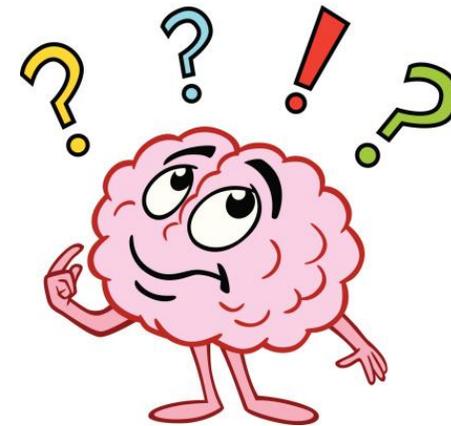


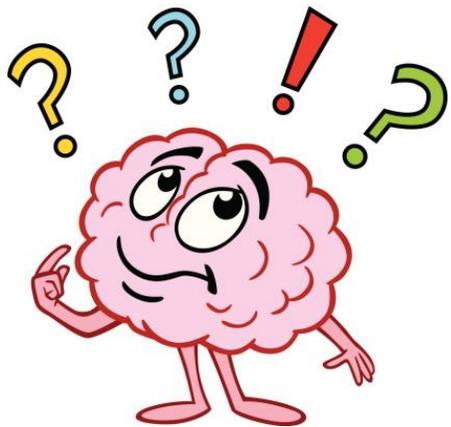
Monday 6th April - Maths

Parent/carer

- Your child can complete this lesson by reading the activities and working from the screen on some paper. You don't need to print the slides - save your ink.
- However, because it uses columns, some children get digits lined up wrongly at first. Therefore I have included some squared paper on p4, that you could print if needed.

(Be careful to only select p4 though! You don't want to print every page!)





Monday 6th April- Maths.

Monday means it's time for Maths!

- Let's start with a warm up.

Easier:

Count in 4's up to 48.

Can you count back down again?

4,8,12....

Write out your 4x table and then answer them at random – e.g.

$$5 \times 4 =$$

Count in 8's up to 96.

Can you count back down again?

8,16,24....

Write out your 8x table and then answer them at random – e.g. $5 \times 8 =$

Maybe test an adult – can they answer their tables too?

Challenge yourself!

Count in 9's up to 108.

Can you count back down again?

9,18,27....

Write out your 9x table and then answer them at random – e.g. $5 \times 9 =$



Today, we will be working on our subtraction using the column method.

- This is a simple method that helps us subtract up 2 and 3 digit numbers quickly. We have practised it in school.

At school, we use the squared paper in our books to help us. If you don't have squared paper at home, you will need to concentrate on getting the digits lined up carefully under each other.

I've also added some squared paper in this PowerPoint, which you could print. Be careful not to print the whole PowerPoint! Just page 4.

