

# Resources to support Maths activities

These are the slides from the online teaching activities.

**Print these out if you prefer reading on paper than on a screen.**

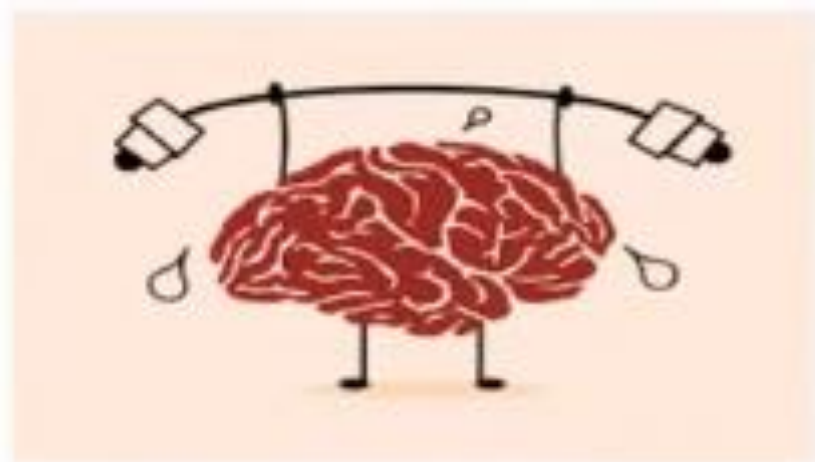
Monday

## Warm up!

What can you remember about fractions?

You can discuss what you know or draw it to explain further.

Pause the video here whilst you have a think.



## Star Words



Part

Whole

Divide



Equal



Fraction names



Vinculum

Denominator

Numerator

.



## Let's Learn

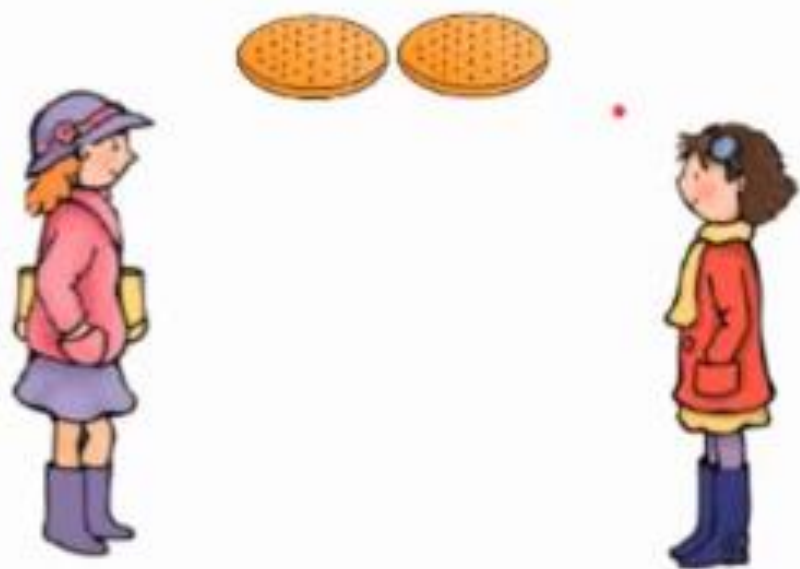


What is the whole?

How many parts are there?

How many biscuits would each person get if shared in equal groups?

## Let's Learn



What is the whole?

How many parts are there?

How many biscuits would each person get if shared in equal groups?

## Let's Learn



## This is a little trickier!

What is the whole?

How many parts are there?

How can we make sure the two people get an equal amount?

## Let's Learn



## This is a little trickier!

What is the whole?

How many parts are there?

How can we make sure the three people get an equal amount?

What do we call it when we divide an amount into 3 equal parts?



## Let's Learn

Lucy spends an equal amount of time doing each

*Do my homework*

*Watch TV*

*Tidy my room*

*Read my book*



**1 hour**



What is the whole?

How many parts are there?

What do we call it when we divide an amount into 4 equal parts?

## How do we write fractions?



Numerator



Vinculum



Denominator

## Let's practise writing unit fractions!



This queue of people share a chocolate bar equally.

How would we write how much chocolate they each get?



## Let's practise writing unit fractions!



This biscuit is split equally into two pieces.

How much do they each get?

How would I write this fraction?



## Let's practise writing unit fractions!



How can we share this drink equally?

How much do they each get?

How would I write this fraction?

