



Can you use the sharing method to solve these equations?



Engage

$$14 \div 2 =$$

$$15 \div 5 =$$

$$18 \div 2 =$$

$$25 \div 5 =$$

$$10 \div 5 =$$



Where are the whole and parts in these equations?

Key Learnin: To solve division equations using the grouping method.

Success Criteria

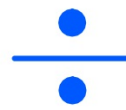
- I can draw the correct number of dots for the whole.
- I can divide the whole by grouping the dots.
- I can write the division equation.

Deepening -I can solve division word problems

Star words

division sharing groups of divide equal groups

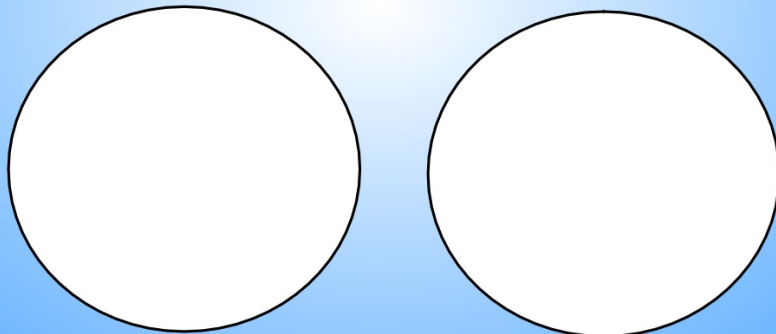
We have been learning how to divide something by **sharing** it into **equal** groups.



Let's
Recap

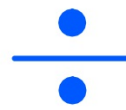
Let's do this one together:

$$16 \div 2 =$$



16 is my whole.
2 and **8** are my parts.

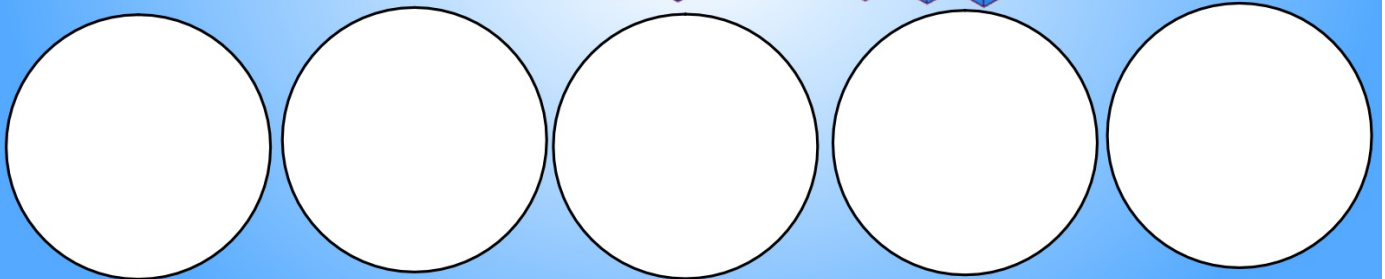
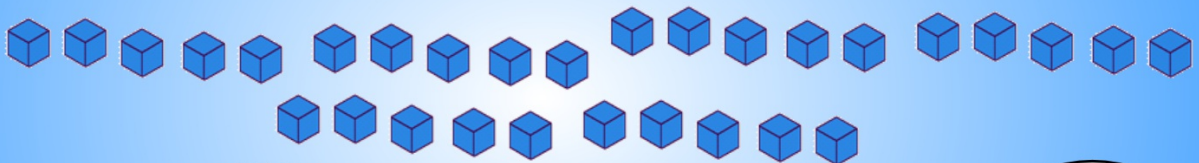
We have been learning how to divide something by **sharing** it into **equal** groups.



Let's
Recap

Let's do this one together:

$$30 \div 5 =$$



30 is my whole.
5 and **6** are my parts.

Introduce

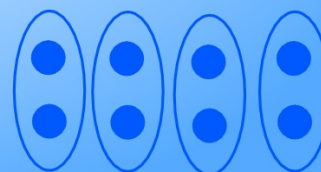
(5 mins)

We can also solve a division equation by **grouping the whole**.

