Maths Week 2

Last week we looked at sharing and grouping and how this is used in division.
This week we are continuing to look at division, looking at dividing by specific amounts and also looking at odd and even numbers.
Please note: The activity sheets at the end of each lesson are available separately.

Lesson 1: Dividing by 2
Lesson 2: Odd and even numbers
Lesson 3: Dividing by 5
Lesson 4: Dividing by 10
Lesson 5: Flashback Friday

Lesson 1 - Dividing by 2

In this lesson we look at dividing by 2.

We mention both grouping and sharing that was taught last week, and we also expand a bit more on the empty number line. Please encourage your child to show their working out, and give the different methods a go so they can find the one they are most confident with.

Fred is going bowling with his friend Jack.
They have got 6 bowling balls between them.
They divide the bowling balls between the 2 of them.
They end up with 3 bowling balls each.

There are 6 bowling balls.
There are 2 equal groups.
There are 3 bowling balls in each group.

$6 \div 2 = 3$

Whenever we do a division question we can check our answer by doing a multiplication with the same numbers. We call this the inverse.

$6 \div 2 = 3$

$2 \times 3 = 6$

Can you complete these sentences now?

There are _____ flowers.

There are _____ groups.

There are _____ in each group.

___ ÷ ___ = ___

Top tip:
You can check your answer by doing a multiplication with the same numbers!

Last week we looked at using an empty number line to help us and we're going to revisit it again now.

$20 \div 2 = ?$

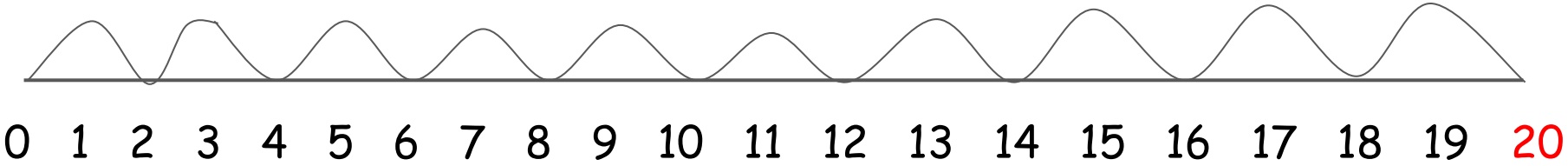
To start we need to draw a number line starting from 0 to the first number in our division sentence, which is 20 here.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Once we have written the numbers in we need to figure out how big our jumps will be.

We know how big the jumps are by looking at the second number in the division sentence. In this case the jumps are of 2. So we draw these in until we get to 0.

20 ÷ 2 = ?



To work out the answer all you need to do is count how many bumps there are!

20 ÷ 2 = 10

Can you try to work out this now using the empty number line?

$8 \div 2 = ?$

For these next division questions you can choose how you'd like to work them out. You might want to use grouping, sharing or the empty number line.

$14 \div 2 = ?$ $22 \div 2 = ?$ $40 \div 2 = ?$

John has 18p in 2p coins.
How many 2p coins does he have?

Top tip:
Look at the problem carefully and put the key information into a division sentence.

Methods that might help:
Grouping
Sharing
Empty number line

Now you can apply what you've learnt on this sheet.

Divide by 2

1 Complete the sentences.

a)

There are 12 cherries.

There are ☐ groups.

There are ☐ cherries in each group.

12 ÷ 2 = ☐ 2 × ☐ = 12

b)

There are 10 muffins.

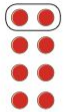
There are ☐ muffins in each group.

There are ☐ groups.

10 ÷ 2 = ☐ ☐ × 2 = 10

2 Complete the number sentences for each array.

a)



☐ × 2 = 8

8 ÷ 2 = ☐

b)

☐ × 2 = 16

16 ÷ 2 = ☐

3 There are 14 socks.

Amir puts them in pairs.

a) How many pairs of socks does he have? ☐

b) Complete the number sentence.

☐ ÷ ☐ = ☐

Lesson 2 - Odd and even numbers

In this lesson we are looking at odd and even numbers.

The lesson begins by asking the children what they notice about some numbers. While the answer we're looking for is that they are even numbers, your child might also find other things that they notice about the numbers and this is fine.

We then look at odd and even numbers across a variety of resources before finishing with an investigation into multiplication with odd and even numbers.

Use your sharp eyes - what do you notice about these numbers?

6

14

28

34

2

88

Well done, they are all even numbers!

If someone is helping you with this lesson can you tell them anything you know already about even numbers?

If you're doing it by yourself you could write any of those things down!

Even number:

A number that can be divided into 2 equal groups.