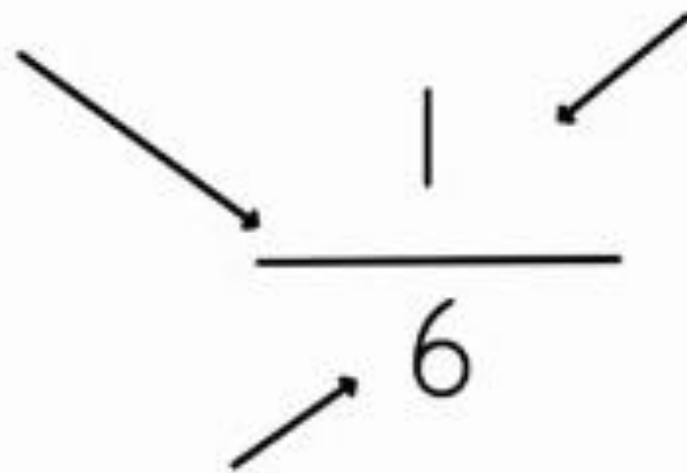


Tuesday

Warm up!



Quiz recap



## Star Words

Quantity



Fraction



Whole



Equal Parts



Multiplication

Division



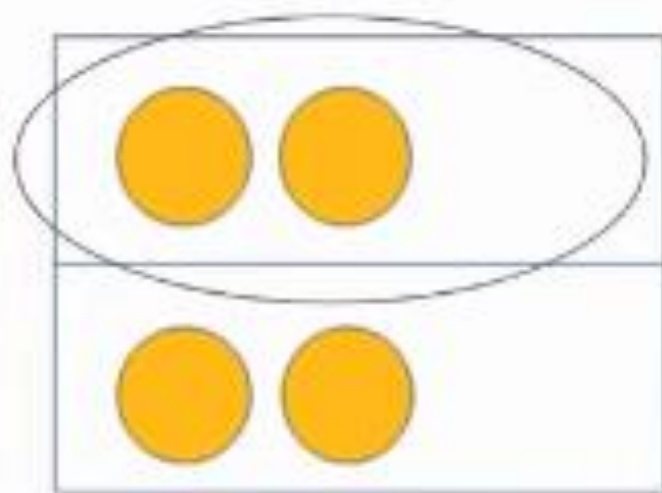
## Let's Learn...

What is  $\frac{1}{2}$  of four?



I know that because the denominator is 2, I need to split four into two equal parts.

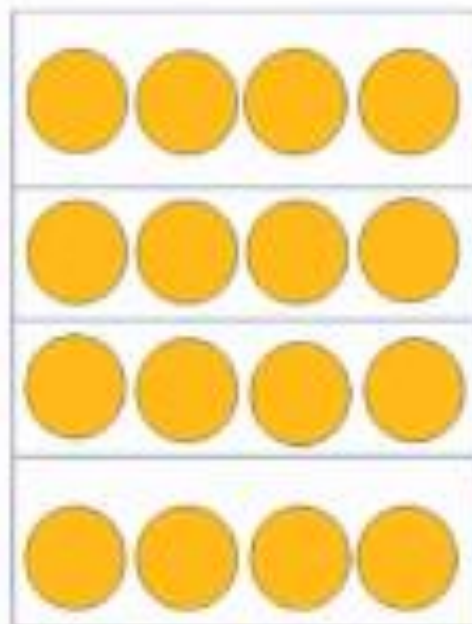
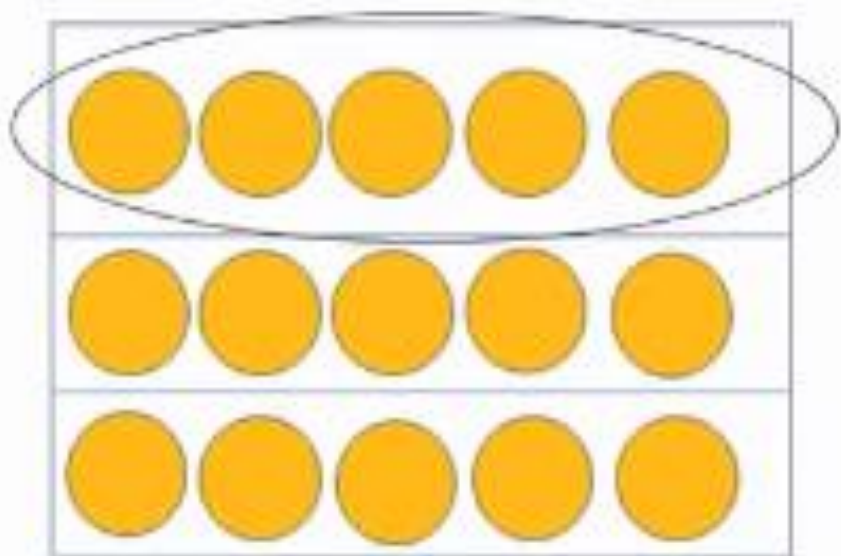
Because the numerator is 1, I want one of those two parts.



## Let's Learn...

$$\frac{1}{3} \text{ of } 15 = 5$$

$$\frac{1}{4} \text{ of } 16 =$$



Prompts:

What is the whole?

