Maths Week 2

Times tables, equal groups, odd and even numbers

Lesson 1 - The 10 times tables

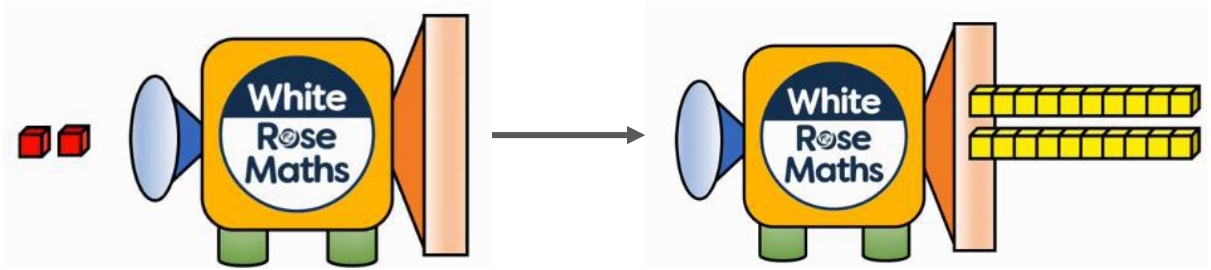
In this lesson the children will revisit the ten times table. There is a video the children can watch that explains how numbers are getting ten times bigger and how real life scenarios can be represented in a multiplication calculation. On the slides there are activities/problems for the children to complete and an **optional** activity sheet.

https://vimeo.com/420582220

I have also included the link to BBC Bitesize videos and activities for those who are interested in doing extra work.

https://www.bbc.co.uk/bitesize/articles/zk89d6f

2



20

What is ten times bigger than these numbers?

4 8 9

5 7 3

2 1 0

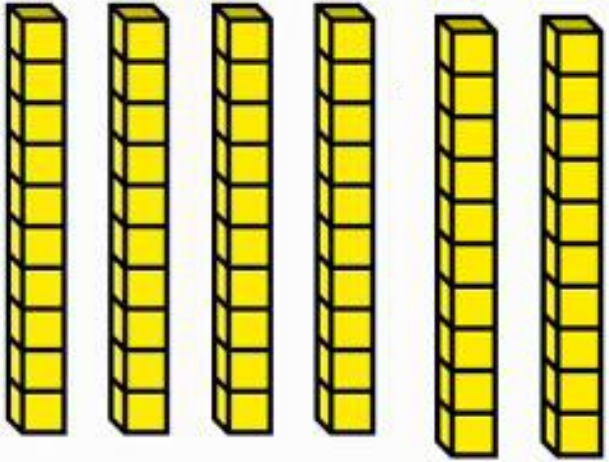
6 10

Which numbers are not in the ten times table?

Can you explain why?

43	60	50	10
120	167	78	90
	33	40	

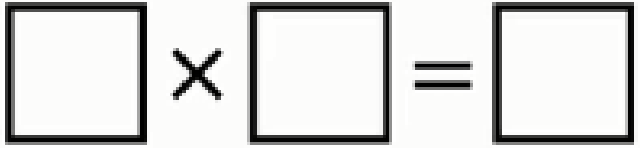
Whitney has been playing with towers of ten.



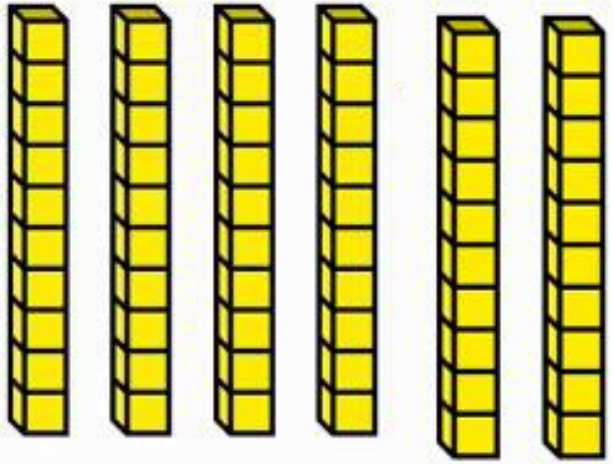
How many towers has she built?

How many cubes are in each tower?

How many cubes has she used in total?



Whitney has been playing with towers of ten.



How many towers has she built?

How many cubes are in each tower?

How many cubes has she used in total?

Solution

6 x 10 = 60

Dexter has got some 10 pence coins.

How many coins has he got?

How much is each coin worth?

How much money does he have in total?

□ × □ = □

Can you think of a different calculation?

□ × □ = □

Dexter has got some 10 pence coins.

How many coins has he got?

How much is each coin worth?

How much money does he have in total?

7 x 10 = 70

Solution

Can you think of a different calculation?

10 x 7 = 70

Can you draw bar models to find the solutions to the calculations?

4 x 10 = 40 or 10 x 4 =40

2 x 10 = ?
9 x 10 = ?
? = 6 x 10

Can you complete the problems?

a) $2 \times 10 = \square$

b) $\square = 7 \times 10$

c) $10 \times 4 = \square$

d) $10 \times \square = 110$

e) $80 = \square \times 10$

f) $\square = 10 \times 10$

g) $10 \times \square = 10$

h) $10 \times 0 = \square$

i) $30 = 10 \times \square$

j) $\square \times 10 = 90$

Four children each have some money.

Teddy has this money.

I have twice as much money as Teddy.

Dora

I have five times as much money as Teddy.