For example:
4 is an even number because 4 pencils could be shared between 2 people.

Top Tip:
Even numbers always end in either:
0, 2, 4, 6, 8

If you know about even numbers you probably also know about … odd numbers!

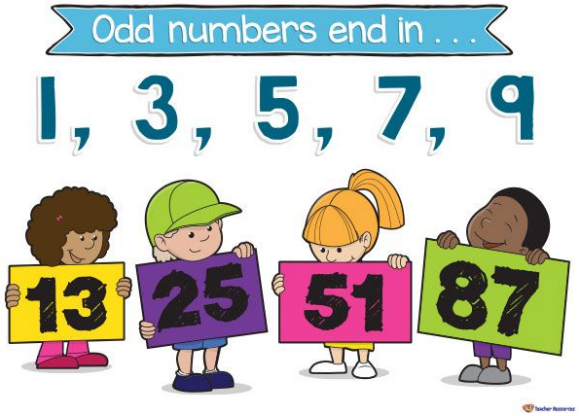
I wonder if you can remember anything about odd numbers...

Odd number:

A number that cannot be divided into 2 equal groups.

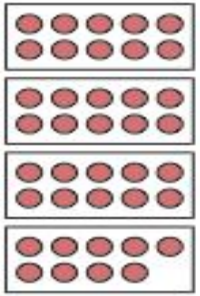
For example:
5 is an odd number because 5 rubbers could not be shared between 2 people, there would be 1 leftover.

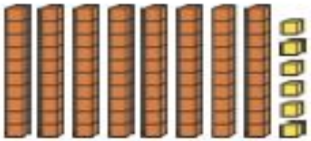
Top Tip:
Odd numbers always end in either:
1, 3, 5, 7, 9



Circle the odd numbers and tick the even numbers.

one hundred

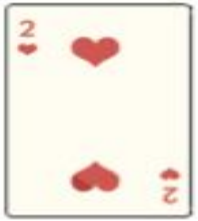




72

ten

55



47

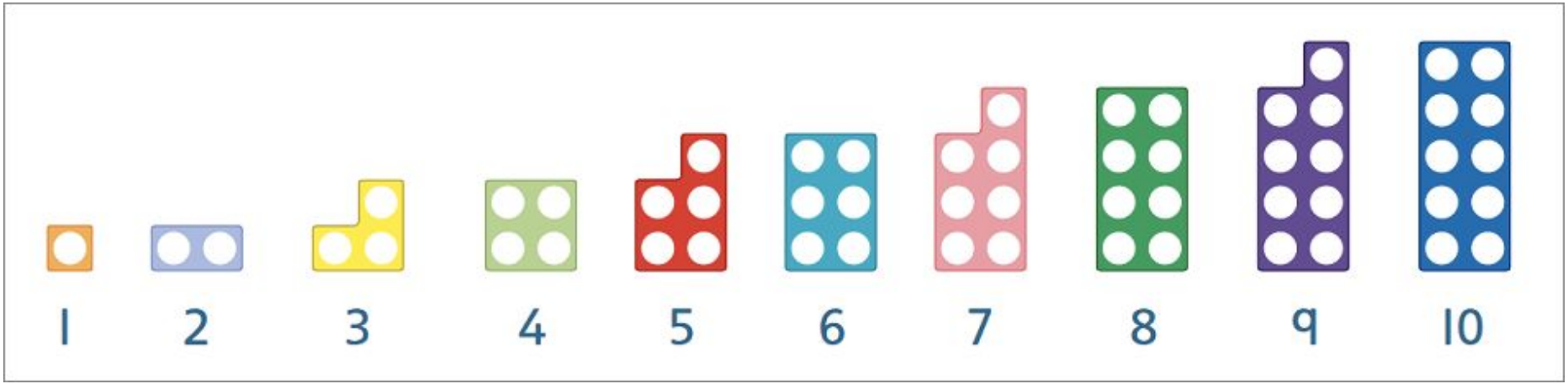
six

Can you think of another number to add to each collection?

Using numicon is a really good way to see whether a number is odd or even.

If you split each of these numicon in half you will be able to see whether each side gets the same amount or whether one gets more.

If one side gets more then you know it will be odd.



In school, we like to set you investigations and challenges. Can you try this one at home?

Investigate what happens when you carry out these calculations using facts from the 2, 5 or 10 times tables.

Is each answer odd or even?

Is that always the case? Why?

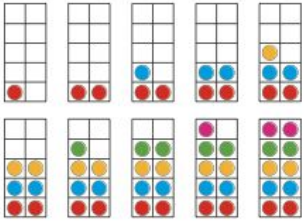
Give 5 examples for each one.

