




| | | |
|---|--|--|
| LI | WALT: <i>I can build fractions that make a whole</i> | |
|  | I can make a range of fractions I can explain that fractions are equal parts of a whole | |
|  | I can make a range of fractions I can show that fractions are equal parts of a whole | |
|  | I can make a range of fractions | |
| Nasty Maths | No Nasty Maths | |

Recap

Addend -

Sum -

The **sum** is always the amount.

Addends are always of the amount.

Can you think of an example of an addend or a sum?

$$243 + \boxed{} = 774$$

How do you find the missing number?

Subtrahend -

Minuend -

Difference -

Can you think of an example for each one?

Tell me how to find the missing numbers

Tip - think if you need to add or subtract

$$542 - \boxed{} = 232$$

$$\boxed{} - 310 = 232$$

We will need to know this when working with fractions.

Recognising Fractions



$$\frac{3}{8}$$

Numerator

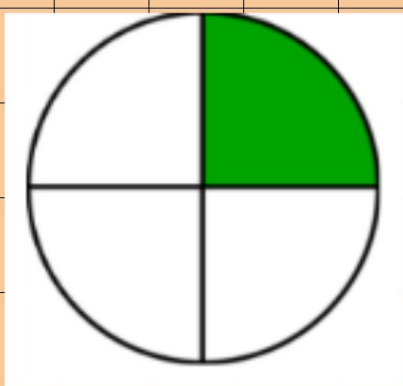
How many equal parts of the whole are needed?

Denominator

How many equal parts are in the whole?

A fraction is an equal part of a whole.

If a fraction has a numerator of 1, we can call it a unit fraction.



$$\frac{1}{4}$$

| Say | Write |
|---------------------------------|---------------------------|
| "The whole has been divided..." | The fraction bar: – |
| "...into 3 equal parts." | The denominator: 3 |
| "1 of these parts is shaded." | The numerator: 1 |

Can you think of any unit fractions?

Today, we will be making fractions from coloured shapes.

Record the fractions you make onto your fractions chart.

To start with, make as many unit fractions as you can and make a list in your book.

Now make as many non-unit fractions
as you can.

Can you think of a quick way to identify
unit and non-unit fractions?

Now try and make the biggest fraction
you can and then the smallest fraction
you can.

Finally, make a fraction and draw it into your book. Write down what fraction it is.




Tell me what the numerator and denominator are used for.

Ext: What if the numerator changes?

What if the numerator and the denominator are the same?

Which whole shape has been divided into halves? Tell me why the others haven't.



| | | |
|--|--|--|
| L2 | WALT: I can identify a unit fraction | |
|  | I can identify a unit fraction I can explain how to identify a unit fraction | |
|  | I can identify a unit fraction I can use the numerator and to identify a fraction | |
|  | <i>I can identify a unit fraction</i> | |
| Nasty Maths | <i>In folder</i> | |

Recap

Tell me how to find the missing numbers.

$$345 - \boxed{} = 132$$

$$\boxed{} - 234 = 453$$

$$238 + \boxed{} = 387$$

A fraction is an  part of a 

Spot the unit fractions:

$$\frac{1}{3}$$

$$\frac{3}{5}$$

$$\frac{5}{10}$$

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

$$\frac{4}{6}$$

$$\frac{1}{12}$$

Can you remember....?

Recognising Fractions



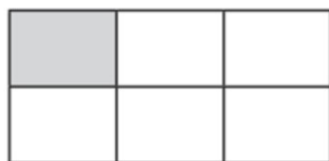
$$\frac{3}{8}$$

Numerator

Denominator

Challenge

Complete the sentences:



_____ out of _____ equal parts are shaded.

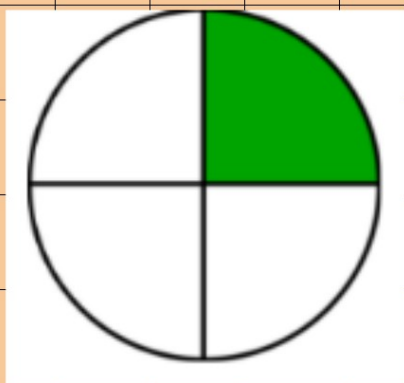
Mega Challenge

Draw a circle around the unit fractions.

$$\frac{1}{10} \quad \frac{2}{7} \quad \frac{3}{4} \quad \frac{1}{9} \quad \frac{5}{6} \quad \frac{1}{3} \quad \frac{1}{7}$$

Explain how you know which ones are unit fractions.

If a fraction has a of 1, we can call it a



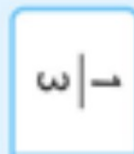
| Say | Write |
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| "The whole has been divided..." | The fraction bar: — |
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| "1 of these parts is shaded." | The numerator: 1 |

Can you think of any unit fractions?

Fractions Dominos

Instructions:

To play the game you need to match a picture domino to another one with the correct fraction on it.