What does grouping mean?

Grouping is when we work out **how many equal groups** there are **within the whole**.

- Step 1. Draw the correct number of dots for your whole number.
- Step 2. Draw circles around the number of the dots in each group.
- Step 3. Count the number of groups and add your answer to the equation.

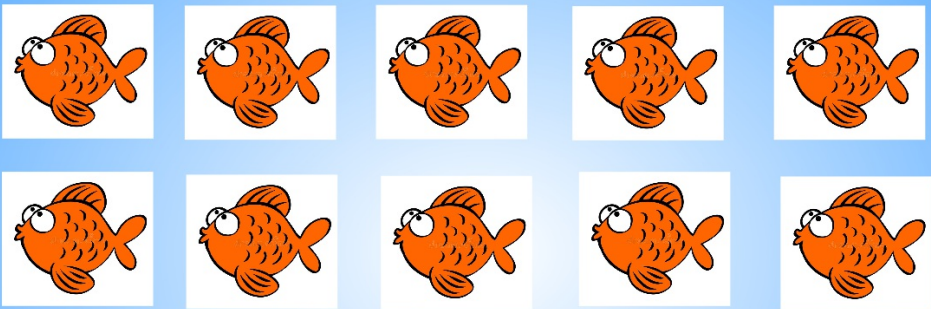


What would the **whole** be for this example?

What would the **parts** be for this example?

Introduce

We need to divide these **10** fish into **groups of 2**.



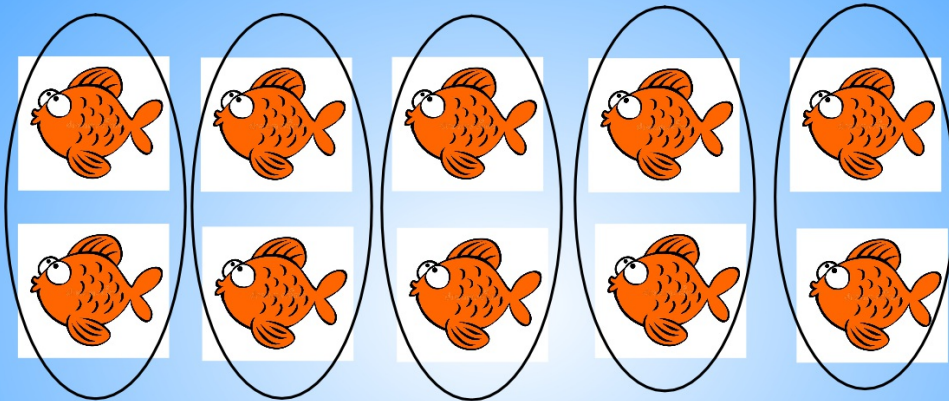
What do we need to do to solve this problem?

We need to draw circles around groups of 2.
Then we can count up how many groups there are.

$$10 \div 2 = 5$$

The **10** represents the number of fish (**whole**).
The **2** represents the numbers of fish in each group
(**part**).
The **5** represents the number of groups (**part**).

Introduce



Let's now fill in the gaps in these sentences:

___ has been divided into groups of ___

___ divided by ___ equals ___

Introduce

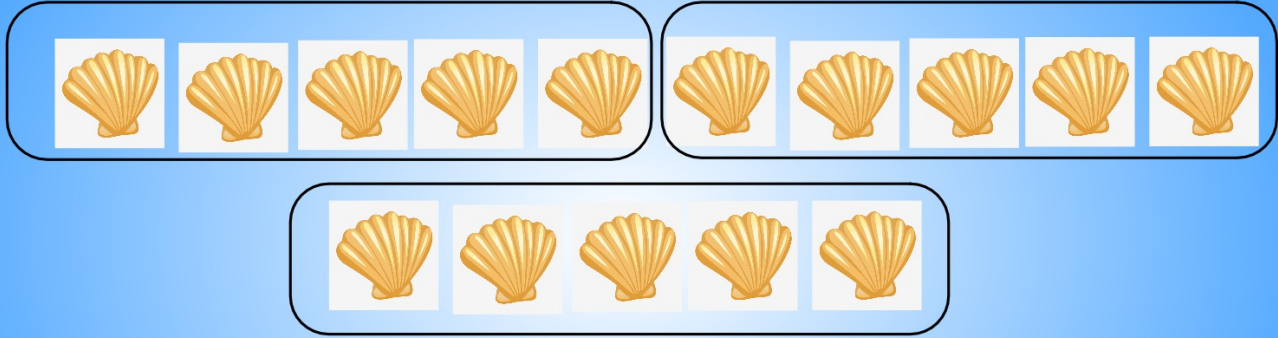
Let's try another! We need to divide these 15 shells into groups of 5.



