

Maths Home Learning

Week beginning 01/03/21

This week...

Day 1 - Times Tables Races.

Day 2 - Subtraction - using base 10.

Day 3 - Subtraction - using column addition.

Day 4 - Subtraction 1 step problems.

Day 5 - Subtraction 2 step problems.

Day 1

Arithmetic

Click the link for an explanation of today's lesson.

<https://youtu.be/XYmzCDWfs7c>

Hot: Can you complete the times table track race? 2x table. Write the answers in your home learning book.

Name _____

The track is a large grid with several sections:

- Top Left:** A green car with the number 1 is on a track. Below it are the numbers 6 and 12, followed by a checkered flag.
- Top Right:** A "Start" arrow points to a green car with the number 1. A speech bubble says "Good start". Below the car is a row of numbers: 2, 10, 1, 9, 3.
- Left Side:** A green car is upside down with a speech bubble saying "Nearly there!". To its right is a vertical column of numbers: 4, 9, 8, 12, 7.
- Center:** A clock face is labeled "Race around the clock". To its right is a starburst labeled "Multiplication table" with "2 x" inside.
- Right Side:** A green car is upside down with a speech bubble saying "Keep going!". To its left is a vertical column of numbers: 4, 8, 6, 7, 5.
- Bottom:** A horizontal row of numbers: 4, 6, 9, 3, 2, 11, 5, 8, 10. A green car is upside down below this row.

Hotter: How quickly can you answer the questions? 5x table. Get set! Go!

Name _____

Start →

Good start

Nearly there!

Keep going!

6 **12**

4 **9** **8** **12** **7**

Race around the clock

Multiplication table

5 x

4 **6** **9** **3** **2** **11** **5** **8** **10**

2 **10** **1** **9** **3**

4 **8** **6** **7** **5**

Hotter: What about this one? 10 x table. Which are you quickest at?

Name _____

The image shows a multiplication table designed as a racetrack. The track is a large U-shape with a checkered flag at the top right. A green car is at the top left, another at the top right, and a third at the bottom center. A fourth car is on the left side, and a fifth is on the right side. The track contains several math problems and a clock.

Start →

Good start

Nearly there!

Keep going!

6 12

2	10	1	9	3

4

9

8

12

7

Race around the clock

Multiplication table

10x

4

8

6

7

5

4	6	9	3	2	11	5	8	10
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On Fire: Who is ready for a challenge? 3x table.

Name _____

Start →

Good start

Nearly there!

Keep going!

6 **12**

4 **9** **8** **12** **7**

Race around the clock

Multiplication table

3x

2 **10** **1** **9** **3**

4 **8** **6** **7** **5**

4 **6** **9** **3** **2** **11** **5** **8** **10**

Times Tables Rockstars (TTRS)

- If you have time practice your times tables on TTRS or by writing them in your home learning book.
- Hot - 2x, 10x
- Hotter - 2x, 5x, 10x
- On Fire - 2x, 5x, 10x, 3x

Please click on the link to listen to today's lesson.

https://youtu.be/___lItN70u10

Day 2

Subtraction

using base 10

Mental maths starter-what time is it?



Mental maths starter- Answers

7 o'clock



9 o'clock



6 o'clock



Half past 6

Subtraction

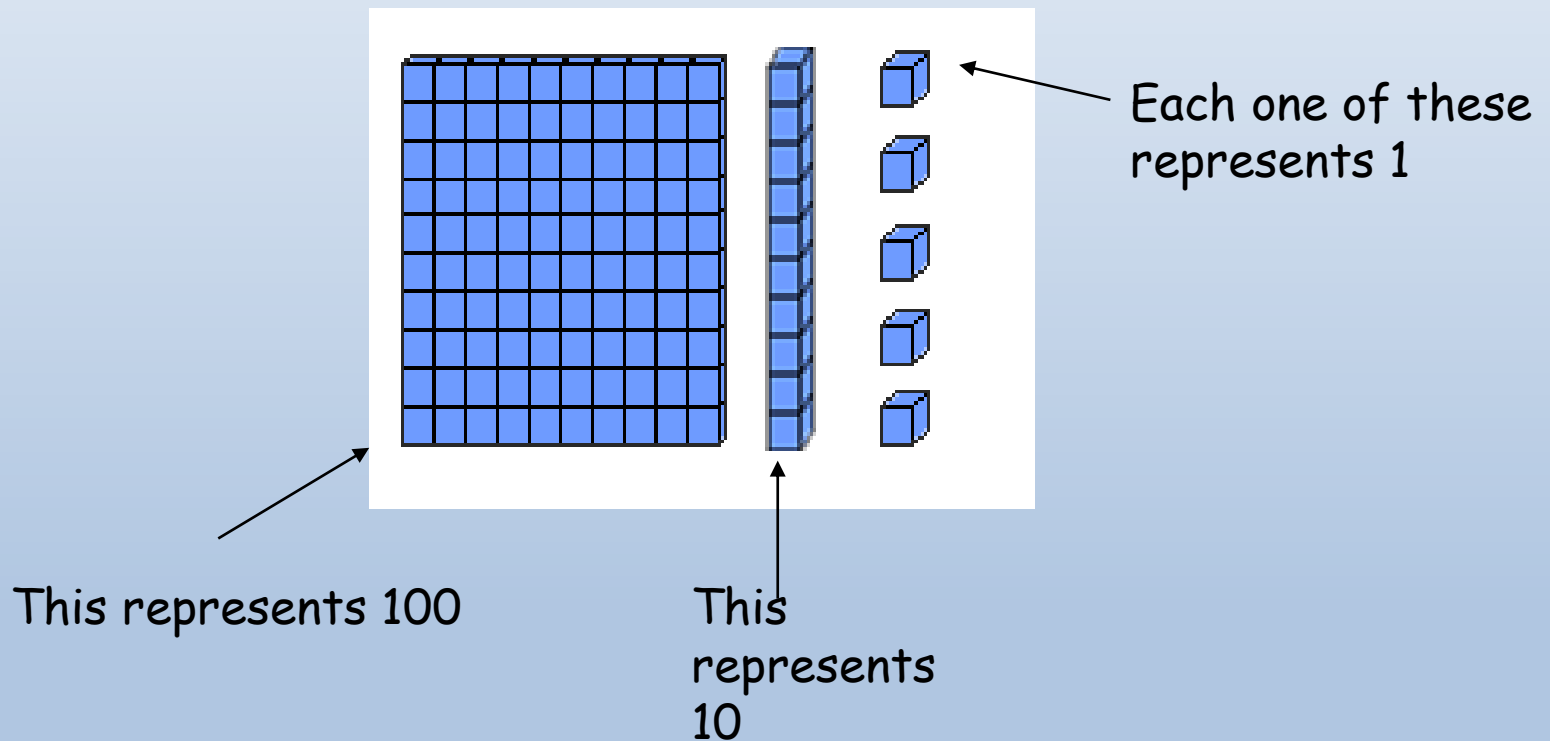
- Remember some of the rules around subtraction.
- The answer will always be LESS or SMALLER than the first number you started with.
- The BIGGEST number always goes first in a subtraction number sentence.
Example: $22 - 10 = 12$