Jack

I have ten times as much money as Dora.

Rosie

How much money do they each have?

How much money do they each have?

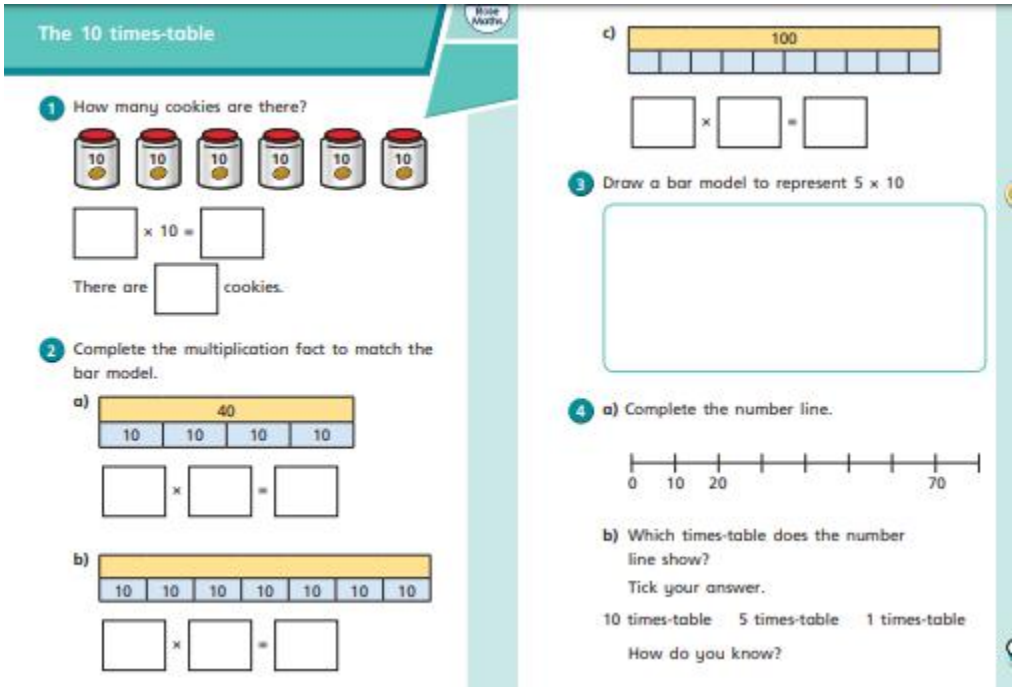
Teddy has ☐ p

Dora has ☐ p

Jack has ☐ p

Rosie has ☐ p

If you would like to do a bit more work remember you can complete the optional activity sheet.



The 10 times-table

1 How many cookies are there?

□ × 10 = □

There are □ cookies.

2 Complete the multiplication fact to match the bar model.

a)

□ × □ = □

b)

□ × □ = □

c)

□ × □ = □

3 Draw a bar model to represent 5 × 10

4 a) Complete the number line.

b) Which times-table does the number line show?

Tick your answer.

10 times-table 5 times-table 1 times-table

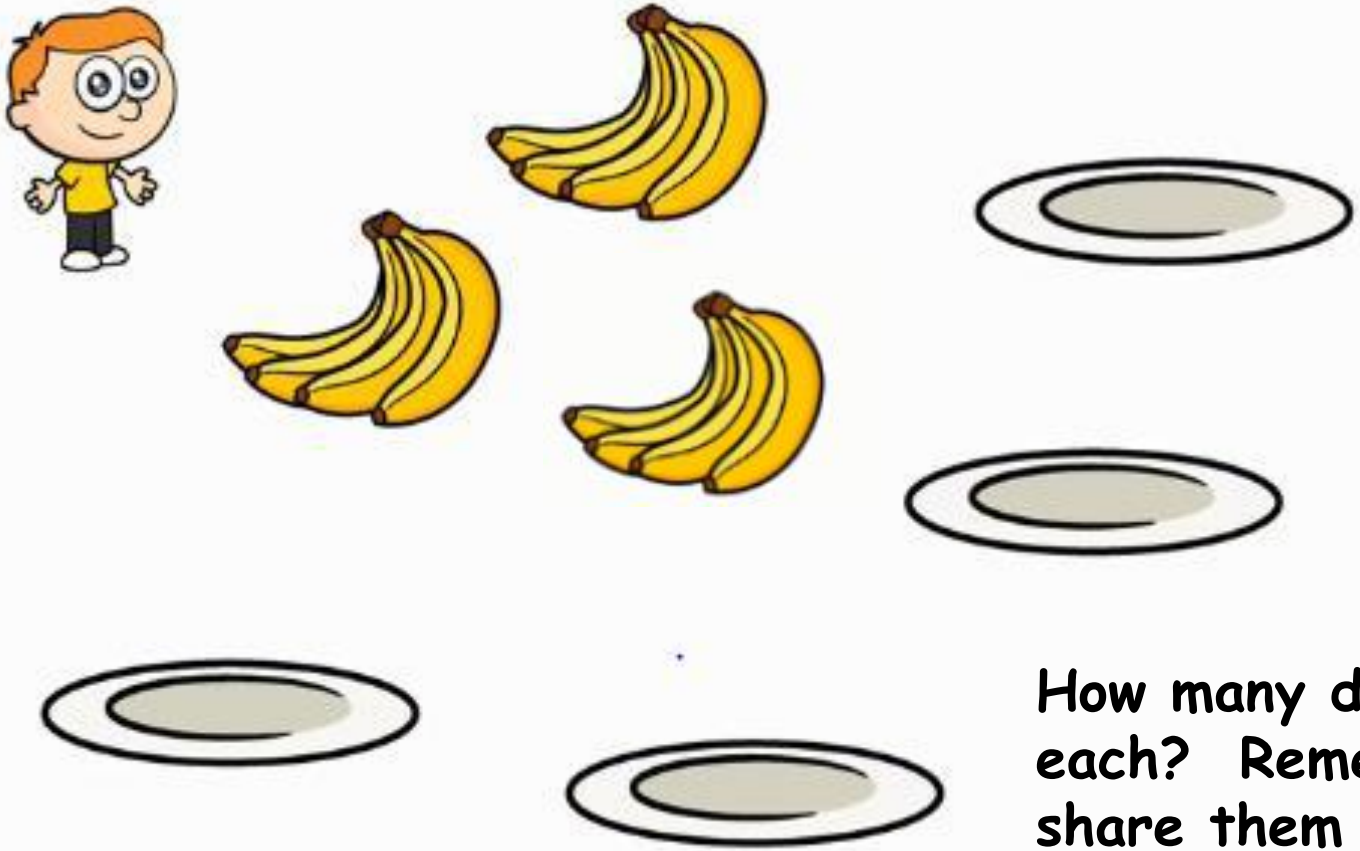
How do you know?