How many equal parts are there?

How many parts do we want?

## Your turn!

$$\frac{1}{3} \text{ of } 9 =$$

•

$$\frac{1}{5} \text{ of } 25 =$$

$$\frac{1}{4} \text{ of } 24 =$$

Prompts:

What is the whole?

How many equal parts are there?

How many parts do we want?



## Let's Learn...

$$\frac{1}{2} \text{ of } 12 = 6$$

$$2 \times 6 = 12 \quad 12 \div 2 = 6$$

$$\frac{1}{3} \text{ of } 15 = 5$$

$$3 \times 5 = 15 \quad 15 \div 3 = 5$$

$$\frac{1}{4} \text{ of } 16 = 4$$

$$4 \times 4 = 16 \quad 16 \div 4 = 4$$

$$\frac{1}{5} \text{ of } 10 = 2$$

$$5 \times 2 = 10 \quad 10 \div 5 = 2$$



Is there a quicker way than using arrays?

Look at the answers given.

What do you notice?

What patterns do you see?



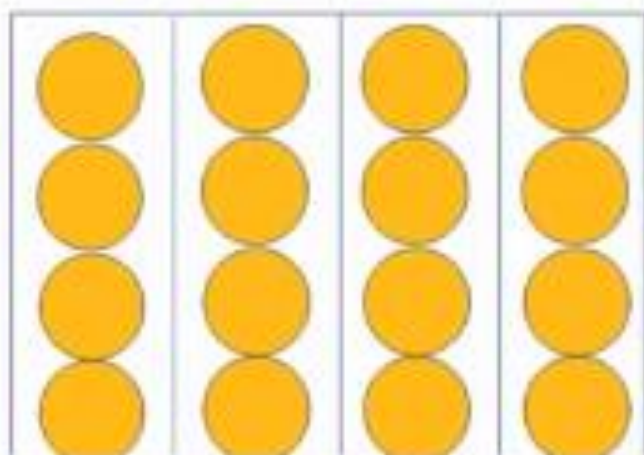
## My turn!

I am thinking of a number.

$\frac{1}{4}$  of the number is 4.

What number am I thinking of?

What else can you tell me?



## Your turn!

I am thinking of a number.

$\frac{1}{5}$  of the number is 3.

What number am I thinking of?

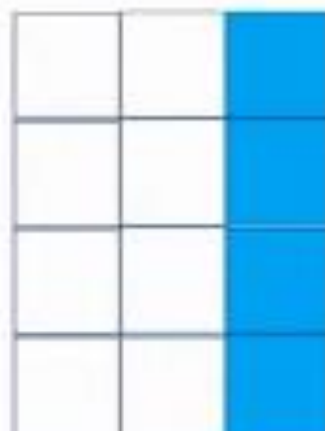
What else can you tell me?



Your turn!



My turn!



True or False?

I have shaded  $\frac{1}{4}$  of this shape?

Prove it!



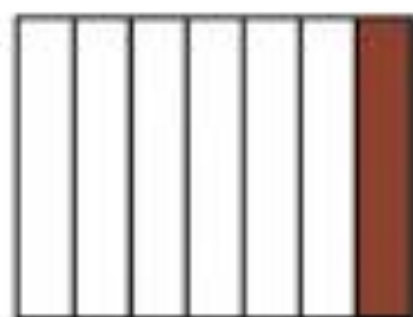
Wednesday

## Warm up!



Write down and draw as many **unit fractions** as you can.

Here are some mathematical pictures to help.



Pause the video for 20 seconds. Go!





## Star Words



Part



Whole

Vinculum



Numerator

Denominator

Unit fraction



Non-unit fraction



$$\frac{1}{5}$$



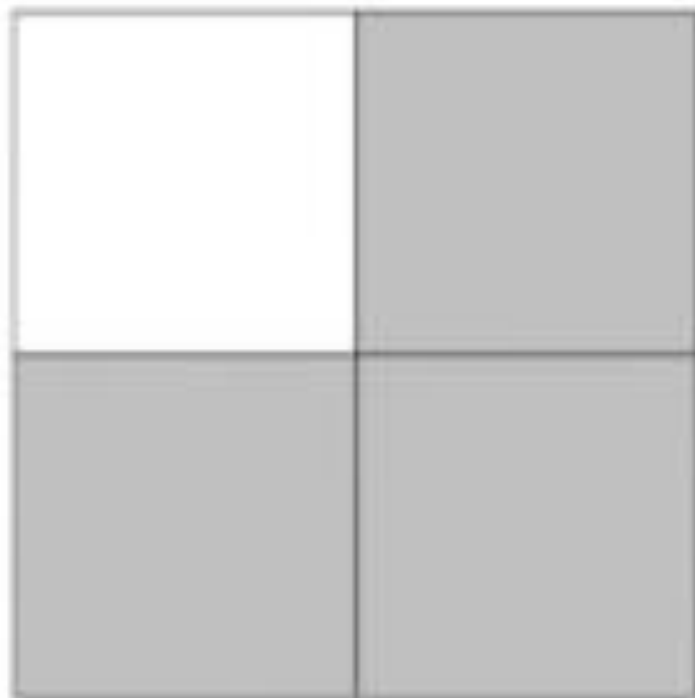
## Let's Learn...

