



How quickly can you solve these equations?

Engage

$$4 \times 2 =$$

$$2 \times 2 =$$



$$10 \times 2 =$$

$$8 \times 2 =$$

Introduce

(5 mins)

**Key Learnin:** To divide a number by 2 using the sharing method.

### Success Criteria


- I understand what division is and I can recognise a division sign.
- I can write a division equation.
- I can share the whole into equal groups.

**Deepening** -I can solve division word problems

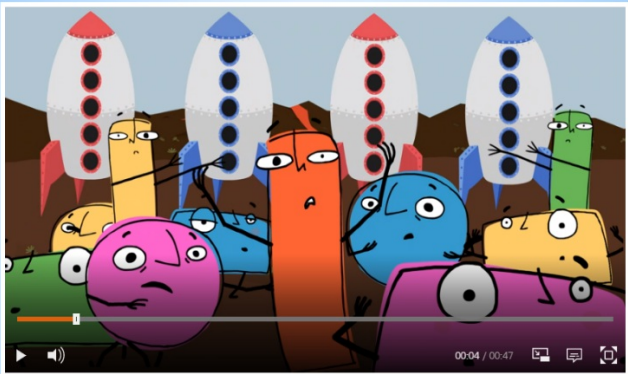
Star words

division   sharing   groups of   divide   equal groups

Introduce

 Do you know what **dividing** means?

Dividing means sharing something into **equal** groups or parts.



 What does a division sign look like?

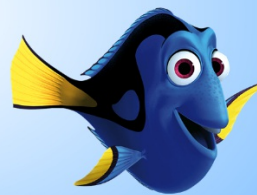
$$\div$$

Today we are going to be sharing numbers into **2 equal parts**. When we split numbers into 2 equal parts, this is also known as finding '**half**' of a number.



Introduce

We need to divide **10** shells equally between Nemo and Dory.  
How many shells do they each get?



We can write this as **10 ÷ 2 = 5**

**10** is my whole.  
**2** and **5** are my parts.

Mr Ray is trying to split 8 fish into 2 equal groups.

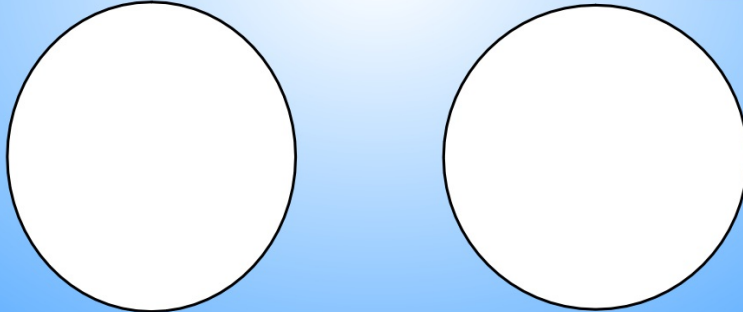
Introduce



What would his equation be?

$$8 \div 2 = \square$$

Let's share the fish equally into the 2 groups.



8 is my whole.  
2 and 4 are my parts.



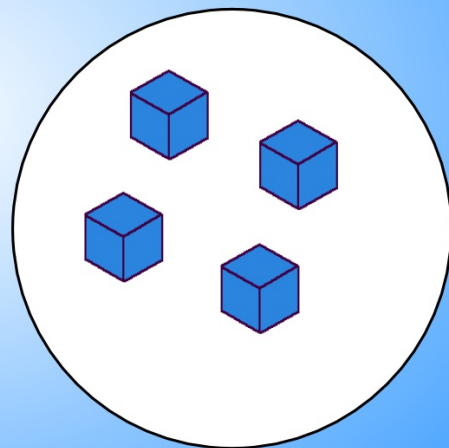
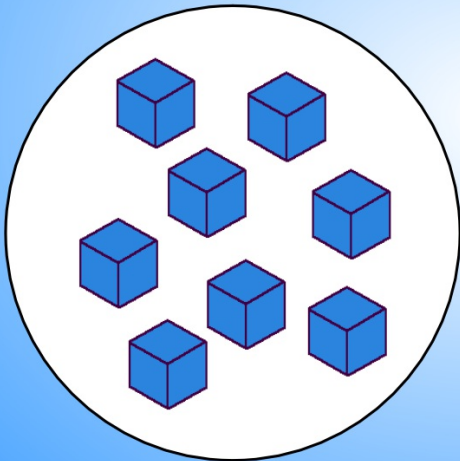


Miss Hughes has tried to solve the following equation. Has she done it correctly?