Lesson 2 - Sharing

In this lesson the children will quickly revisit equal and unequal groups and how they can practically share objects. The lesson will also include revising the division sign and solving division calculations. There is an **optional** activity sheet.

https://vimeo.com/420582354

Ron is playing with three friends, he is sharing out fruit.

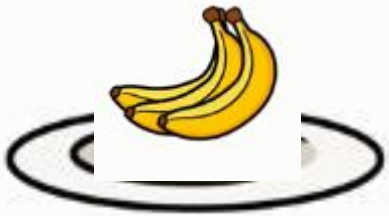


How many do they get each? Remember to share them equally!

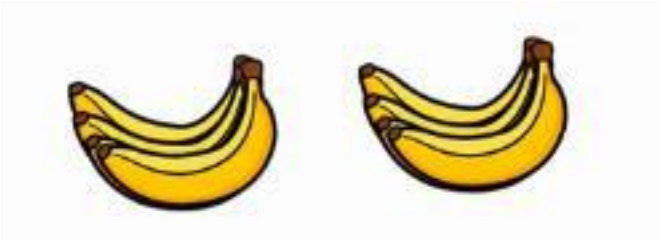
Ron is playing with three friends, he is sharing out fruit.

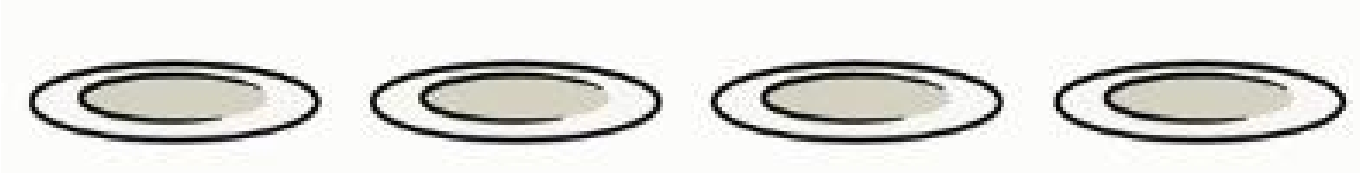
Did you share them equally?
They get 3 each?

There were **12** bananas.
There are **4** children.
Each child gets **3** bananas.



Can you share the 8 bananas and complete the sentence?



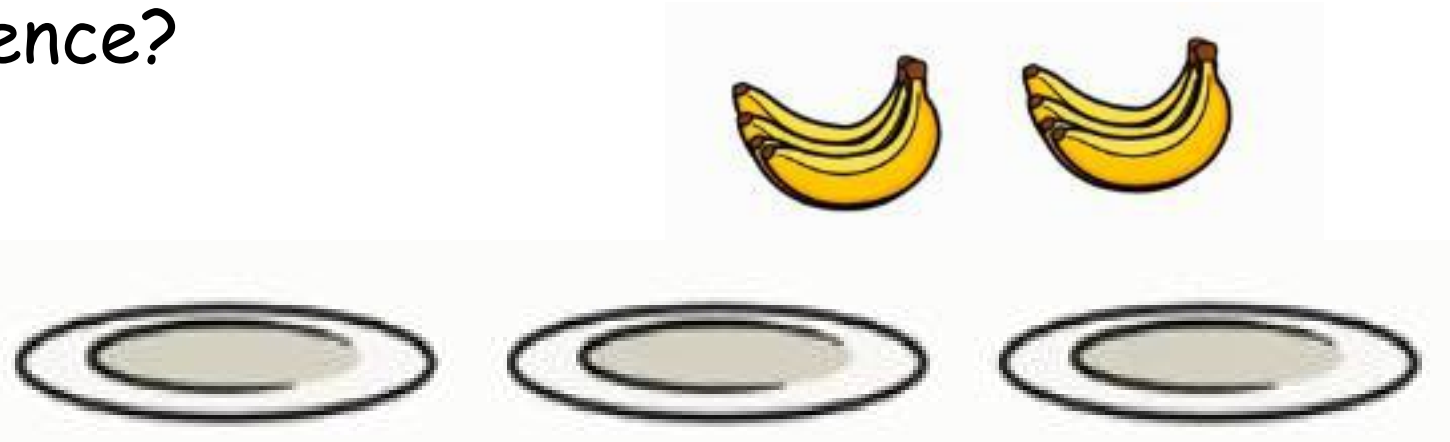


There are _____ bananas.