**What fraction of the shape is shaded in?**

The whole has been split into \_\_\_\_\_  
equal parts.

There are \_\_\_\_\_ equal parts shaded  
in.

The fraction of the whole shaded in  
is \_\_\_\_\_.



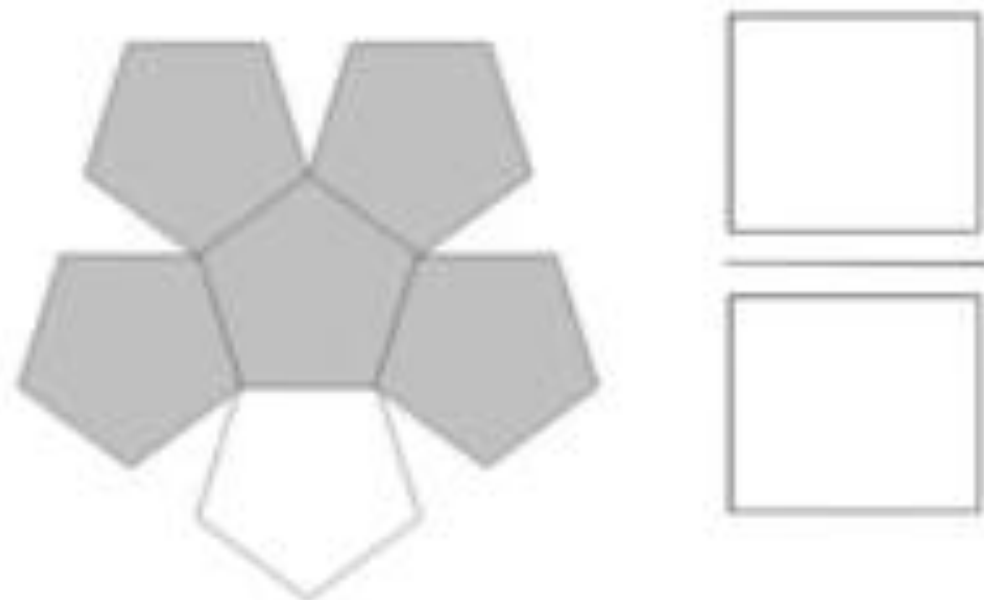
## Let's Learn...

**What fraction of the shape is shaded in?**

The whole has been split into \_\_\_\_\_  
equal parts.

There are \_\_\_\_\_ equal parts shaded  
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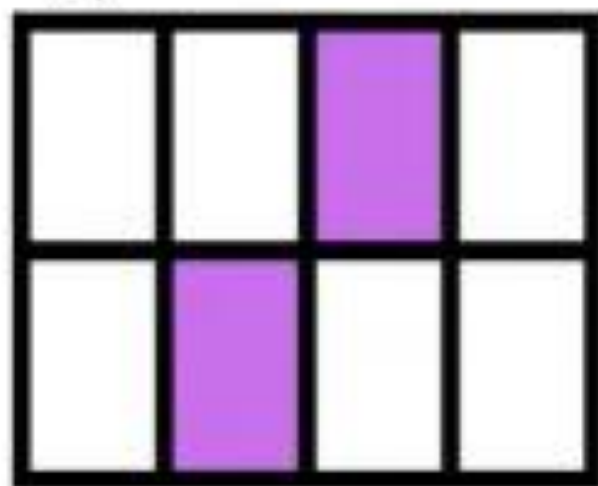
The fraction of the whole shaded in  
is \_\_\_\_\_.



Let's Learn...

**Unit fraction or non-unit fraction?**

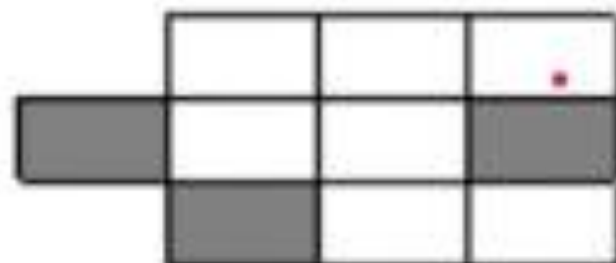
A)



B)