Compact column subtraction

4 No exchanging

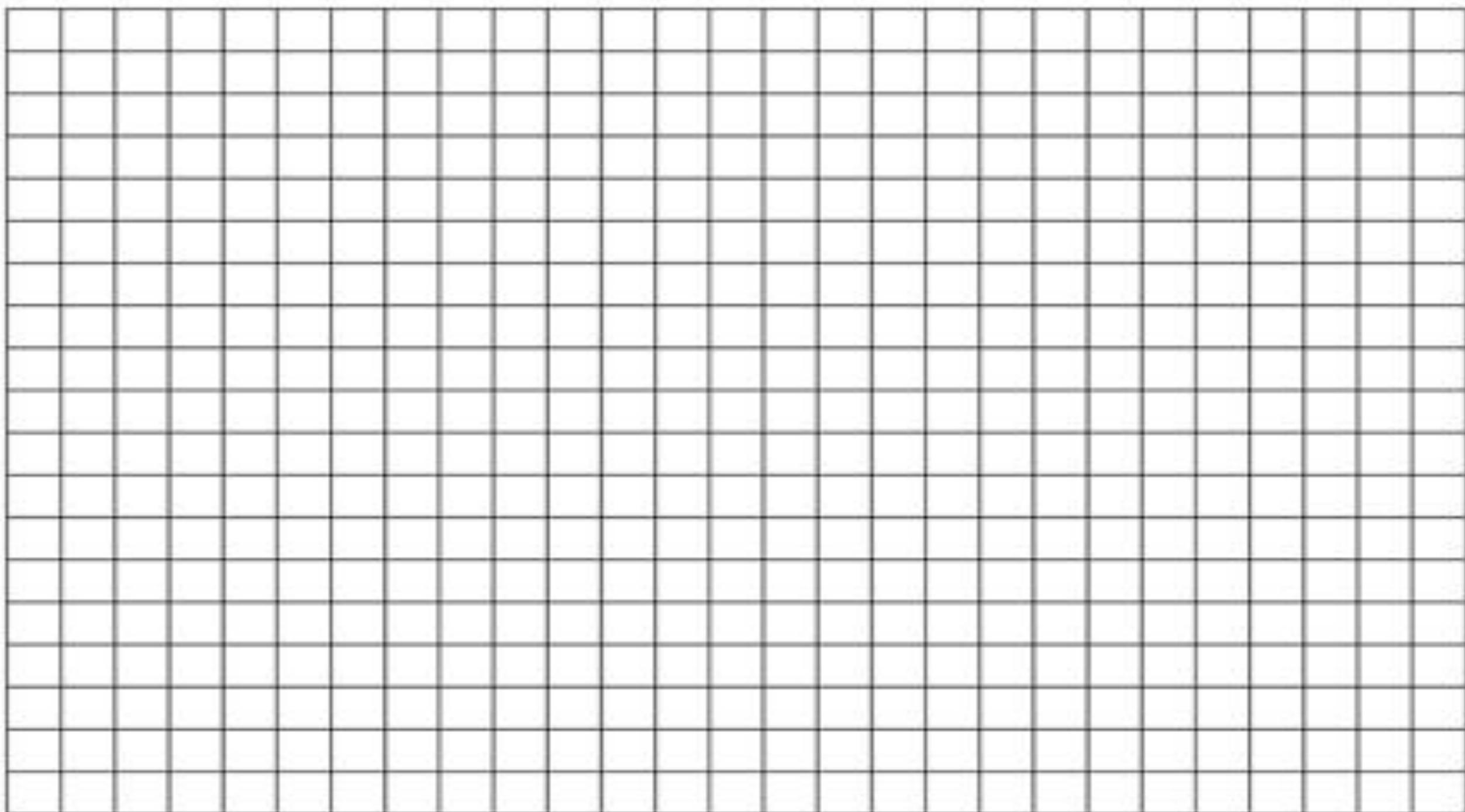
	3	6	5
-	1	2	3
<hr/>			
	2	4	2
<hr/>			

5 Exchanging

	3	⁵ 6	5
-	2	4	7
<hr/>			
	1	1	5
<hr/>			

This is what we are aiming for, but let's try some together....







Subtracting in columns

Before we worked on this in school with the Y3 children, we spent a lot of time helping them understand that these are not simply digits. For example 56 is not just a five and a six.

56 is made of a fifty and a six. We can also say it is 5 tens and 6 ones.

This is called partitioning...

Warm up that skill first by partitioning these numbers:

88

39

846

756

295

305

When we complete our subtraction today, make sure you see the value of the numbers in the calculation, to help you with your work.



Subtracting in columns

Tens	ones
5	6
-	3
	3

Tens	ones
5	6
-	3
	3

Tens	ones
5	6
-	3
2	3

- Ok, now lets look at these columns using this example $56 - 33$.
- First you need to copy the calculation carefully into columns or a grid.

Then, start with the column furthest right (the ones here).

Read the calculation from the TOP DOWN. So we would say 6 take away 3.

It's really important to always read from the top down. You can't swap this rule.

So 6 ones take away 3 ones equals 3 ones
 $6 - 3 = 3$

Now read the tens.

5 tens take away 3 tens...

That would be 2 tens. $5 - 3 = 2$

And now we can see our answer

$$56 - 33 = 23$$



Let's try a larger number.

H	T	O	
9	7	6	
-	3	1	4
		2	

Calculate the ones first...

Remember TOP DOWN!

$$6 \text{ ones} - 4 \text{ ones} = 2 \text{ ones}$$

H	T	O	
9	7	6	
-	3	1	4
	6	2	

Now calculate the tens...