There are _____ plates.

Each person gets _____.

Can you share the 8 bananas and complete the sentence?



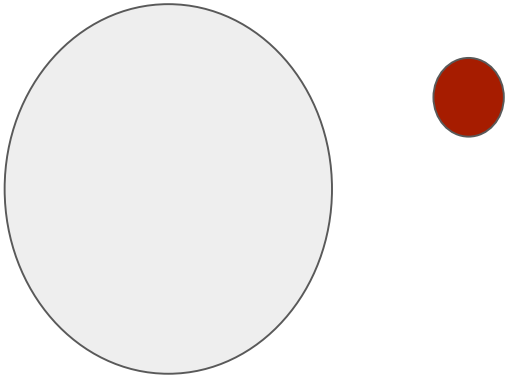
Have a go. The next slide tells you the answer.

Can you share the 8 bananas and complete the sentence?

No, you can't share 8 bananas equally between 3.

I have **16** chocolate buttons. I share them equally between **8** plates. How many chocolate buttons are on each plate?

Can you find the solution?

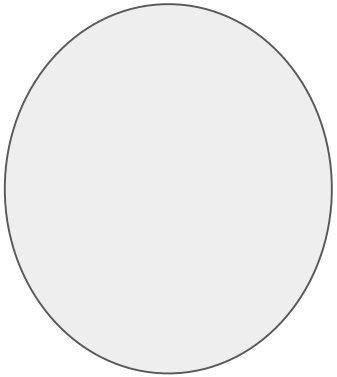


Remember to represent your workings out in pictures. You could draw counters to represent the buttons and circles for the plates.

This time I have 18 chocolate buttons and I share them equally onto plates.

How many buttons would there be on each plate if I had…

2 plates
3 plates
6 plates
9 plates

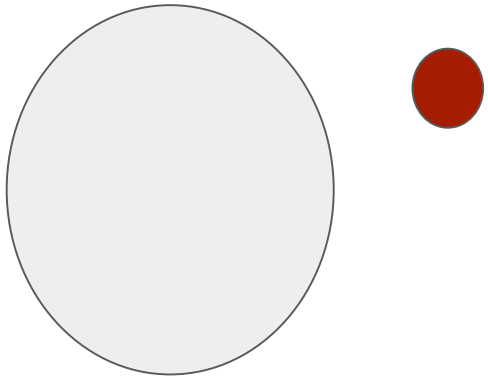


Remember you can use drawings to help you. The solutions are on the next slide.

This time I have 18 chocolate buttons and I share them equally onto plates.

How many buttons would there be on each plate if I had…

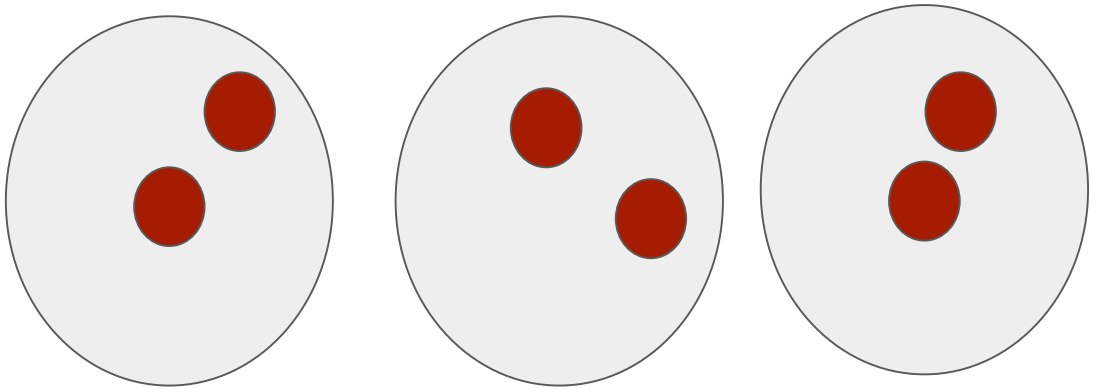
2 plates - 9 buttons
3 plates - 6 buttons
6 plates - 3 buttons
9 plates - 2 buttons

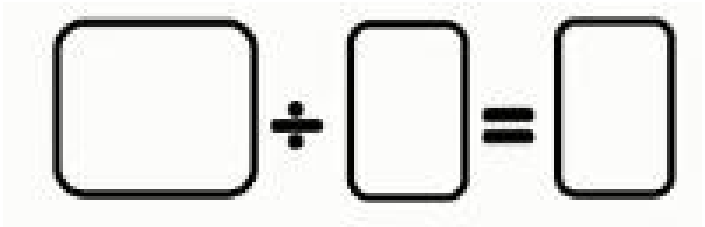


Can you remember how to use the ÷ sign?

I have 6 chocolate buttons.

I share them equally between 3 plates.