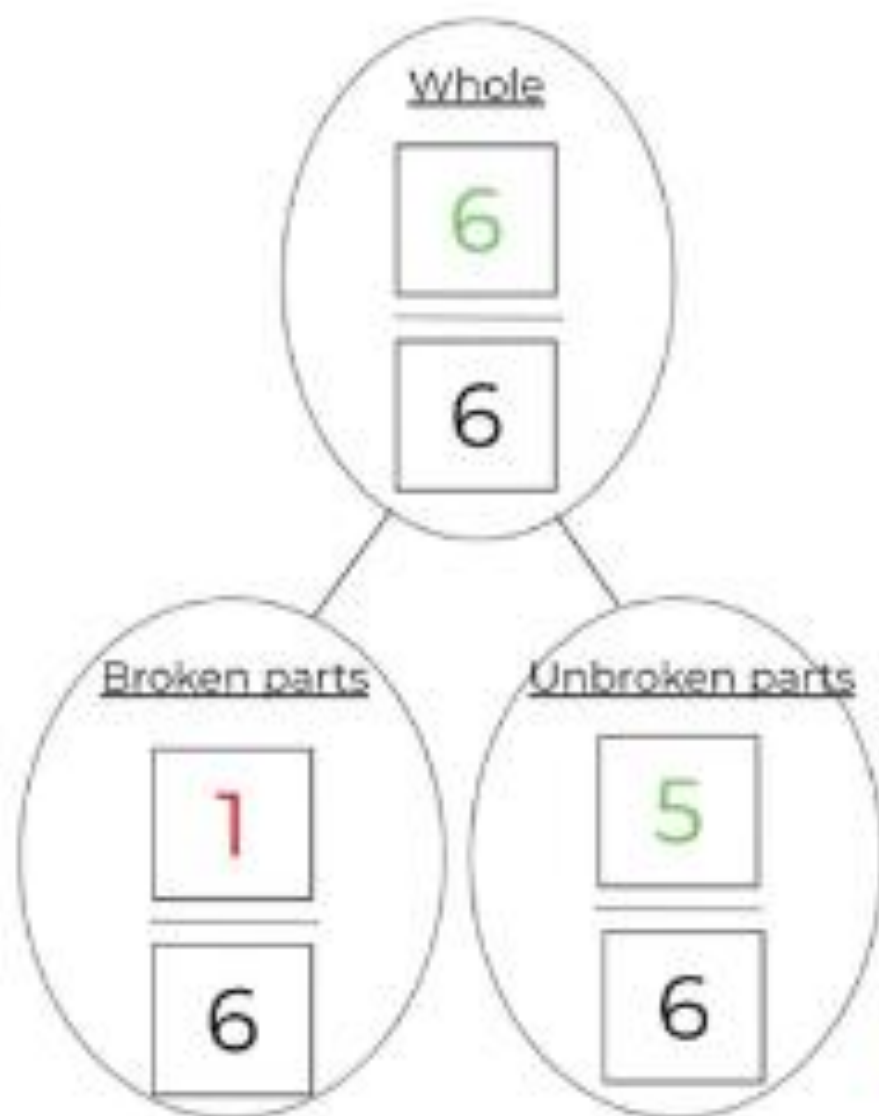
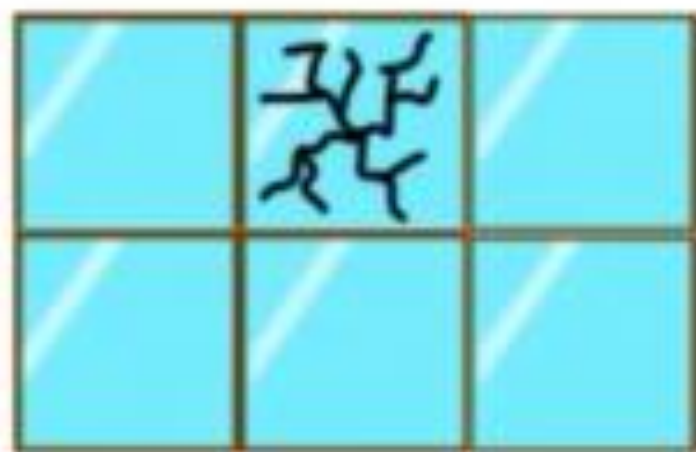
C)



Get exploring...

## Which unit and non-unit fractions make one whole?

The window has one broken part and five unbroken parts.  
What fraction of the window is not broken?



Get exploring...