Remember TOP DOWN

$$7 \text{ tens} - 1 \text{ ten} = 6 \text{ tens}$$

H	T	O	
9	7	6	
-	3	1	4
6	6	2	

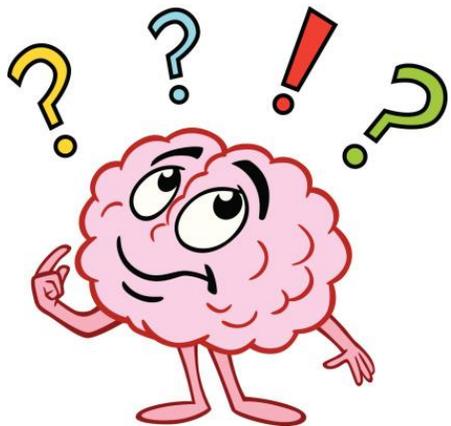
Now find the hundreds...

Remember TOP DOWN

$$9 \text{ hundreds} - 3 \text{ hundreds} = 6 \text{ hundreds}$$

And now we can
see our answer

$$976 - 314 = 662$$



Ok, let's try some of those independently now...

Give yourself up to ten minutes...



Easier:

$$56 - 21$$

$$94 - 72$$

$$99 - 37$$

$$96 - 30$$

$$47 - 14$$

$$88 - 25$$

$$74 - 22$$

Harder (3 digit)

$$847 - 235$$

$$979 - 243$$

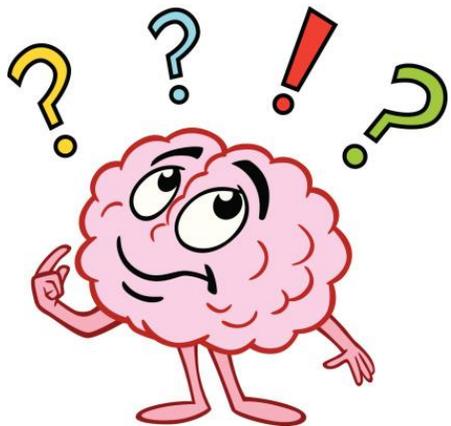
$$978 - 645$$

$$786 - 243$$

$$686 - 231$$

$$967 - 254$$

$$869 - 103$$



How did you get on?



Answers time

Easier:

$$56 - 21 = 35$$

$$94 - 72 = 22$$

$$99 - 37 = 62$$

$$96 - 30 = 66$$

$$47 - 14 = 33$$

$$88 - 25 = 63$$

$$74 - 22 = 52$$

Harder (3 digit)

$$847 - 235 = 612$$

$$979 - 243 = 736$$

$$978 - 645 = 333$$

$$786 - 243 = 543$$

$$686 - 231 = 455$$

$$967 - 254 = 713$$

$$869 - 103 = 766$$



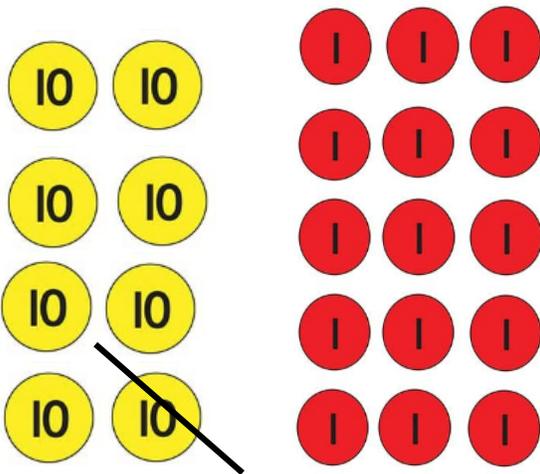
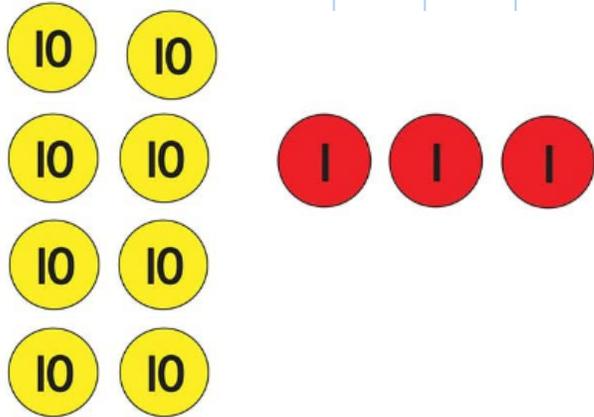
Subtracting in columns - exchanging

Tens	ones
8	3
-	2
	6

So now, we are going to explore what happens when we can't simply complete the calculation with a simple subtraction.