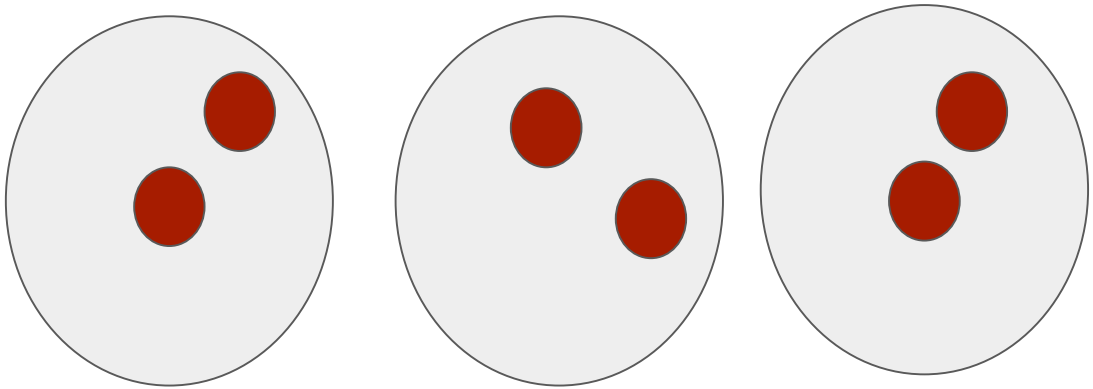




Can you remember how to use the ÷ sign?

I have 6 chocolate buttons.

I share them equally between 3 plates.



$$6 \div 3 = 2$$

Please complete the calculations.

16 ÷ 2 =

14 ÷ 2 =

15 ÷ 5 =

20 ÷ 5 =

10 ÷ 0 =

Here are the answers. How well did you do?

16 ÷ 2 = 8

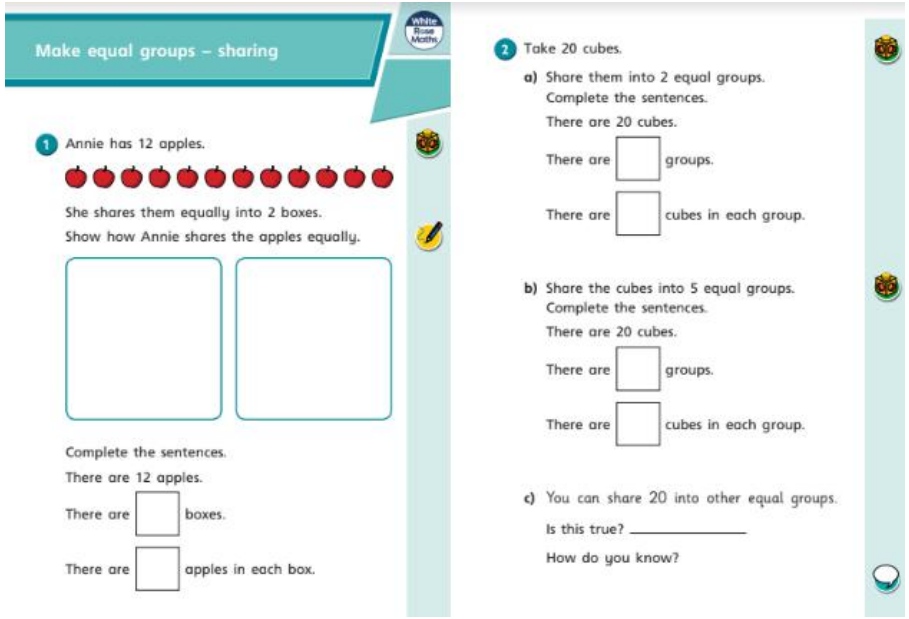
14 ÷ 2 = 7

15 ÷ 5 = 3

20 ÷ 5 = 4

10 ÷ 0 = 10

If you would like to do a bit more work remember you can complete the **optional** activity sheet.



Make equal groups – sharing

1 Annie has 12 apples.

She shares them equally into 2 boxes.
Show how Annie shares the apples equally.

Complete the sentences.
There are 12 apples.
There are ☐ boxes.
There are ☐ apples in each box.

2 Take 20 cubes.

a) Share them into 2 equal groups.
Complete the sentences.
There are 20 cubes.
There are ☐ groups.
There are ☐ cubes in each group.

b) Share the cubes into 5 equal groups.
Complete the sentences.
There are 20 cubes.
There are ☐ groups.
There are ☐ cubes in each group.

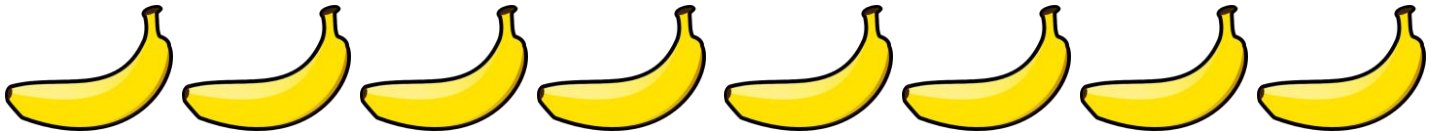
c) You can share 20 into other equal groups.
Is this true? _____
How do you know?

Lesson 3 - Grouping

Yesterday we looked at sharing in division. Today we are going to look at grouping. We will look at examples with real life objects first, then show this as a division sentence. During this lesson we will also look at the number line for division, something we did a bit of at school.