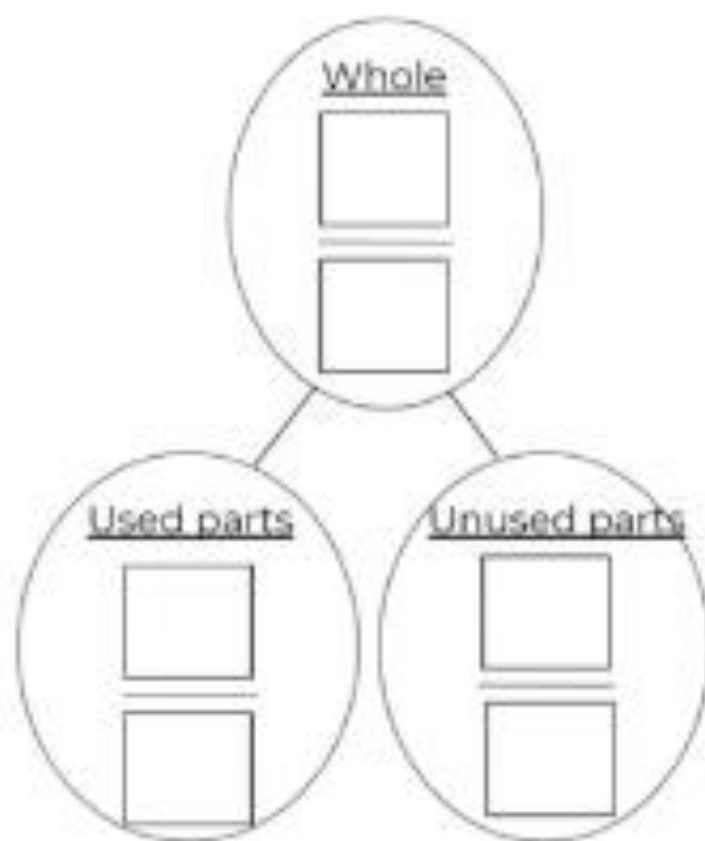
## Which unit and non-unit fractions make one whole?

Simon cuts a string into 5 equal parts.



He uses 2 parts to repair a swing.

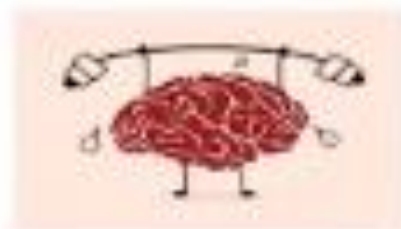
- What fraction of the string did he not use?
- Were the parts used and not used: unit or non-unit fractions?



Pause the video to complete this activity.

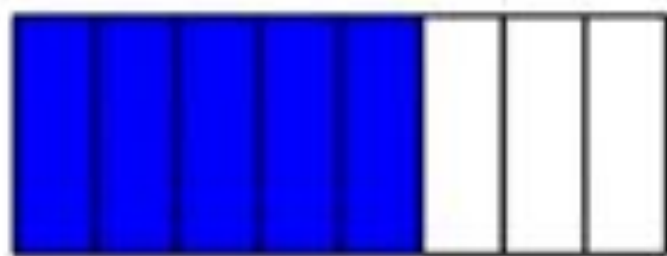
Thursday

## Warm up!



Write down and draw as many **non-unit fractions** as you can.

Here are some mathematical pictures to help.





Star Words



Quantity

Non-unit fraction



Whole

Divide



Denominator

Multiple



Numerator



## Let's Learn...

**What strategy can we use to find fractions of a quantity?**

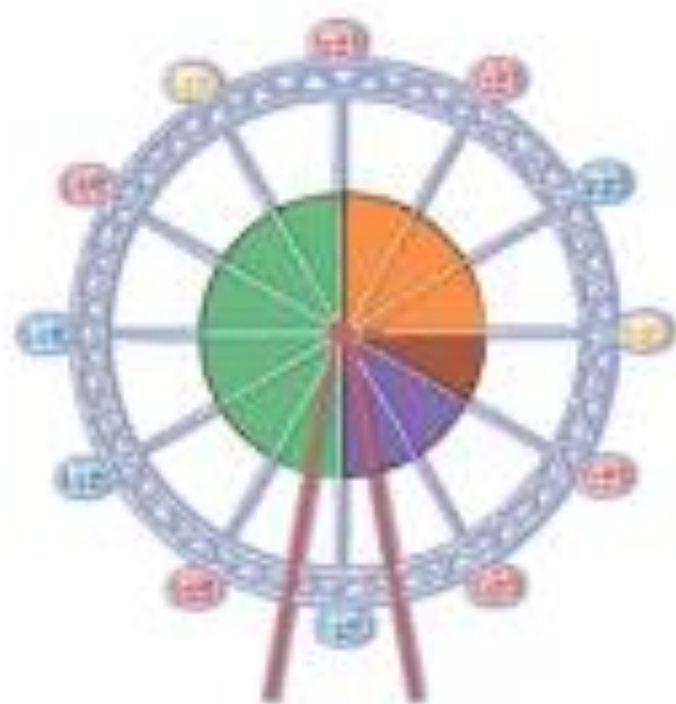
There are 12 pods on the London Eye.

$\frac{1}{4}$  of the pods are empty.

How many pods are empty altogether?