We may need to make an exchange.

Look at this as an example.



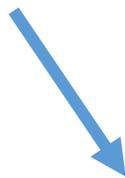
Starting with the ones, we need to read TOP DOWN.
3 ones - 6 ones...but we can't do this without getting a negative number.

So we need to exchange a ten,
and use it to create ten ones...
This is it visually... a ten is exchanged for ten single ones.

Let's look at it written down
formally -->



Tens	ones
8	3
-	2
<hr/>	
<hr/>	



Tens	ones
7 8	13
-	2
<hr/>	
<hr/>	



Tens	ones
7 8	13
-	2
	7
<hr/>	
<hr/>	



Tens	ones
7 8	13
-	2
5	7
<hr/>	
<hr/>	

Subtracting in columns - exchanging

So 3 ones - 6 ones

We can't calculate this to get a positive number

So we move to the tens to make an exchange

We look at the tens, and use a ten to exchange. This means instead of having 8 tens, they will have 7. We record this by crossing out the 8 and writing the 7.

We then move back to the ones and mark the 1 ten down. This can now be read as 13.

Phew. Now let's read those ones again.

13 ones - 6 ones would make 7 ones.

So we record the 7.

Then we complete the tens. Remember it is 7 tens to use now.
7 tens - 2 tens = 5 tens. Write that in.



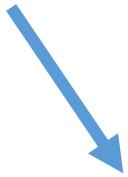
H	T	O
9	5	2
-	3	1
<hr/>		
<hr/>		



9	5	2
-	3	1
<hr/>		
<hr/>		



9	5	2
-	3	1
<hr/>		
		7
<hr/>		



9	5	2
-	3	1
<hr/>		
	3	7
<hr/>		

9	5	2
-	3	1
<hr/>		
6	3	7
<hr/>		



Lets try another

TOP DOWN. 2 ones - 5 ones

We can't calculate this to get a positive number

So we move to the tens to make an exchange

We look at the tens, and use a ten to exchange. This means instead of having 5 tens, they will have 4. We record this by crossing out the 5 and writing the 4.

We then move back to the ones and mark the 1 ten down. This can now be read as 12.

Now let's read those ones again.

12 ones - 5 ones would make 7 ones.

So we record the 7.

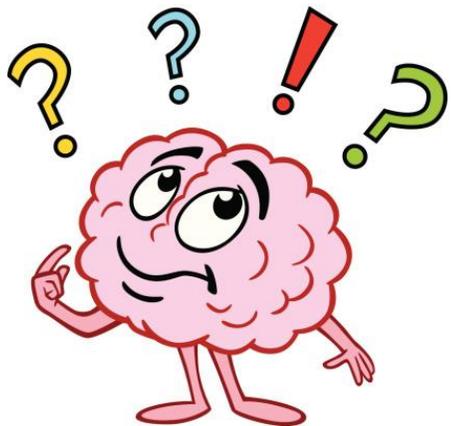
Then we complete the tens. TOP DOWN.

4 tens - 1 ten = 3 tens. Write that in.

Then we complete the hundreds. TOP DOWN.
9 hundreds - 3 hundreds = 6 hundreds. Write that in.

Parent/carer,
if that just made your brain ache, feel
free to have a cuppa right now, or a walk to
another room for five minutes! 😊





Ok, let's try that independently...

Work for about 15/20 minutes and then see how much you've done.

Ask for help if you need to.