Example:

$$\frac{1}{2}$$

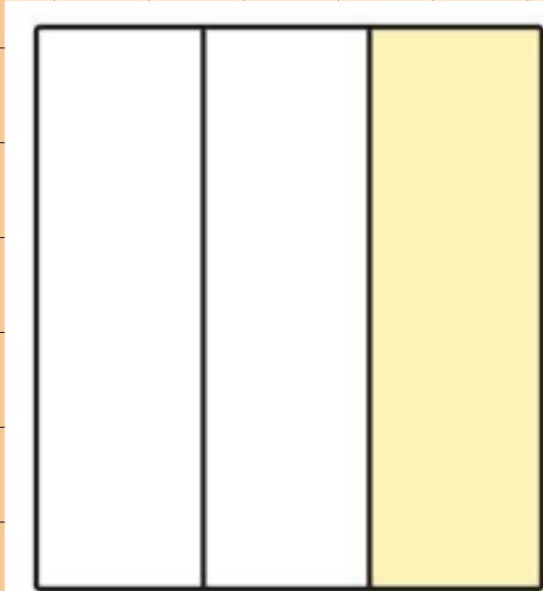


Tell your partner why you have matched each domino up.

5 HP for using 'whole', 'part', 'numerator' and 'denominator'.

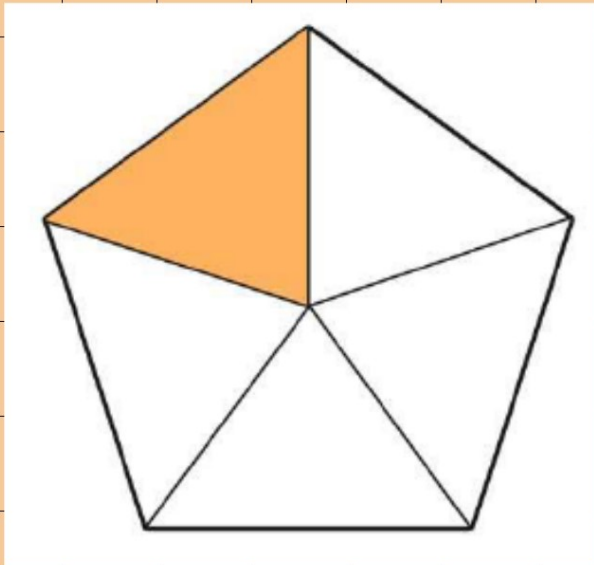
Ext: Use flash cards to make extra dominoes.

I do - identify a fraction



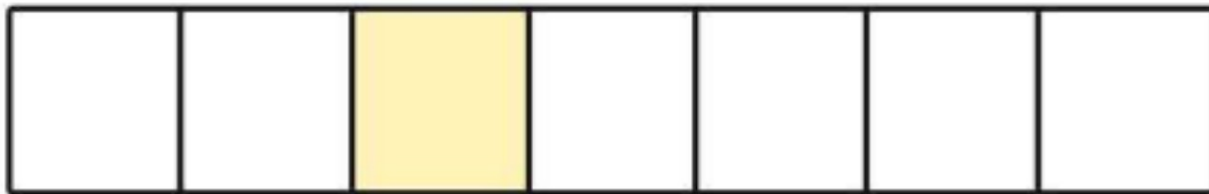
| Say | Write |
|---------------------------------|---------------------------|
| "The whole has been divided..." | The fraction bar: – |
| "...into 3 equal parts." | The denominator: 3 |
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We do - identify a fraction.



| Say | Write |
|---------------------------------|---------------------------|
| "The whole has been divided..." | The fraction bar: – |
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You do - identify a fraction.



| Say | Write |
|---------------------------------|---------------------------|
| "The whole has been divided..." | The fraction bar: – |
| "...into 3 equal parts." | The denominator: 3 |
| "1 of these parts is shaded." | The numerator: 1 |

Complete this first...

Unit Fractions

To recognise and use unit fractions of shapes and groups of objects.

1)

a) Draw a circle around the unit fractions.

$$\frac{1}{10}$$

$$\frac{2}{7}$$

$$\frac{3}{4}$$

$$\frac{1}{9}$$

$$\frac{5}{6}$$

$$\frac{1}{3}$$

$$\frac{1}{7}$$

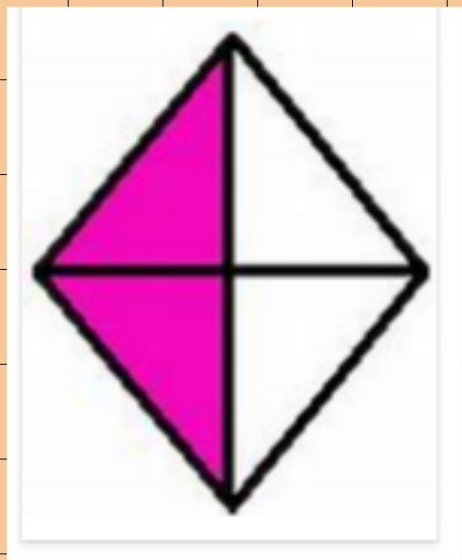


b) How do you know that they are unit fractions?

