text{ } 300 = \square$$

There are hinges left.

- 2 a) A builder uses 400 nails. How many does she have left? b) How many screws does the builder have in total?



$$600 \text{ } \ominus \text{ } \square = \square$$

She has nails left.



$$\square \text{ hundreds } \oplus \text{ } \square \text{ hundreds}$$

= hundreds

He has screws in total.

3 Explain the mistake.

There are 100 bolts in each box.

The builders need 600 bolts in total.

How many more boxes do they need?



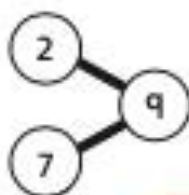
$$3 + 6 = 9$$

They need 900 boxes.

That can't be right,
I'll try again!



4 What other additions and subtractions can you find using this fact?



I will think of fact families. I will try to find 8 facts using 100s.

I will try adding 100s.



CHALLENGE

If you can print the following three pages, your child can write directly onto them.

Adding and subtracting 100s

1



- a) George owns a shop. How many ice creams and ice lollies are in the shop?

$$\square \text{ hundreds} + \square \text{ hundreds} = \square \text{ hundreds}$$

$$\square 00 + \square 00 = \square 00$$

He has \square ice creams and lollies altogether.

- b) George sells 300 drinks. How many are left?

$$\square \text{ hundreds} - \square \text{ hundreds} = \square \text{ hundreds}$$

$$\square 00 - \square 00 = \square 00 \quad \text{He has } \square \text{ drinks left.}$$


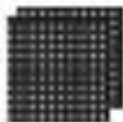
- c) How many more ice lollies does George have than choc ices?

$$\square 00 \bigcirc \square 00 \bigcirc \square 00$$

He has \square more ice lollies than choc ices.

- d) George gets 200 more of one item. Now he has 600 of that item. What item is it?

2 Complete the additions shown.

a)  +  =

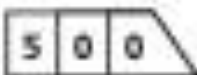
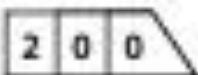
00 + 00 = 00

b)  + = 

+ =

3 Complete the subtractions shown.

a)  $700 - \text{}00 = \text{}00$

b)  - = 

5 hundreds - hundreds = 2 hundreds

4 Circle the calculations that can be solved using this part-whole model. Complete all the subtractions.

a) $700 - 200 = \text{}$

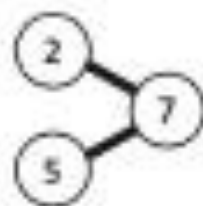
d) $700 + 200 = \text{}$

b) $500 - 200 = \text{}$

e) $500 + \text{} = 700$

c) $700 - \text{} = 200$

f) $500 = \text{} - 200$



5 Explain the mistake.



I could try rearranging the numbers.



6 Crack the code. Each symbol represents a single digit.

$$\star 00 + \triangle 00 = \square 00 \quad \triangle 00 - \star 00 = 200$$

$$\square + \triangle + \star = 16$$

$$\star = \square \quad \triangle = \square \quad \square = \square$$

Challenge

Reflect

How many addition and subtraction facts for 100s can you write that use the number fact $9 - 4 = 5$?

- _____
- _____
- _____
- _____