Maybe challenge a family member to do some too? 😊

With no exchange - easier

$$86 - 21$$

$$95 - 62$$

$$99 - 25$$

$$95 - 40$$

$$49 - 25$$

$$88 - 65$$

$$87 - 21$$

With an exchange:

$$881 - 323 =$$

$$986 - 129 =$$

$$872 - 336 =$$

$$590 - 253 =$$

$$872 - 235 =$$

$$760 - 147 =$$

$$876 - 328 =$$

A mixture so look carefully:

$$326 - 213 =$$

$$982 - 336 =$$

$$743 - 208 =$$

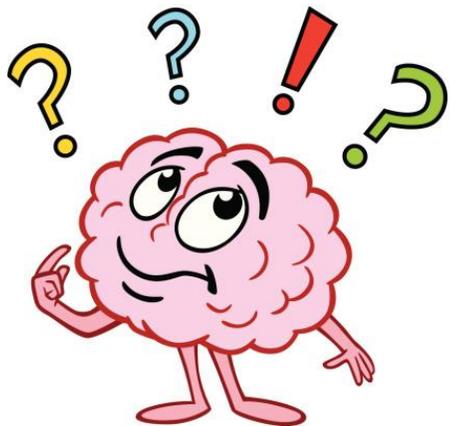
$$828 - 264 =$$

$$956 - 729 =$$

$$848 - 255 =$$

If you finish with time to spare:

- Check your answers
- Make up a few of your own



How did you get on?

Answers! If you have one wrong, look to see where it went wrong.

Did you remember the TOP DOWN rule?

With no exchange - easier

$$86 - 21 = 65$$

$$95 - 62 = 33$$

$$99 - 25 = 74$$

$$95 - 40 = 55$$

$$49 - 25 = 24$$

$$88 - 65 = 23$$

$$87 - 21 = 66$$

With an exchange:

$$881 - 323 = 558$$

$$986 - 129 = 857$$

$$872 - 336 = 536$$

$$590 - 253 = 335$$

$$872 - 235 = 637$$

$$760 - 147 = 613$$

$$876 - 328 = 548$$

A mixture so look carefully:

$$326 - 213 = 113$$

$$982 - 336 = 646$$

$$743 - 208 = 535$$

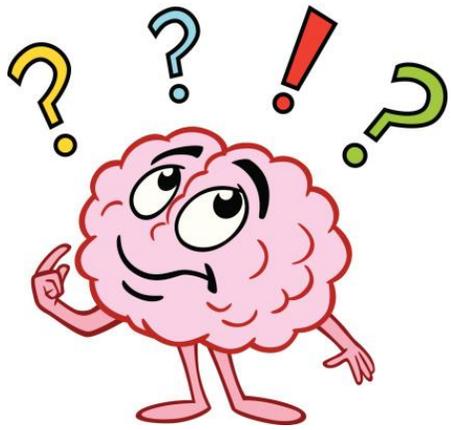
$$828 - 264 = 564$$

$$956 - 729 = 227$$

$$848 - 255 = 593$$

If you finish with time to spare:

- Check your answers
- Make up a few of your own



Plenary

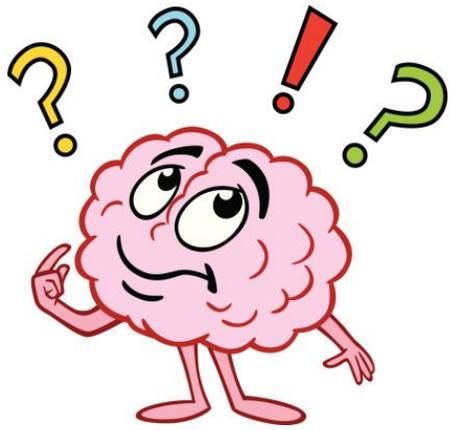
Solve a word problem to finish.

Easier:
Jim has 356
smarties. Pam eats
232 smarties.
How many does Jim
have now?

Michael walks 492 steps
around the garden on
Monday. On Tuesday he
walks 259 fewer. How
many did he walk?

Stanley has 826 paper
clips on his desk. Angela
has 153 fewer. How
many does she have?

Create your own word problem about your family and challenge someone to answer it!



Plenary

Answers

Easier:
He has 124 smarties.

233 steps.

Angela has 673 paper
clips.

Create your own word problem about your family and challenge someone to answer it!

Awesome work- you've been very busy
today!

We are all very proud of you!😊