Now you can apply what you've learnt on this sheet.

Odd and even numbers

White Rose Maths

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



Which numbers 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.

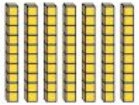
a) Group the shoes in 2s to show that 16 is even.

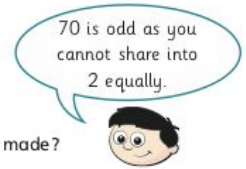
b) Group the socks in 2s to show that 17 is odd.

4 Colour all the even numbers on a 50 grid.

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

5 Dexter makes the number 70 from base 10





What mistake has Dexter made?

6 **a)** Teddy has a 2-digit number.

The 1st digit has been covered up.

Is Teddy's number odd or even?

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

How do you know?

Lesson 3 - Dividing by 5

In this lesson we look at dividing by 5.

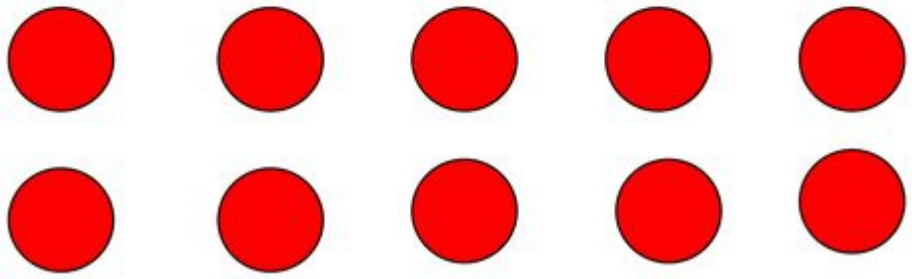
We will look at grouping and arrays, and how to identify what the division sentence will be by looking at the array.

After this there is an investigation to do.

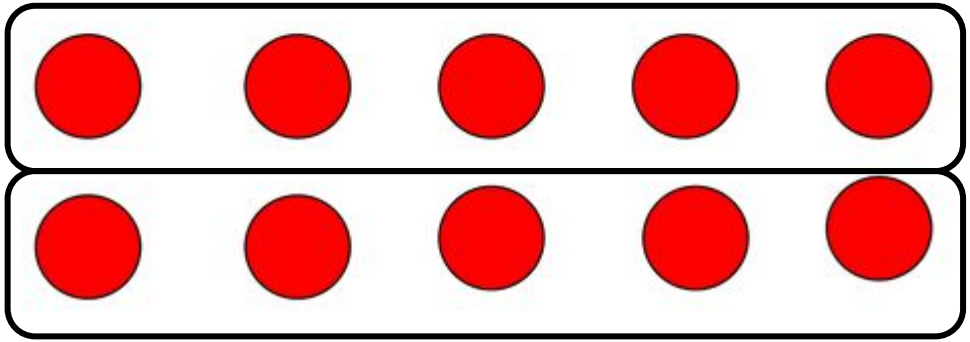
There is a space race division game at the end.

Today we're going to become experts at dividing by 5!

I have 10 counters here and I want to put them in groups of 5.



I've put the ten counters into groups of 5 so now I can complete my sentences.



There are 10 counters.
There are 5 counters in each group.
There are 2 groups.

10 ÷ 5 = 2

Your turn!

Once you have figured out the sentences there is a challenge at the bottom.

Circle Alice's coins to make groups of 5.

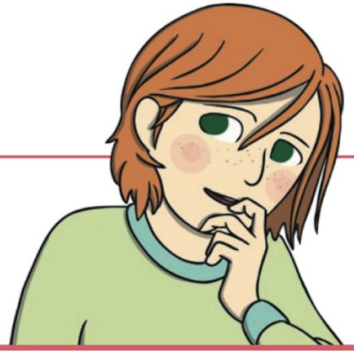
The value of each group is _____p.

There are _____ groups.