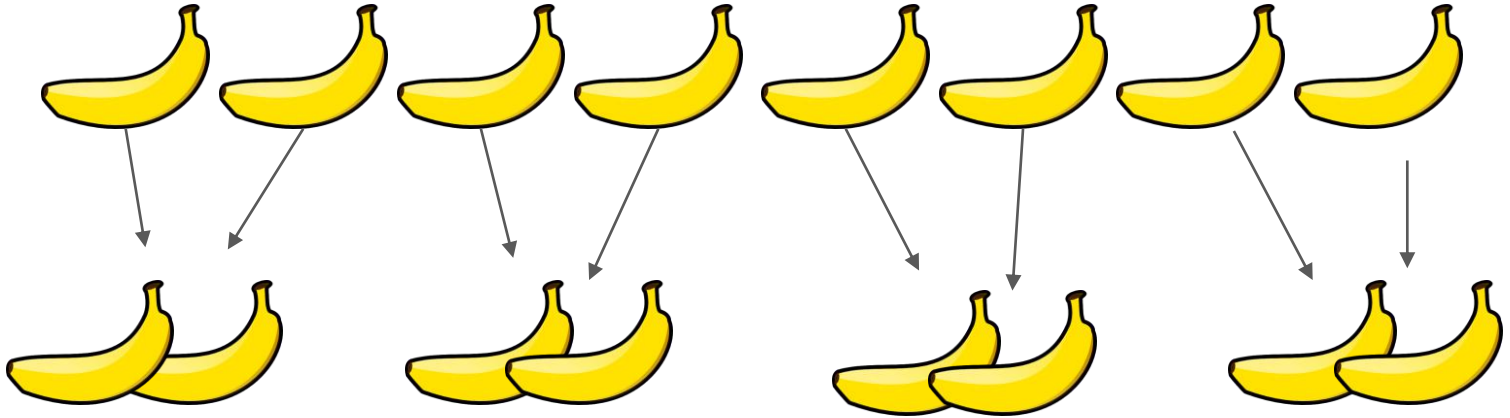
https://vimeo.com/420582476

Burlington Bear has 8 bananas.
He also has some bags for the bananas.
He wants to put 2 bananas in each bag.



Using drawings can you find out how many bananas will go in each bag?

Let's see how Burlington Bear did it!



I put 2 bananas into a group and I did this until they were all in groups.

There are 8 bananas.

There are 2 bananas in each bag.

There are 4 bags.

8 ÷ 2 = 4

Give this one a go. You can use any objects instead of counters.

Take 15 counters.

Put the counters into groups of 3

Complete the sentences.

There are 15 counters.

The counters are in groups of ☐

There are ☐ groups.

Can you try and write the division number sentence now?

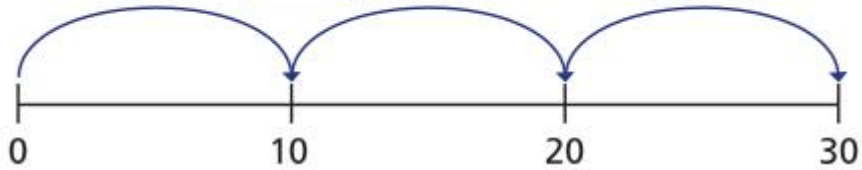
There are 20 chairs here.
Circle groups of 4 chairs.

There are _____ groups.

___ ÷ ___ = ___

The number line can help you divide too.

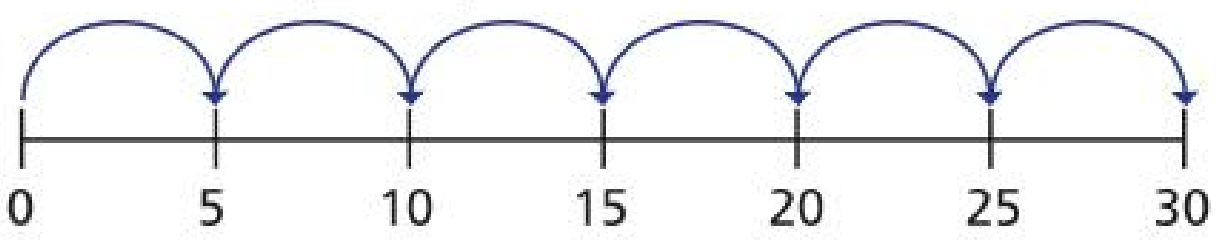
a) 30 ÷ 10 = ☐



The second number in the division sentence tells you what the jumps will be of.
In the example above they are going to be jumps of 10.
Starting from 0, you draw in jumps of 10, counting as you go.
Once you have got to the total (the first number in the division sentence) then you stop and count how many jumps you have done.
There are 3 jumps, so the answer is 3.

See if you can find the answer here.

b) 30 ÷ 5 = ☐



30 is made of ☐ equal groups of ☐

Eva is putting 24 pencils into pots.

She puts 2 pencils into each pot.

How many pots does Eva need?

$\square \div \square = \square$

Eva needs $\square$ pots.

You could try this by:

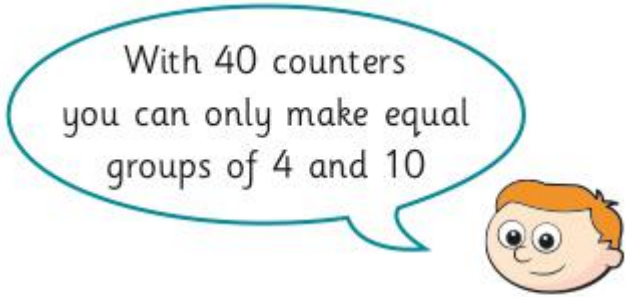
Using drawings

Moving actual pencils into groups

Using a number line

Or your own clever method!

Challenge!