Subtraction Methods

- Just like we did with addition last week, there are different ways to work out subtraction questions.
- We can use our mental maths (work out in our head). It helps if you practice counting backwards.
- We can use objects to help us subtract.

Subtraction Methods

- We can use Base 10 like we do in class.



REMEMBER 10 ones make 1 ten.
REMEMBER 10 tens make 1 hundred.

Place value.

- Just like you did last week, first work out your tens and ones. This is called partitioning or using place value.

Example:

Tens	Ones		T	O
3	6	or	3	6

Drawing base 10 neatly.

- Remember when you are drawing base 10 you can just use lines.
- Just like you did last week, we can add hundreds to our place value.

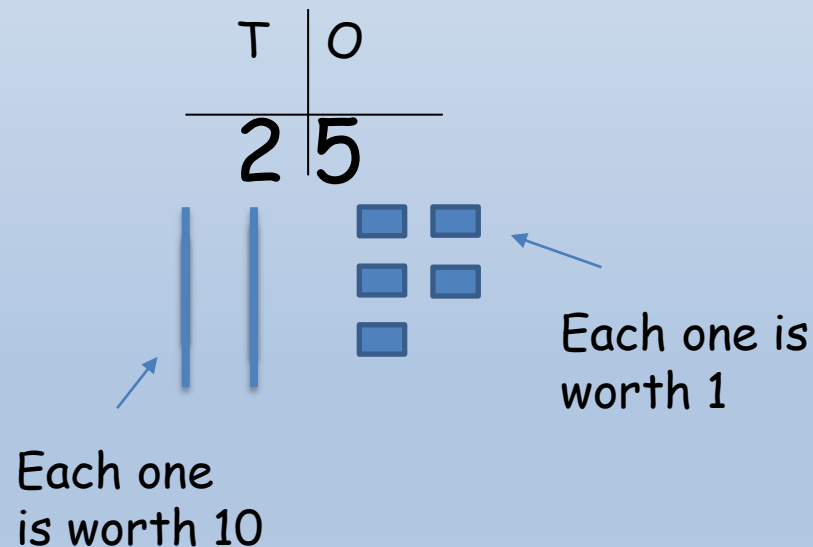
Example:

Hundreds	Tens	Ones		H	T	O
2	3	6	or	2	3	6

Drawing base 10 neatly.

- Next draw the base ten to match the first number. This is different to addition where you matched both numbers. Remember to check if it is in the ten or the one column

Example:

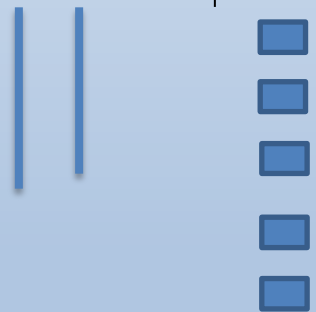


Now we can use base 10 to work out subtraction problems.

First I look at the number question carefully.

Next I draw base 10 for the FIRST number only.

I do - $25 - 12 =$

$$\begin{array}{r|l} \text{T} & \text{O} \\ \hline 2 & 5 \end{array} - \begin{array}{r|l} \text{T} & \text{O} \\ \hline 1 & 2 \end{array} =$$


Next look at the *SECOND* number.
I cross out the amount of Base 10 that match the
second number.