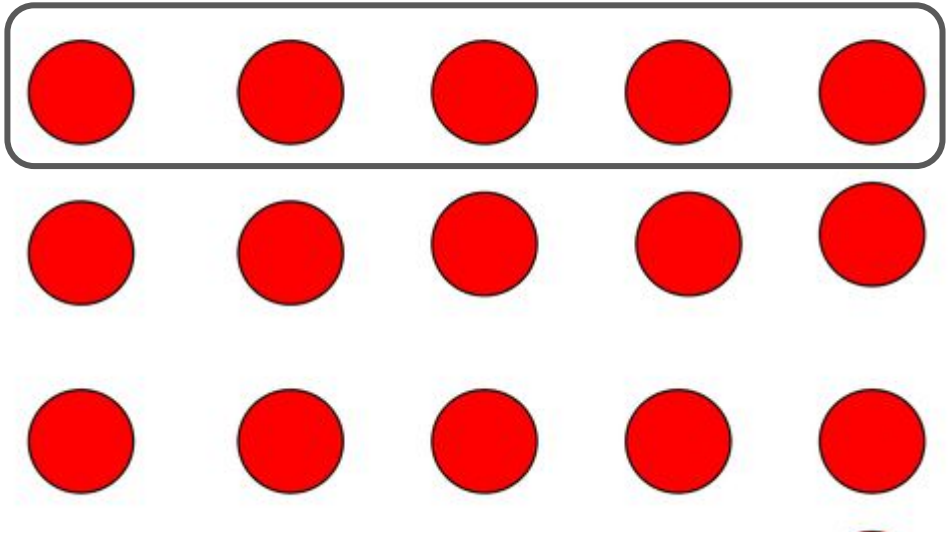
15p = _____ × ____p

15p ÷ _____ = ____p

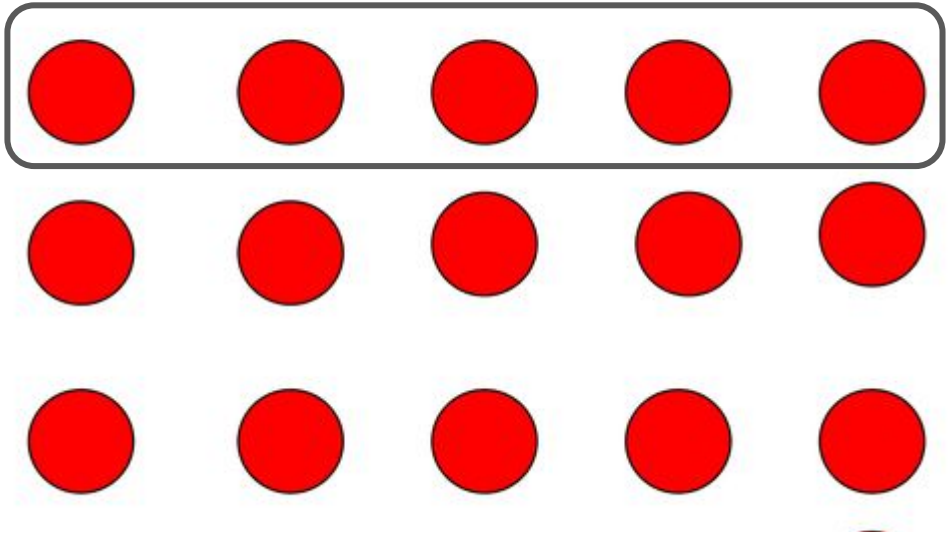
How many bags of sweets can Alice buy?



I've drawn an array here and circled my first group.
Can you figure out what my division sentence would be here?



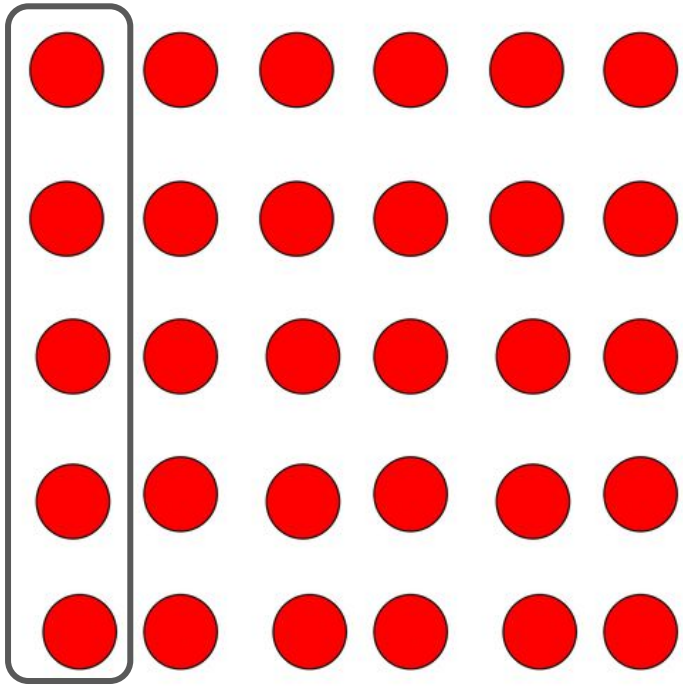
Here are the steps to figure this out:



1. Count the number of circles in the array: 15
2. Count how many circles are in the group I have circled: 5
3. Now we know our division sentence: 15 ÷ 5 = ?
4. We can complete this by circling the other groups or working it out another way you might know.