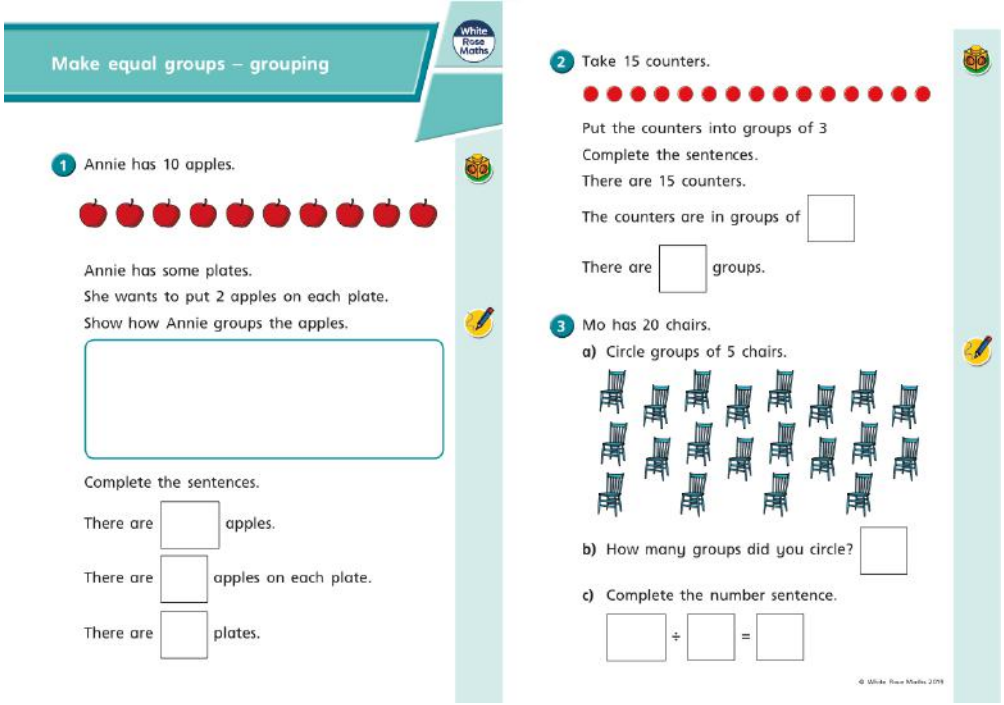


Is Ron correct? _____

Use counters to show how you know.

Remember to show your working out!

Now you're a grouping expert you can do some more practice on the sheets! (This is optional)



Make equal groups – grouping

1 Annie has 10 apples.

Annie has some plates.
She wants to put 2 apples on each plate.
Show how Annie groups the apples.

Complete the sentences.

There are ☐ apples.

There are ☐ apples on each plate.

There are ☐ plates.

2 Take 15 counters.

Put the counters into groups of 3
Complete the sentences.
There are 15 counters.

The counters are in groups of ☐

There are ☐ groups.

3 Mo has 20 chairs.

a) Circle groups of 5 chairs.

b) How many groups did you circle? ☐

c) Complete the number sentence.

☐ ÷ ☐ = ☐

Lesson 4 - Odd and even numbers

In this lesson we will recap odd and even numbers.

We will also use grouping to help recognise when a number is odd or even and then also some problem solving using what we have learnt about odd and even numbers.

https://vimeo.com/420582652

I have also included a link to a Numberblocks episode on odd and even numbers:

https://www.bbc.co.uk/iplayer/episode/b08r2l4d/numberblocks-series-2-odds-and-evens

What do you notice about these numbers?

5

41

99

9

3

107

33

Well done, these are all odd numbers!

5

41

99

9

3

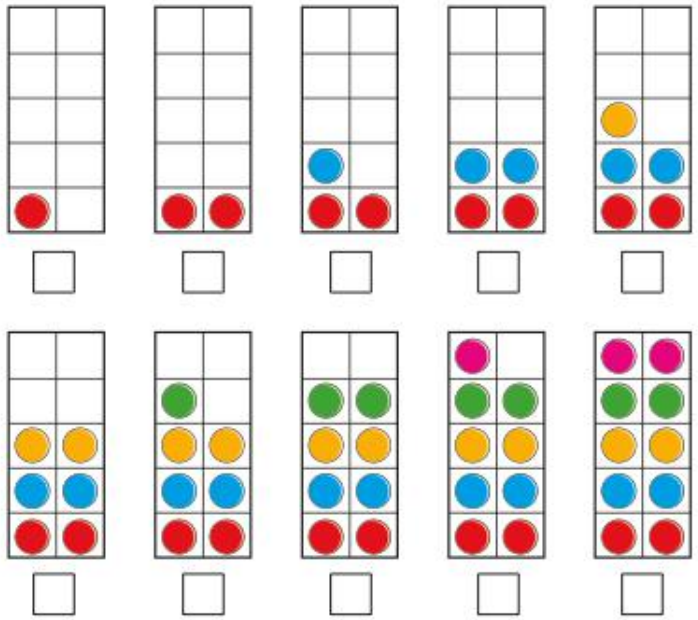
33

107

An odd number always ends in either 1, 3, 5, 7 or 9.
An odd number cannot be divided equally between 2 people.

Now that you know what an odd number is, try this.