I do - $25 - 12 =$

$$\begin{array}{r|l} \text{T} & \text{O} \\ \hline 2 & 5 \end{array} - \begin{array}{r|l} \text{T} & \text{O} \\ \hline 1 & 2 \end{array} =$$

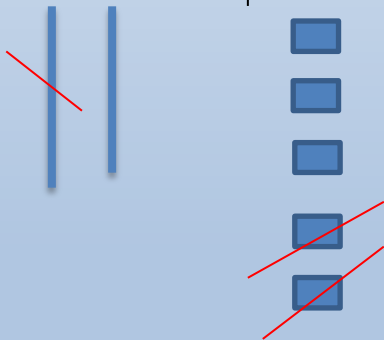
There is 1 ten. There are 2 ones

So I cross off 1 ten and 2 ones.

The final step is to count the base ten that is left. Look at how many tens and how many ones are left.

I do - $25 - 12 =$

$$\begin{array}{r|l} \text{T} & \text{O} \\ \hline 2 & 5 \end{array} - \begin{array}{r|l} \text{T} & \text{O} \\ \hline 1 & 2 \end{array} = 13$$



There is 1 ten left. There are 3 ones left.

Follow each step one by one.

Show how you work it out in your home learning books.

We do - $58 - 31 =$

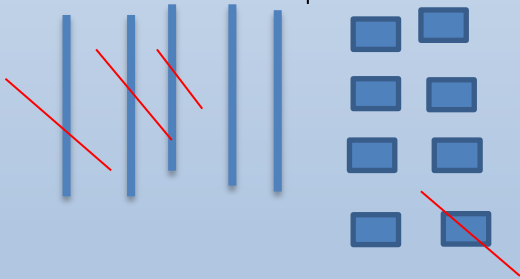
$$\begin{array}{r|l} T & O \\ \hline 5 & 8 \end{array} - \begin{array}{r|l} T & O \\ \hline 3 & 1 \end{array} =$$



Did you remember to look carefully at the second number? Then cross out the base ten.

We do - $58 - 31 =$

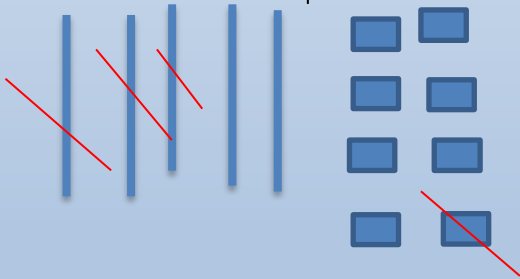
$$\begin{array}{r|l} T & O \\ \hline 5 & 8 \end{array} - \begin{array}{r|l} T & O \\ \hline 3 & 1 \end{array} =$$



Did you remember to then count the base ten that was left to write down your answer?

We do - $58 - 31 =$

$$\begin{array}{r|l} T & O \\ \hline 5 & 8 \end{array} - \begin{array}{r|l} T & O \\ \hline 3 & 1 \end{array} = 27$$



Work out your answers by
drawing base 10.

You do - HOT

$$22-11=$$

$$13-10=$$

$$15-14=$$

$$26-12=$$

$$28-14=$$

CHALLENGE: $8-5 =$

Work out your answers by
drawing base 10.

You do - HOTTER

$$46 - 22 =$$

$$47 - 32 =$$

$$35 - 23 =$$

$$42 - 22 =$$

$$48 - 20 =$$

$$\text{CHALLENGE: } 225 - 112 =$$

Work out your answers by
drawing base 10.

You do - ON FIRE- you will need to think
carefully about your answers.

$$272-121=$$

$$185-142=$$

$$368-232=$$

$$196-182=$$

$$574-323=$$

$$\text{CHALLENGE: } 256 - 35 =$$

How did you do?

You do - HOT

$$22-11= 11$$

$$23-10= 13$$

$$15-14= 1$$

$$29-12= 17$$

$$28-14= 14$$

$$\text{CHALLENGE: } 8-5 = 3$$

How did you do?

You do - HOTTER

$$46-22= 24$$

$$47-32= 15$$

$$35-23= 12$$

$$42-22= 20$$

$$48-20= 28$$

$$\text{CHALLENGE: } 225-112 = 113$$

How did you do?

You do - ON FIRE

$$272-121= 151$$

$$185-142= 43$$

$$368-232= 136$$

$$196-182= 14$$

$$574-323= 251$$

$$\text{CHALLENGE: } 256 - 35 = 221$$

Click on the link to find out about today's.