15 ÷ 5 = 3

I've drawn another array with one group circled. Can you figure out the division sentence?



Now try these:

25 ÷ 5 =

5 ÷ 5 =

30 ÷ 5 =

50 ÷ 5 =

Remember you can check your answer by doing a multiplication sentence with the same numbers!

Challenge:
Can you draw an array for one of these division sentences?

Use the digits 1 to 9 to find different ways to complete this statement. You can use each digit more than once.

1 2 3 4 5 6

7 8 9

$\square 5 \div 5 = \square$

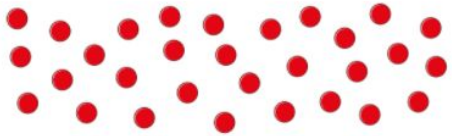
How many different ways can you find?

For each one, write the matching multiplication calculation.

Now you can apply what you've learnt on this sheet.

Divide by 5

1 Here are some counters.



a) Draw circles around groups of 5

b) Complete the sentences.

There are 30 counters.

There are ☐ counters in each group.

There are ☐ groups.

30 ÷ 5 = ☐

☐ × 5 = 30

2 Share the sweets between the party bags.

There are ☐ sweets.

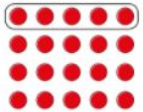
There are ☐ party bags.

There are ☐ sweets in each bag.

15 ÷ ☐ = ☐

3 Complete the number sentences for each array.

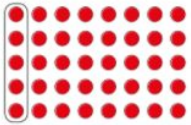
a)



☐ × 5 = 20

20 ÷ 5 = ☐

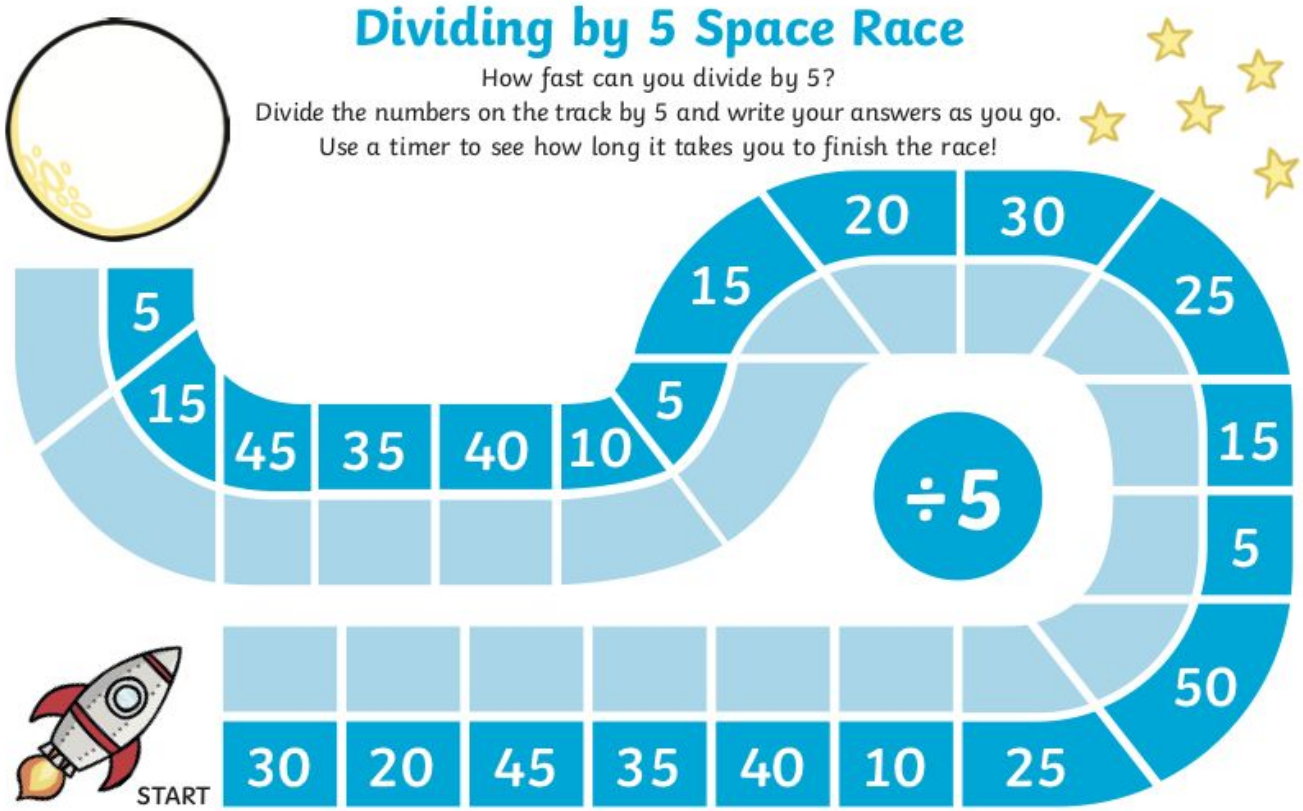
b)



☐ × 5 = ☐

☐ ÷ 5 = ☐

Here is a game you might like to play now that you're an expert at dividing by 5! How quickly you can get around space?