Eva uses counters to make the numbers from 1 to 10

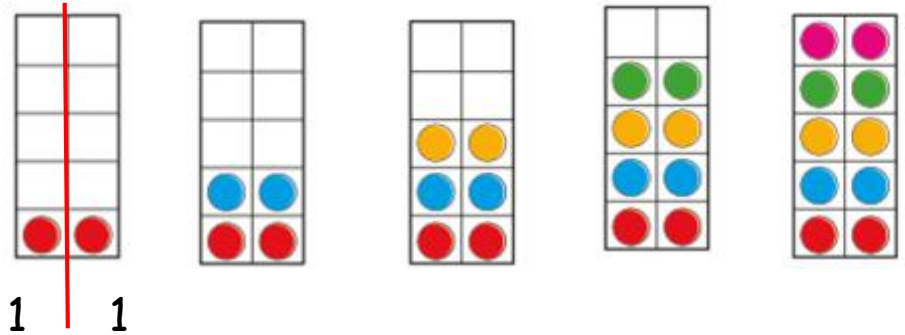


Tick all the numbers that are even.

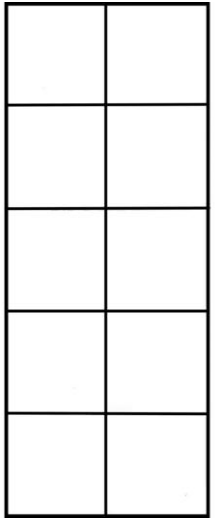
What do you notice about all the even numbers?

Looking at even numbers in a tens frame helps you really clearly see that they are all able to be divided by 2.

If you split all of these vertically down the middle you will have the same amount on each side.



Pick an even or odd number below 20 and prove that this is correct using a tens frame!



We know when we use grouping, there must be the same amount in each group.
Group these shoes and socks to prove whether the numbers 16 and 17 are odd or even.

Draw circles to show the groups.

a) Group the shoes in 2s to show that 16 is even.

b) Group the socks in 2s to show that 17 is odd.

Teddy has a 2-digit number.

The 1st digit has been covered up.

Is Teddy's number odd or even?
Circle your answer.

odd **even** **you cannot tell**

How do you know?

Teddy's number is _____. I know this because_____

Dora has a 2-digit number

The 2nd digit has been covered up.

Is Dora's number odd or even?
Circle your answer.

odd **even** **you cannot tell**

Dora's number is _____. I know this because_____

This is an odd and even game that helps you practice your addition too!

Roll 2 dice and find the total.

Complete the table.

Dice 1	Dice 2	Total	Is the total odd or even?
3 (odd)	2 (even)	3 + 2 = 5	odd

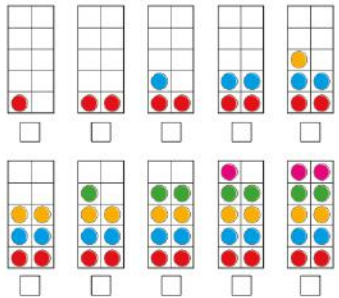
What patterns can you spot?

See if you can talk about and explain the patterns you spotted with someone else.

Now you're confident with your odd and even numbers you can try some of these questions. (These are optional)

Odd and even numbers

1 Eva uses counters to make the numbers from 1 to 10



Tick all the numbers that are even.

What do you notice about all the even numbers?

2 Use counters and ten frames.

a) Show that 14 is an even number.

b) Show that 15 is an odd number.

c) Work out whether 18 is even or odd.

Compare answers with a partner.

3 Draw circles to show the groups.

a) Group the shoes in 2s to show that 16 is even.

b) Group the socks in 2s to show that 17 is odd.

4 Colour all the even numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

What do you notice about the last digit of all the even numbers?

Lesson 5

In this lesson we would like to the children to get creative. Can they create a maths game that helps children revise and practise multiplication and division facts.

The following slides might give the children some ideas.

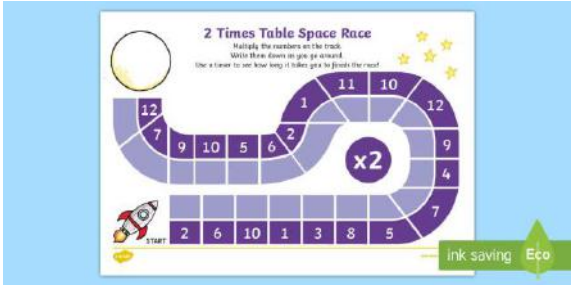
My nephew needs your help.

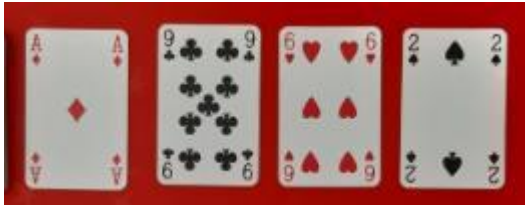
He is finding it hard to remember his multiplication and division facts.

Can you create a game that is **fun** but also helps his **learning**?

He needs your help!

Maybe these examples could help you.





Can you make 12?

He needs to learn his 2 5 10 and some 3 multiplication and division facts.

Can you play the game?

Maybe you will help someone in your family with their learning?

We'd love to see a photograph of you playing the game!

Mental Maths

This week we would like you to practise:

- To add and subtract 2-digit numbers. Challenge yourself and include problems where you need to exchange.

  34 + 23 (no exchanging) 45 - 26 (with exchanging)

- To practise adding 'near doubles'

  Please see the next slide for extra information.

Near doubles

3 + 4 =

4 + 5 =

6 + 7 =

10 + 11 =

12 + 13 =

We have practised these in class but here is a quick reminder:

3 + 4 = 3 + 3 + 1 = 7

Thank you for your hard work!