 I think Miss Hughes is...because...

$$12 \div 2 = 8$$



Miss Hughes has made a mistake! She has not shared the cubes **equally** between the groups.

Practise  
and  
consider  
5 mins

We need to split these **6 cubes** into **2 equal groups**.

So my equation is..  $6 \div 2 =$



What should we do first?

1. Draw **2** circles
2. **Share** the cubes equally between each circle.
3. **Count** up how many are in each circle.

My answer is  $6 \div 2 =$  3



Where is my whole? Where are my parts?

**It's your turn!**

**In pairs, use the cubes or dienes to solve each equation.**

Practise  
and  
consider  
5 mins

1. Draw **2** circles on your whiteboard
2. **Share** the cubes equally between each circle.
3. **Count** up how many are in one of the circles.
4. Write down your answer.

In pairs, use cubes / dienes to solve the following equations.

Practise  
and  
consider

$6 \div 2 =$

$10 \div 2 =$

$4 \div 2 =$

$8 \div 2 =$

$14 \div 2 =$

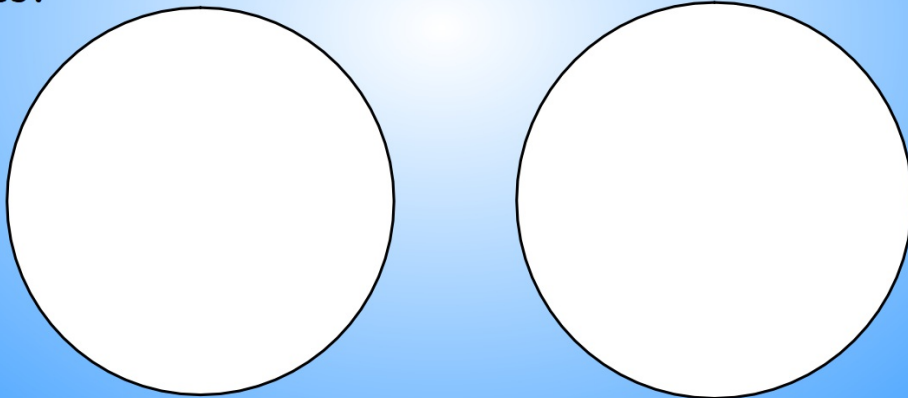
$20 \div 2 =$





Miss Tinker thinks she can only divide even numbers by 2. Is she correct?

Let's choose an odd number. Can we share it equally between the 2 circles?



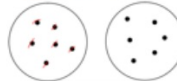
**Miss Tinker is correct! Only even numbers can be divided by 2 equally!**

# Now it's your turn!

Independent task

### Worked Example

$$12 \div 2 =$$



$$12 \div 2 = 6$$

**DO NOT STICK THIS SHEET IN!**

Independent

1. Copy the division equation into your book.
2. Draw 2 circles.
3. Share your whole number equally into each circle to show how many are needed in each group.
4. Count the number of dots in **one** group and add your answer to the equation.

$$8 \div 2 =$$

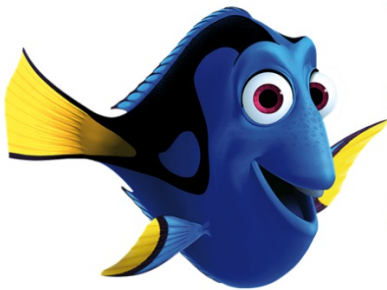
$$4 \div 2 =$$

$$10 \div 2 =$$

$$16 \div 2 =$$

$$12 \div 2 =$$

$$18 \div 2 =$$



Dory is thinking of a number.

She doubles it. Then she adds 10.

Her answer is 24.

**What number did she start with?**

Going Deeper

### Questions to think about



What do we mean when we double a number?



What is the inverse of doubling?



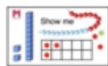
What is the inverse of addition?

# Deepening

I think of a number.  
 I double it. Then I add six to get 26.  
 My answer is 42.

**What number did I start with?**

|



Miss Tinker says:  
**"When I have a two-digit number, I always get a one-digit number."**  
 True or false?  
 Explain your answer.




---

---

---

---


---

---

**Key learning:** to divide a number by 2 using the sharing method

31.1.22

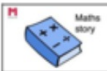
Deepening

 Nemo says,  
 I know that  $40 \div 2 = 20$   
 because I know that  
 $4 \div 2 = 2$ .

**Use the sharing method to explain why Nemo is correct.**



Write your own division story for:



$10 \div 2 =$

---

---

---

---

---

---

Reflection



What does dividing mean?

Dividing means sharing something into **equal** groups or parts.



What is the same as dividing a number by 2?

Halving!