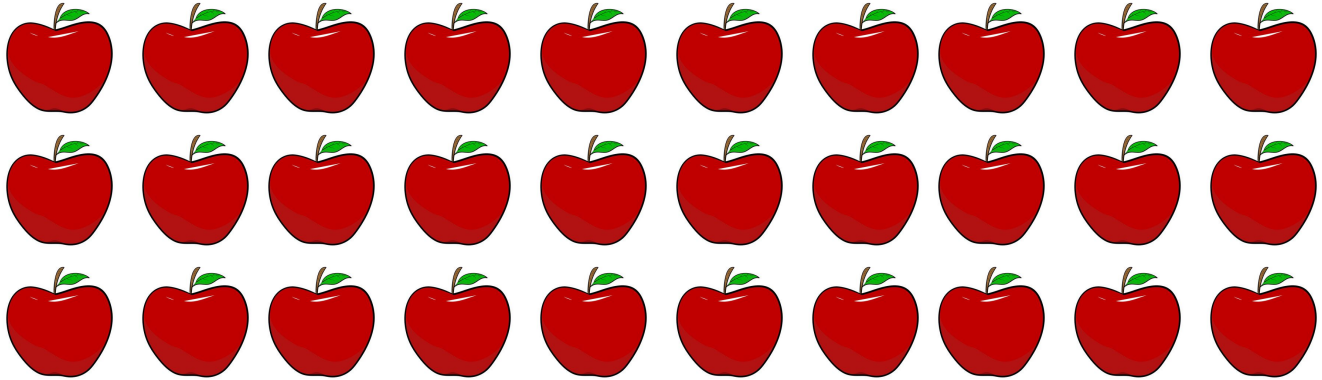


Lesson 4 - Dividing by 10

In this lesson we will focus on dividing by 10.

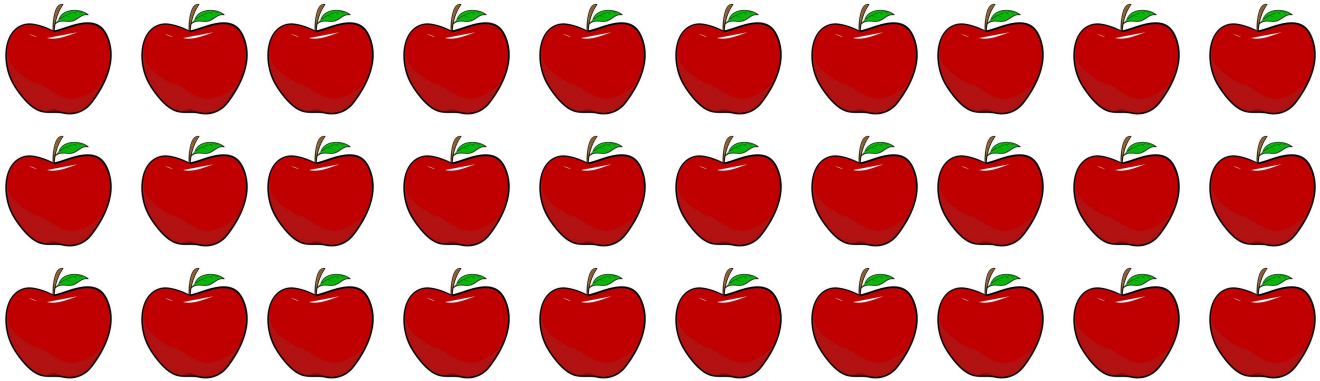
Similar to the previous lessons we will divide by 10 by grouping and sharing.

Mr Johnson has some apples.
He can fit 10 apples in a bag.
How many bags would he have?



Have a think about how you could work this problem out, we'll look at it together on the next slide.