What calculation am I trying to work out?

$$\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \text{ of } \underline{\hspace{2cm}} = \boxed{\phantom{00}}$$



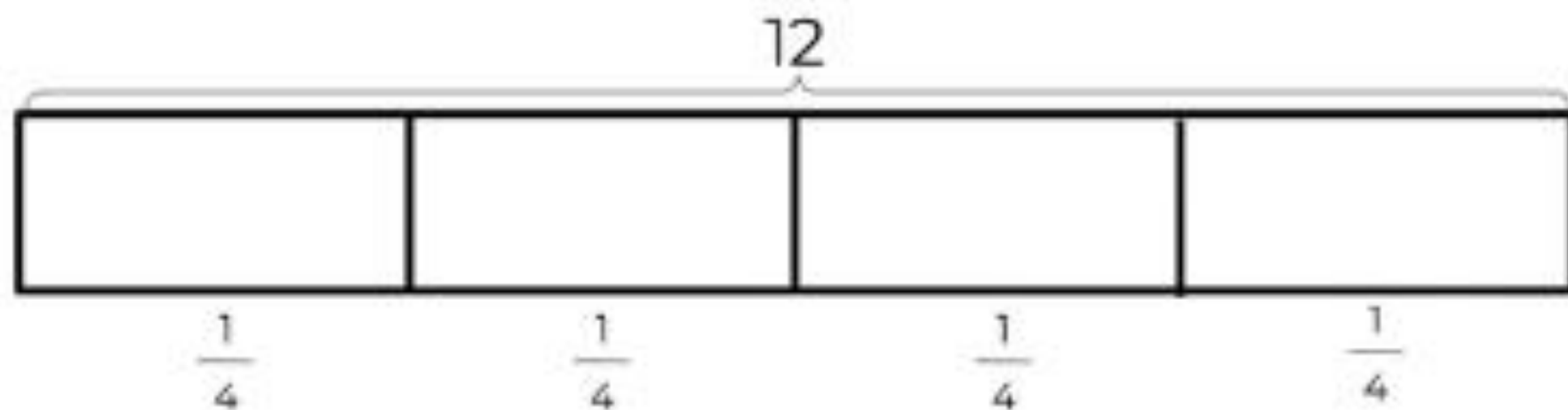
## Let's Learn...

What strategy can we use to find fractions of a quantity?

$$\frac{1}{4} \text{ of } 12 = \boxed{\phantom{00}}$$



What is the whole?  
How many equal parts are there?  
How many equal parts do we want?



## Let's Learn...

Three quarters of the pods are full. How many pods are full?

$$\frac{3}{4} \text{ of } 12 = \boxed{\phantom{00}}$$

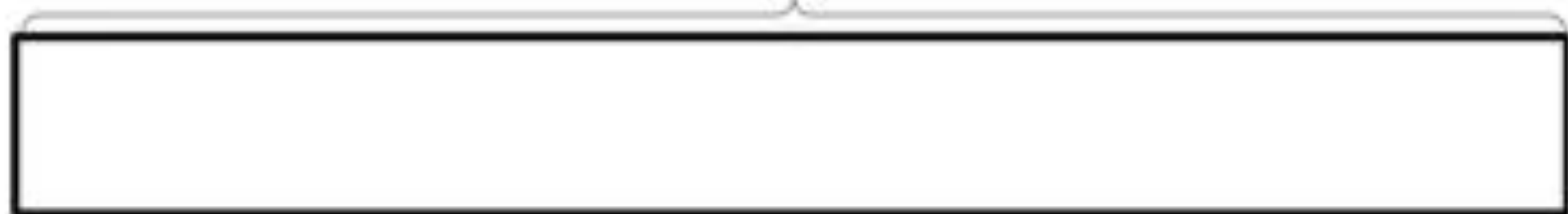


What is the whole?

How many equal parts are there?

How many equal parts do we want?

12



## Your Turn...

Use a bar model to help you calculate the answer to:

$$\frac{2}{5} \text{ of } 30 = \boxed{\phantom{000}}$$

STS

What is the whole?

How many equal parts are there?

How many equal parts do we want?

If you would like another try, have a go at this one...

Use a bar model to help you calculate the answer to:

$$\frac{4}{7} \text{ of } 21 = \square$$

STS

What is the whole?

How many equal parts are there?

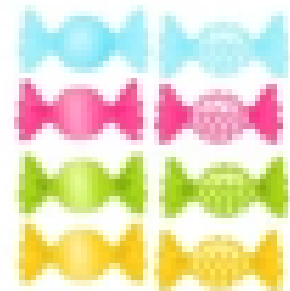
How many equal parts do we want?

## Let's Explore...

**If I know the parts, can I find the value of the whole?**

Mike has  $\frac{4}{6}$  of a packet of sweets. He has 8 sweets altogether.

How many sweets make the whole packet?