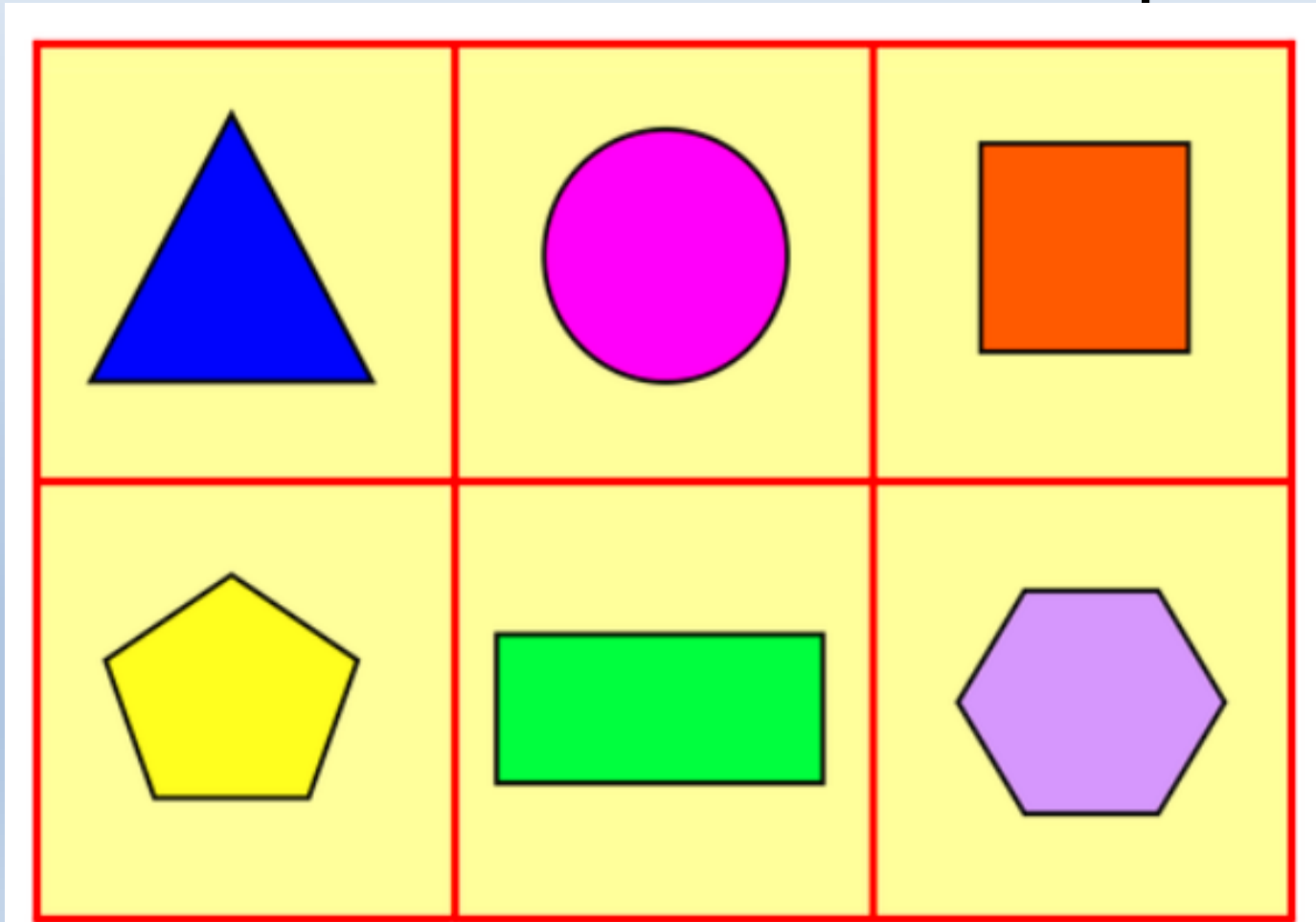
<https://youtu.be/1RWCEjrBNxA>

Day 3

Subtraction using
column method

Mental maths starter-name the shapes.

- What are the names of these shapes?