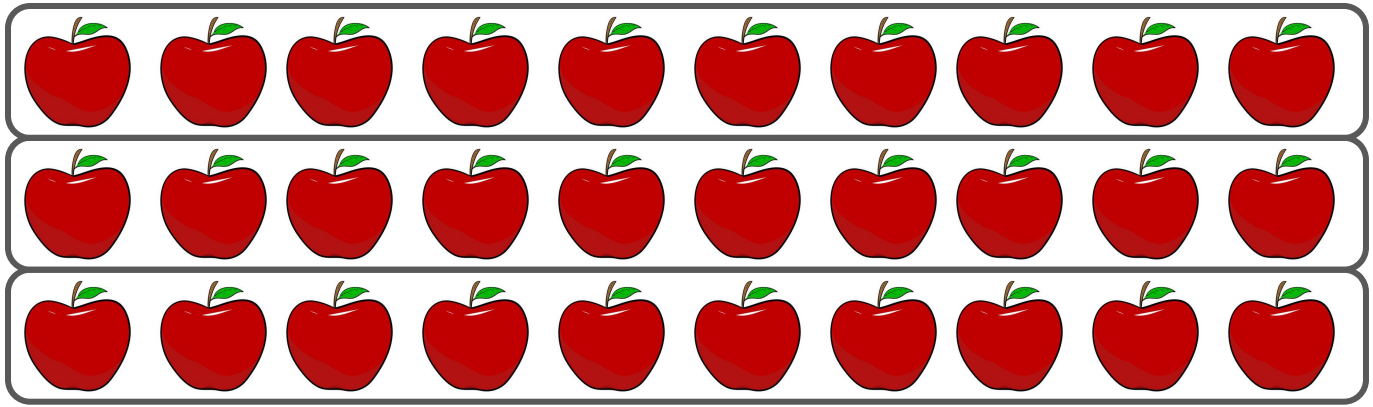
Mr Johnson has some apples.
He can fit 10 apples in a bag.
How many bags would he have?



First of all we need to figure out how many apples there are in total: 30.
We can then write our division number sentence, which is made up of the total amount of apples, divided by how many are in a bag.

30 ÷ 10 = ____

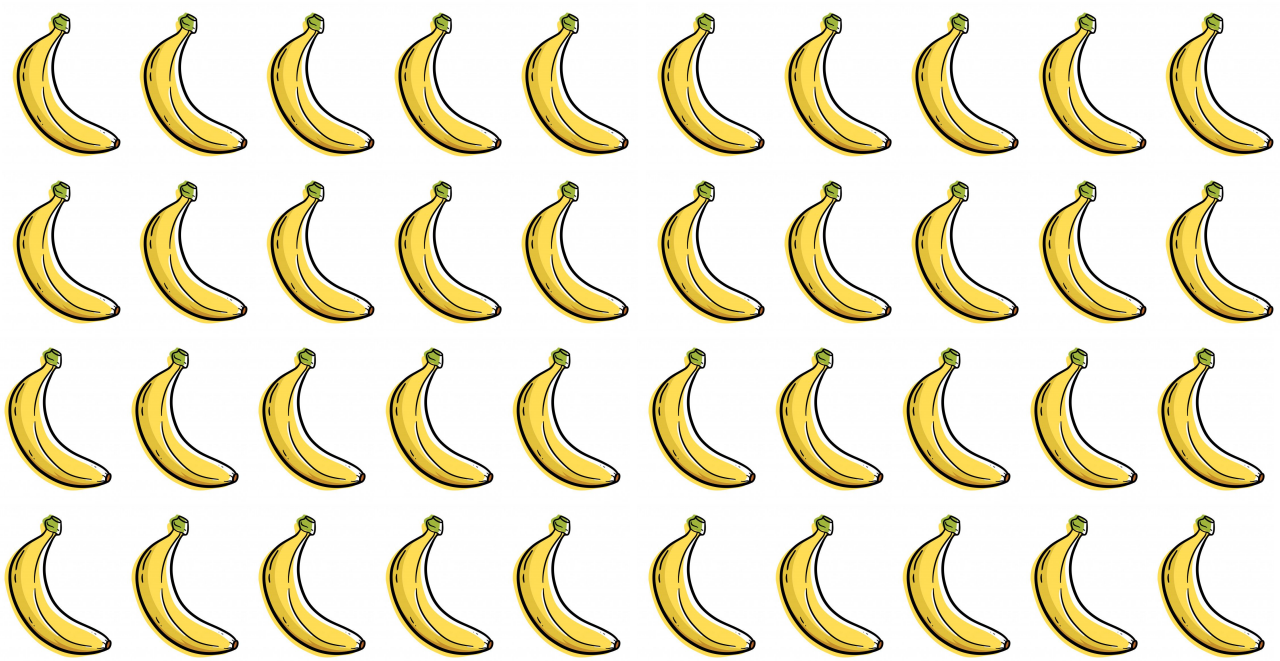
30 ÷ 10 = ____



To work out this division sentence we could circle groups of 10.
When we have done this we see that there are 3 groups.