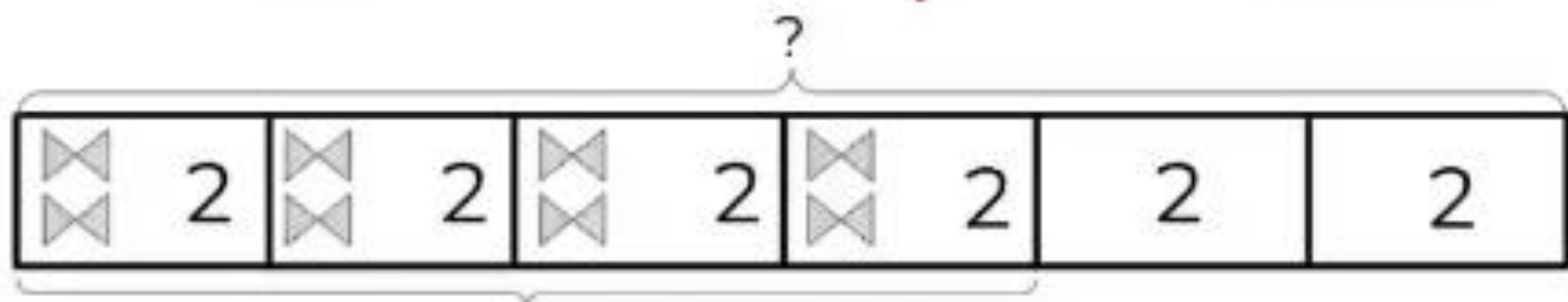


## Let's Explore...

If I know the parts, can I find the value of the whole?

Mike has  $\frac{4}{6}$  of a packet of sweets. He has 8 sweets altogether.

How many sweets make the whole packet?



If  $\frac{4}{6} = 8$ , then  $\frac{1}{6} = \mathbf{2}$

$$6 \times 2 = 12$$
$$2 + 2 + 2 + 2 + 2 + 2 = 12$$





## Your turn...

### If I know the parts, can I find the value of the whole?

Amy has  $\frac{3}{4}$  of a box of bricks. She has 15 bricks altogether.

How many bricks make the whole box?

#### STS

1. Draw a bar model.
2. Do you know the value of the whole?
3. How many equal parts are there in total?
4. How many parts do you have in the question?
5. Can you find the value of one part?
6. Share out the value of the fraction between those parts.
7. What is the value of one part?
8. Use this to calculate the whole.

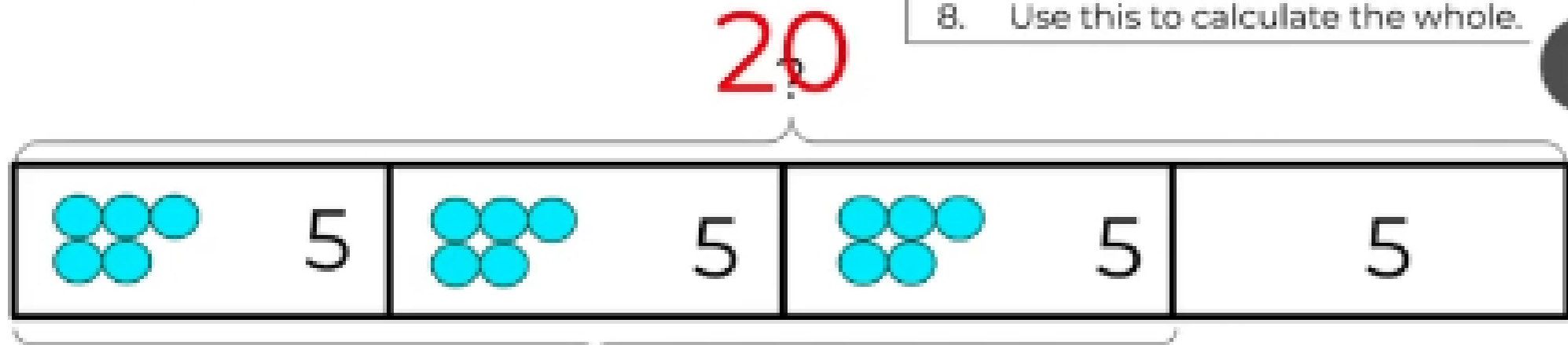


## Your turn...

### If I know the parts, can I find the value of the whole?

Amy has  $\frac{3}{4}$  of a box of bricks. She has 15 bricks altogether.

How many bricks make the whole box?



$$\text{If } \frac{3}{4} = 15, \text{ then } \frac{1}{4} = \mathbf{5}$$

$$4 \times 5 = 20$$
$$5 + 5 + 5 + 5 = 20$$

#### STS

1. Draw a bar model.
2. Do you know the value of the whole?
3. How many equal parts are there in total?
4. How many parts do you have in the question?
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