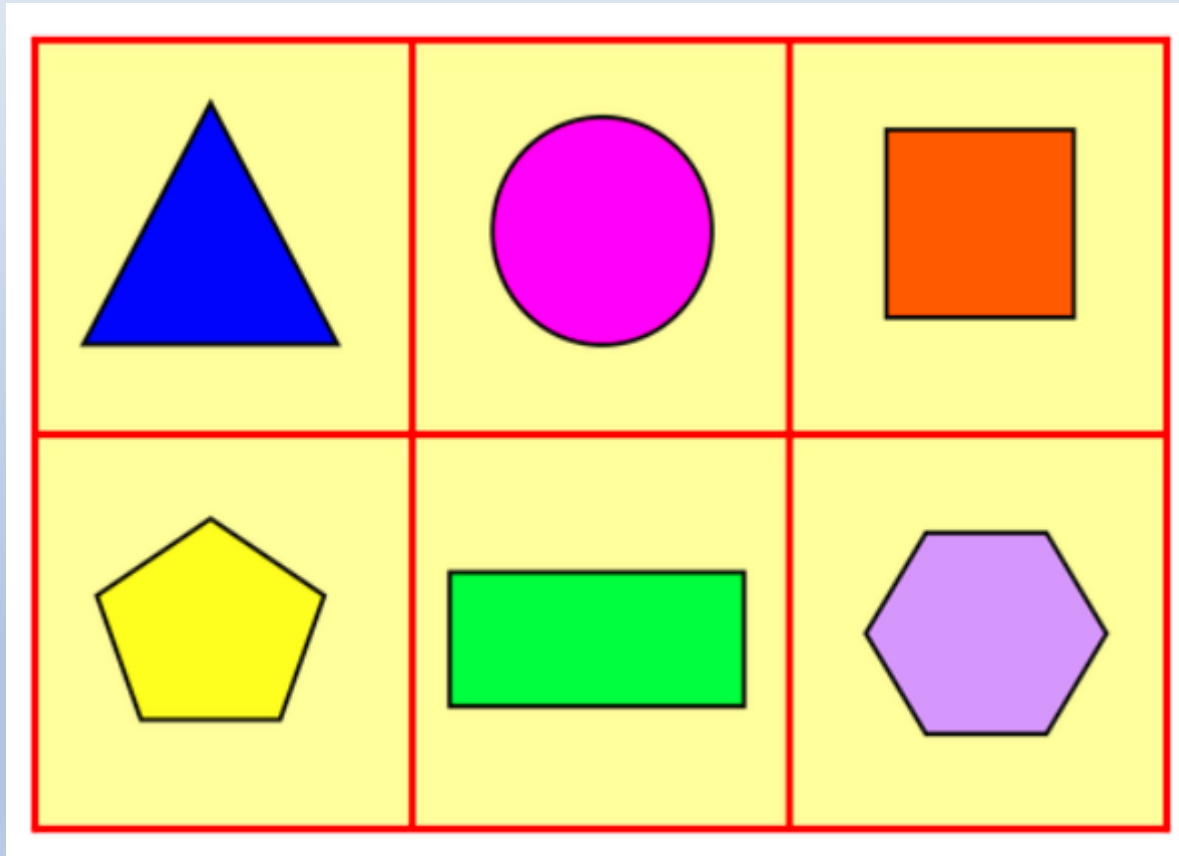


Mental maths starter- Answers.

Triangle

Circle

Square



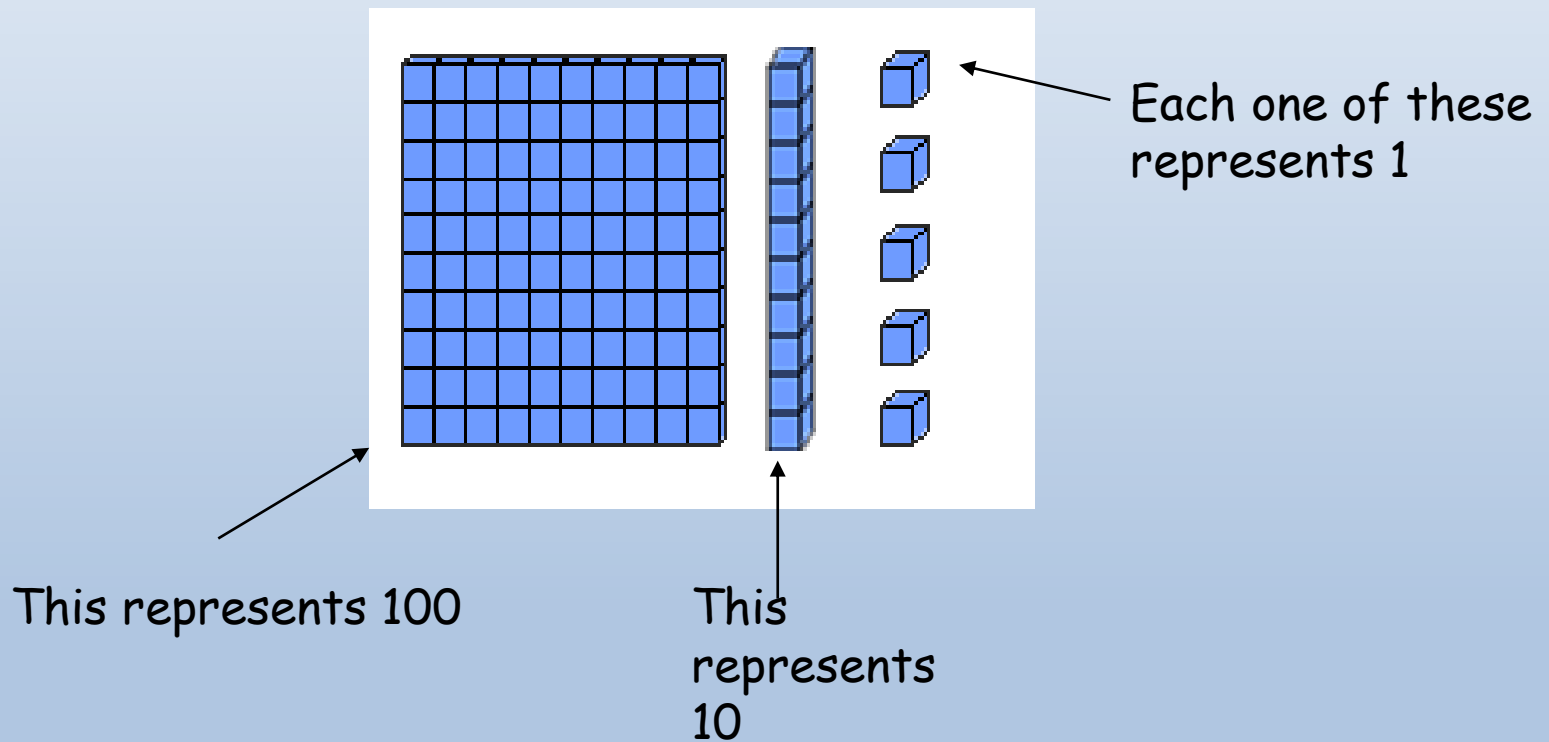
Pentagon

Rectangle

Hexagon

Subtraction Methods

We have already used Base 10 to work out our answers.