30 ÷ 10 = 3

Mr Monkey has some bananas.
The bananas come in packs of 10.
How many packs will there be?



There are ____ bananas.
There are ____ packs.

___ ÷ ___ = ___

Share the tennis balls between 10 people.

Complete these sentences about the balls:

There are ____ people.

Each person gets ____ balls.

There are ____ tens in 30.

3 tens ÷ 1 ten = ____

____ = 30 ÷ 10

____ × ____ = 30

Mr Smith shares 30 books between 10 tables.

How many will be on each table?

___ ÷ ___ = ___

Write or draw two of your own sharing stories to match these calculations:

60 ÷ 10 **20 ÷ 10**

I want 80 pencils. How many packs do I need?

___ ÷ ___ = ___

Write or draw two of your own grouping stories to match these calculations:

70 ÷ 10 **40 ÷ 10**

Now you can apply what you've learnt on this sheet!

Divide by 10

1 Here are some crayons.

A pack holds 10 crayons.

How many packs can be made?

Complete the sentences.

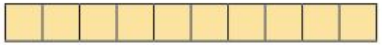
There are ☐ crayons.

There are ☐ crayons in a pack.

60 ÷ 10 = ☐

☐ packs can be made.

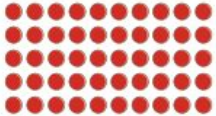
2 Share 40 counters equally between 10 groups.



Complete the division.

40 ÷ ☐ = ☐

3 Complete a fact family for the array.



4 Write the missing numbers.

a) 70 ÷ 10 = ☐

b) 80 ÷ 10 = ☐

c) 1 ten ÷ 10 = ☐

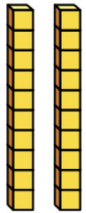
d) ☐ tens ÷ 10 = 2

e) ☐ ÷ 10 = 6

Lesson 5 - Flashback Friday!

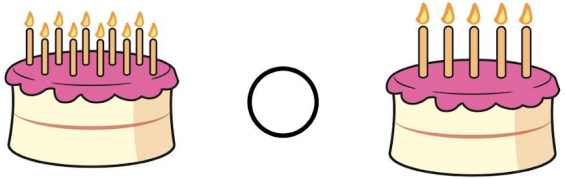
Flashback 4

Year 2 | Week 4 | Day 2



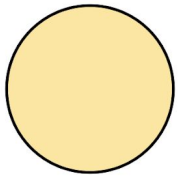
1) $\square + 7 = 20$

2) Use < or > to compare the number of candles.



3) Write forty-two in numerals.

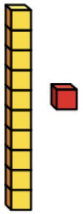
4) What shape is this?



White Rose Maths

Flashback 4

Year 2 | Week 4 | Day 3



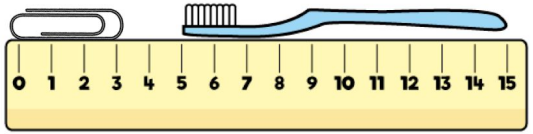
1) Use a subtraction to check that 15 + 3 = 18

2) Use < or > to compare.

14 ◯ 41

3) Write 28 in words.

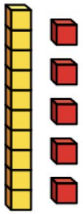
4) Which is longer, the paperclip or the toothbrush?



White Rose Maths

Flashback 4

Year 2 | Week 4 | Day 4

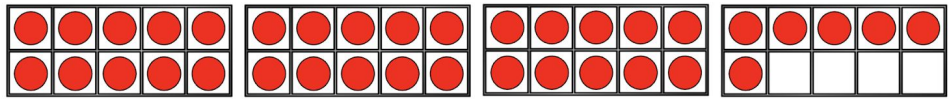


1) Use <, > or = to compare. $15 + 4 \bigcirc 15 + 2$

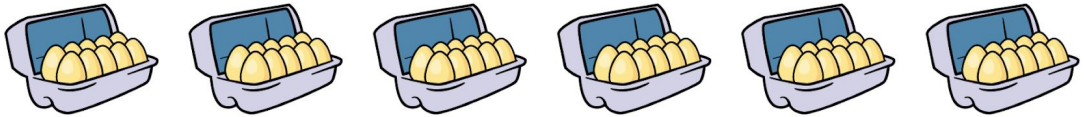
2) Write the numbers in order starting with the smallest.

31, 23, 19, 34, 30

3) What number is represented?



4) How many eggs are there?



White Rose Maths