What do we need to do to solve this problem?

Introduce

The **15** represents the number of shells (**whole**).
The **5** represents the numbers of shells in each group (**part**).
The **3** represents the number of groups (**part**).



How do we write this as an equation?

How many altogether?

How many in each group?

How many groups do we have?

÷

=

Let's try some together!

Practise
and
consider



We need to work out $8 \div 2 =$



What do we need to do first?



How do we write this as an equation?

How many
altogether?

How many in
each group?

How many groups do
we have?

\div

$=$

Let's try some together!

Practise
and
consider



We need to work out $20 \div 5 =$



What do we need to do first?



How do we write this as an equation?

How many
altogether?

How many in
each group?

How many groups do
we have?

\div

$=$

Let's try some together!

Practise
and
consider



We need to work out $18 \div 2 =$



What do we need to do first?



How do we write this as an equation?

How many
altogether?

How many in
each group?

How many groups do
we have?

\div

$=$



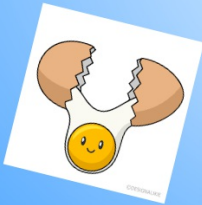
What strategy do you think we could use for this division equation?

Going Deeper

$$40 \div 10 =$$

Neither!

When we divide by 10 we just need to **crack the egg!**



$$40 \div 10 = 4$$



Using this new strategy, can you solve **60** $\div 10$ on your whiteboard!



Now it's your turn!

Independent task

DO NOT STICK THIS SHEET IN!

Independent

Worked Example

How many altogether?

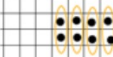
8

÷

2

=

4



1. Draw the whole

2. Divide the whole by **grouping the dots equally**.

3. Count **how many groups** there are.

$10 \div 2 =$

$15 \div 5 =$

$25 \div 5 =$

$18 \div 2 =$

$20 \div 5 =$

$14 \div 2 =$

$16 \div 2 =$

$10 \div 5 =$

Deepening



Mrs Granger is making some bracelets.
She has 25 beads.
She can fit 5 beads on a bracelet.
How many bracelets can she make?

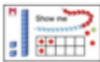


Deepening


There are 30 jellyfish at The Deep and 5 jellyfish tanks.

How many jellyfish live in each tank?

Show your working out.



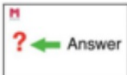

20cm




Miss Tinker has a 20cm piece of wool for her knitting. She needs to cut it into 5cm pieces.

How many 5cm pieces do you think she can cut from this ribbon?


Show your working out.

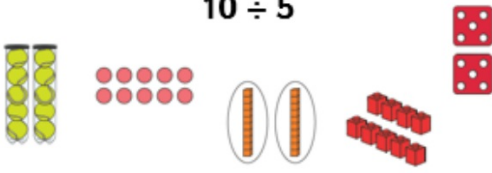
Mr Ogden has 16 footballs. He can fit 2 footballs in a bag. How many bags does he need for all of the footballs?



Which of these pictures matches the calculation? Circle the correct ones.



10 ÷ 5



Key learning: to solve division equations using the grouping method

2.2.22

Deepening

Let's use the **sharing** method to solve this equation.

$$15 \div 5 =$$

Let's use the **grouping** method to solve this equation.

$$15 \div 5 =$$



Is the answer the same?