Subtraction Methods

- Remember there are other ways to work out the answers to maths questions.
- Next we are going to use column subtraction to work out subtraction problems.

Column Subtraction

- Column subtraction is an easy way to work out subtracting 2 numbers.
- It really helps us to subtract big numbers that we would find hard to subtract in our heads.

Column Subtraction

- To start we need to remember to use our place value knowledge.
- Today we are going to look at hundreds, tens and ones depending on which questions you choose to answer.
- First let's remind ourselves of our place value.

Place value

I do -Let's look at the number 45.

We need to put the numbers in the correct column using place value.

	Tens	Ones	or	T	O
	4	5		4	5

Place Value

I do -Next let's look at the number **245**.

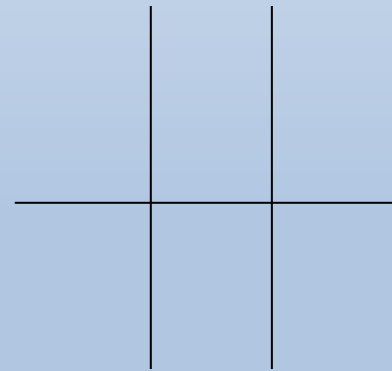
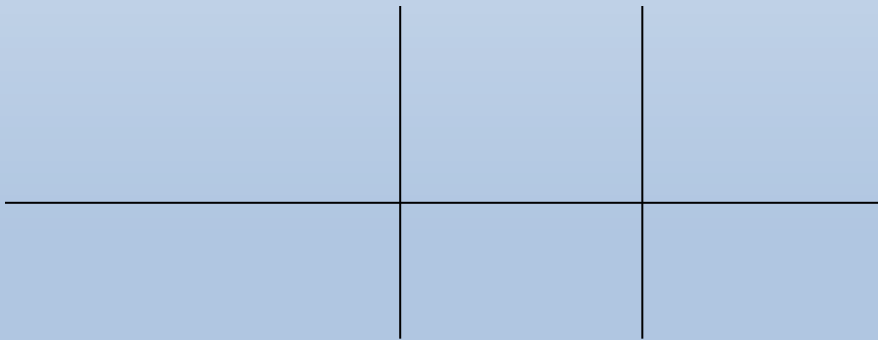
We need to put the numbers in the correct column using place value.

Hundreds	Tens	Ones	or	H	T	O
2	4	5		2	4	5

Place value

We do -Let's look at the number 357.

Put the numbers in the correct column using place value.



Place Value

We do - How did you do?

Remember the number is 357.

Hundreds	Tens	Ones
3	5	7

or

H	T	O
3	5	7

I do - Column Subtraction

If we are subtracting we need to put both numbers in the columns one under the other. Always start with the biggest number.

Example: $26 - 12 =$

First put the numbers into the correct column (using your place value work).

	T	O
-	2	6
	1	2

I do - Column Subtraction

Next we subtract (take away) each column one at a time. Start by subtracting the ones. Then subtract the tens. This will give you your answer.

$$\begin{array}{r|l} & \text{T} \quad \text{O} \\ \hline - & 2 \quad 6 \\ & 1 \quad 2 \\ \hline & 1 \quad 4 \\ \hline \end{array}$$

We do -Column Subtraction

Try this one in your home learning books.
Take your time.

$$48 - 16 =$$

Start by putting both numbers into
columns.

Remember the biggest number goes first.

We do - Column Subtraction

How did you do? Did you remember to subtract (take away) the ones column first?

$$\begin{array}{r|l} & \text{T} \quad \text{O} \\ \hline - & 4 \quad 8 \\ & 1 \quad 6 \\ \hline & 3 \quad 2 \\ \hline \end{array}$$

Work out your answers by
using column subtraction.

You do - HOT

$$12 - 11 =$$

$$26 - 15 =$$

$$29 - 21 =$$

CHALLENGE: $47 - 22 =$

How did you do?

You do - HOT

$$12 - 11 = 1$$

$$26 - 15 = 11$$

$$29 - 21 = 8$$

$$\text{CHALLENGE: } 47 - 22 = 25$$

How did you do?

You do - HOT

$$\begin{array}{r|l} T & O \\ \hline -1 & 2 \\ 1 & 1 \\ \hline & 1 \end{array}$$

$$\begin{array}{r|l} T & O \\ \hline -2 & 6 \\ 1 & 5 \\ \hline & 1 \end{array}$$

$$\begin{array}{r|l} T & O \\ \hline -2 & 9 \\ 2 & 1 \\ \hline & 8 \end{array}$$

CHALLENGE: $47 - 22 = 25$

$$\begin{array}{r|l} T & O \\ \hline -4 & 7 \\ 2 & 2 \\ \hline & 5 \\ \hline & 2 \end{array}$$

Work out your answers by
using column subtraction.

You do - HOTTER

$$37 - 22 =$$

$$44 - 33 =$$

$$49 - 16 =$$

CHALLENGE: $225 - 113 =$

Work out your answers by
using column subtraction.

You do - HOTTER

$$37 - 22 = 15$$

$$44 - 33 = 11$$

$$49 - 16 = 33$$

CHALLENGE: $225 - 113 = 112$

How did you do?

You do - HOTTER

$$\begin{array}{r|l} \text{T O} & \\ \hline - 37 & \\ 22 & \\ \hline 15 & \end{array}$$

$$\begin{array}{r|l} \text{T O} & \\ \hline - 44 & \\ 33 & \\ \hline 11 & \end{array}$$

$$\begin{array}{r|l} \text{T O} & \\ \hline - 49 & \\ 16 & \\ \hline 33 & \end{array}$$

CHALLENGE: 225 - 113 =

$$\begin{array}{r|l} \text{H T O} & \\ \hline - 225 & \\ 113 & \\ \hline 112 & \end{array}$$

Work out your answers by
using column subtraction.

You do - ON FIRE

$$375 - 123 =$$

$$288 - 124 =$$

$$668 - 221 =$$

$$\text{CHALLENGE: } 587 - 65 =$$

How did you do?

You do - ON FIRE

$$375 - 123 = 252$$

$$288 - 124 = 164$$

$$668 - 221 = 447$$

$$\text{CHALLENGE: } 587 - 65 = 522$$

How did you do?

You do - On Fire

$$\begin{array}{r|c|c|c} & H & T & O \\ \hline & 3 & 7 & 5 \\ - & 1 & 2 & 3 \\ \hline & 2 & 5 & 2 \end{array}$$

$$\begin{array}{r|c|c|c} & H & T & O \\ \hline & 2 & 8 & 8 \\ - & 1 & 2 & 4 \\ \hline & 1 & 6 & 4 \end{array}$$

$$\begin{array}{r|c|c|c} & H & T & O \\ \hline & 6 & 6 & 8 \\ - & 2 & 2 & 1 \\ \hline & 4 & 4 & 7 \end{array}$$

CHALLENGE: 587 - 65 =

$$\begin{array}{r|c|c|c} & H & T & O \\ \hline & 5 & 8 & 7 \\ - & & 6 & 5 \\ \hline & 5 & 2 & 2 \end{array}$$

Listen to the link to hear what we are learning today
<https://youtu.be/jPJEDofBojM>

Day 4

Subtraction - 1
step problems

Mental Maths Starter - odd and even numbers.

Which of these numbers are odd and which are even?

3

7

8

12

15

1

26

28

23

113

156

192

Subtraction 1 step word problems.

- 1 step means you only need to do 1 subtraction sum to work out the answer.
- Now we know how to subtract two numbers, we can use that to solve problems.
- First we need to find out what the question is.

I do - Subtraction 1 step word problems.

25 people are on the bus. 5 people get off the bus at the bus stop. How many people are left on the bus now?

- First pick out the information we need to write our number sentence.
- The first important thing is the number 25. Next is the number 5.
- We need to work out what kind of question it is by reading the question carefully.
- It says people get off the bus so there are LESS people on the bus. This tells us it is subtraction.

I do - 1 step word problems.

25 people are on the bus. 5 people get off the bus. How many people are left on the bus now?

We take these numbers and write a number sentence.
Remember the biggest number goes first.

$$25 - 5 =$$

I do - 1 step word problems.

$$25 - 5 =$$

Then I can work out the answer using any method I choose.

$$\begin{array}{r|l} T & O \\ \hline 2 & 5 \\ - & 5 \\ \hline 2 & 0 \\ \hline \end{array}$$

So there were 20 people left on the bus.

We do - Subtraction 1 step word problems.

Question: There were 28 sweets in the jar, then the shopkeeper gave 11 to the children. How many sweets were left in the jar?

Remember all the steps we need to follow.

Now we have practiced many different ways to work out your subtraction questions, have a go using different methods to help you practice.

We do - How did you do?

Question: There were **28** sweets in the jar, then the shopkeeper gave **11** to the children. How many sweets were left in the jar?

First underline or highlight the key numbers.

Next write down the number sentence using the key information.

$$28 - 11 =$$

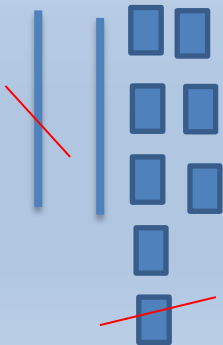
We do - How did you do?

Now we have practiced many different ways to work out your subtraction questions, have a go using different methods to help you practice.

$$28 - 11 =$$

Base 10

$$\begin{array}{r|l} \text{T} & \text{O} \\ \hline 2 & 8 \\ - & 1 & 1 \\ \hline & 1 & 7 \end{array} = 17$$



Column Method

$$\begin{array}{r|l} \text{T} & \text{O} \\ \hline & 2 & 8 \\ - & 1 & 1 \\ \hline & 1 & 7 \\ \hline \end{array}$$

You do - HOT

Q1: There were 16 puppies in the garden playing. Then 5 of them went for a walk with their owners. How many puppies were left playing in the garden?

Q2: Mum bought 36 pink cakes for the party, 22 were eaten at the party? How many cakes were left?

How did you do - HOT

Q1: There were 16 puppies in the garden playing. Then 5 of them went for a walk with their owners. How many puppies were left playing in the garden?

$$16 - 5 = 11$$

Q2: Mum bought 36 pink cakes for the party, 22 were eaten at the party? How many cakes were left?

$$36 - 22 = 14$$

You do - HOTTER

Q1: There were 42 balloons in the garden then the wind blew 21 balloons away. How many balloons were left in the garden?

Q2: Asif had 45 pencils to colour with. He gave his friend 31 pencils. How many pencils did Asif have left?

How did you do - HOTTER

Q1: There were 42 balloons in the garden then the wind blew 21 balloons away. How many balloons were left in the garden?

$$42 - 21 = 21$$

Q2: Asif had 45 pencils to colour with. He gave his friend 31 pencils. How many pencils did Asif have left?

$$45 - 31 = 14$$

You do - ON FIRE

Q1: There were 368 horses in a field. 122 went to the stables to eat their dinner. How many horses were left in the field?

Q2: A Christmas tree had 162 baubles on it. 41 baubles fell off onto the floor. How many baubles were left on the Christmas tree?

You do - ON FIRE

Q1: There were 368 horses in a field. 122 went to the stables to eat their dinner. How many horses were left in the field?

$$368 - 122 = 246$$

Q2: A Christmas tree had 162 baubles on it. 41 baubles fell off onto the floor. How many baubles were left on the Christmas tree?

$$162 - 41 = 121$$

Please click on the link to listen to today's lesson.

<https://youtu.be/42e8x2IAT08>

Day 5

Subtraction 2 step

problems

Subtraction 2 step problems.

If you find 2 step problems are too tricky then just practice your column subtraction and base 10 using 2 numbers.

So please don't worry, we will go through it in class this year.

Have a go if you want to !!!

Subtraction 2 step problems.

2 step problems are where you have to work out 2 parts to a problem before you can find the answer.

First read the question carefully and underline or highlight the key information.

This will be any numbers and other important words.

I do - Subtraction 2 step word problems.

26 people are watching a film. 12 of the children have to go to bed. Then 3 more children have to go to bed. How many children are left watching the film?

- First pick out the information we need to write our number sentence.
- The first important thing are the numbers. **26, 12 and 3.**
- We know it is subtraction because it says "how many are left?"

I do - Step 1

26 people are watching a film. 12 of the children have to go to bed. Then 3 more children have to go to bed. How many children are left watching the film?

Now I know the important information I can write my number sentence.

$$26 - 12 - 3 =$$

Next I need to use one of the methods I have learned to work out the answer. I can do that in 2 steps, first use the first 2 numbers:

STEP 1

T	O		T	O	
2	6	-	1	2	= 14

I do - Step 2.

26 people are watching a film. 12 of the children have to go to bed. Then 3 more children have to go to bed. How many children are left watching the film?

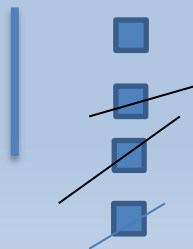
$$26 - 12 = 14 \text{ (the answer from step 1 is 14)}$$

STEP 2: Take the answer from step 1 and subtract (take away) the last number. Write your number sentence.

$$14 - 3 = 11$$

STEP 2

T	O		T	O	
1	4	-	3	=	11



I do - Using column method.

- 26 people are watching a film. 12 of the children have to go to bed. Then 3 more children have to go to bed. How many children are left watching the film?

- $26 - 12 - 3 = 11$

I can also use column method:

Step 1

	T	O
	2	6
-	1	2
	1	4

Step 2

	T	O
	1	4
-		3
	1	1

You do - HOT.

16 children were playing outside. 3 of them went in for first aid. Then 2 more went in to use the toilet. How many children were left outside in the playground?

Use any method you have learned this week to find the answer.

How did you do? - HOT.

16 children were playing outside. 3 of them went in for first aid. Then 2 more went in to use the toilet. How many children were left outside in the playground?

$$\text{Step 1} \quad 16 - 3 = 13$$

$$\text{Step 2} \quad 13 - 2 = 11$$

So the answer is 11 children were left.

You do - HOTTER.

There are 38 cats playing in the garden. 15 of run away to chase the birds. 11 more go in to drink some water. How many cats are left playing in the garden?

Use any method you have learned this week to find the answer.

How did you do? - HOTTER.

There are **38** cats playing in the garden. **15** of run away to chase the birds. **11** more go in to drink some water. How many cats are left playing in the garden?

Step 1 $38 - 15 = 23$

Step 2 $23 - 11 = 12$

So the answer is 12 cats are left playing in the garden.

You do - ON FIRE.

A motorway has 178 cars on it. 23 cars leave the motorway and head to Leeds. Then 32 more cars leave the motorway to go to Bradford. How many cars are left on the motorway?

Use any method you have learned this week to find the answer.

How did you do? - ON FIRE.

A motorway has 178 cars on it. 23 cars leave the motorway and head to Leeds. Then 32 more cars leave the motorway to go to Bradford. How many cars are left on the motorway?

$$\text{Step 1} \quad 178 - 23 = 155$$

$$\text{Step 2} \quad 155 - 32 = 123$$

So the answer is 123 cars are left on the motorway.

Quiztime !!!!!!!

- Time for your quiz. How much can you remember from this week? Click on the link to answer the questions.

-

https://forms.office.com/Pages/ResponsePage.aspx?id=jp2v5jm_FEyFW3PuNqNMc3VDY-Ly4c1OvOHY1pnoLJVUMzhXTIIONDhFWFICM1hNUVZVUU5BODNZNC4u