Then try reasoning




Plenary

Mr Jolley says this is a unit fraction...



Is he correct?

Tell me why
you think
this.

| | | |
|---|---|--|
| L3 | WALT: I can identify a non-unit fraction | |
|  | I can identify a non-unit fraction I can prove what numerator and denominator mean | |
|  | I can identify a non-unit fraction I can explain what numerator and denominator mean | |
|  | I can identify a non-unit fraction | |
| Nasty Maths | On flip | |

Recap

Tell me how to find the missing numbers.

$$923 - \boxed{} = 452$$

$$\boxed{} - 342 = 247$$

$$345 + \boxed{} = 577$$

A is an part of a

Spot the unit fractions:

$$\frac{1}{3}$$

$$\frac{3}{5}$$

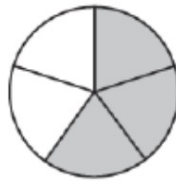
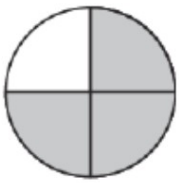
$$\frac{5}{10}$$

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

$$\frac{4}{6}$$

$$\frac{1}{12}$$

Challenge



What fractions have been shaded in?

Mega Challenge

True or false—the denominator shows how many equal parts make the whole.

Can you remember....?

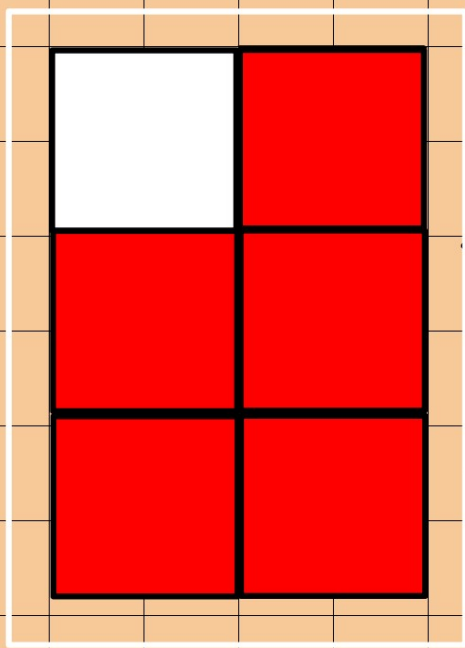
Recognising Fractions



—



A non-unit fraction is a fraction with a numerator bigger than 1.



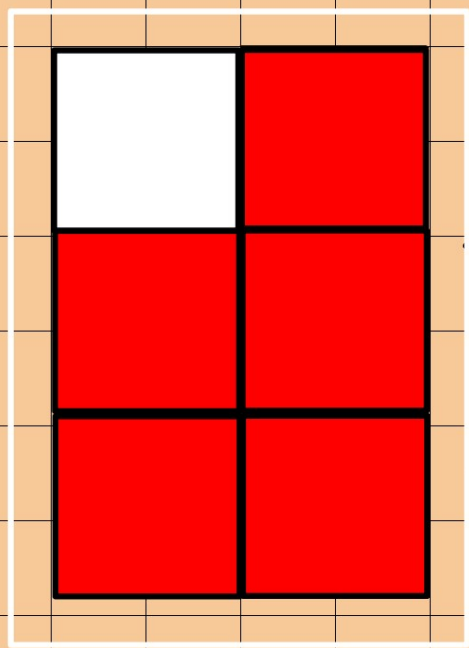
$\frac{5}{6}$ (5 parts shaded)
6 parts altogether)

Teacher show using resources

Non-unit fractions are made of unit fractions.

5

6 is made of 5 one sixths



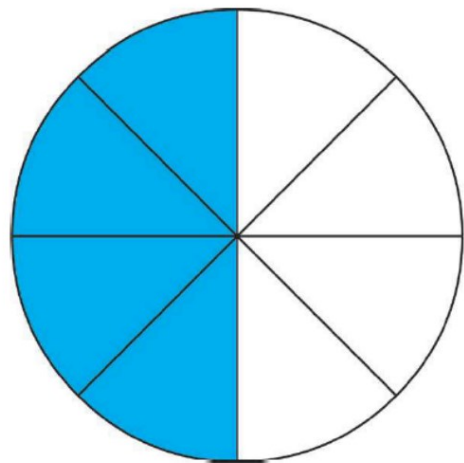
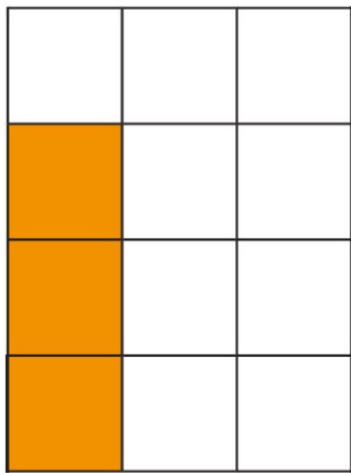
5

(5 parts shaded)

6

6 parts altogether)

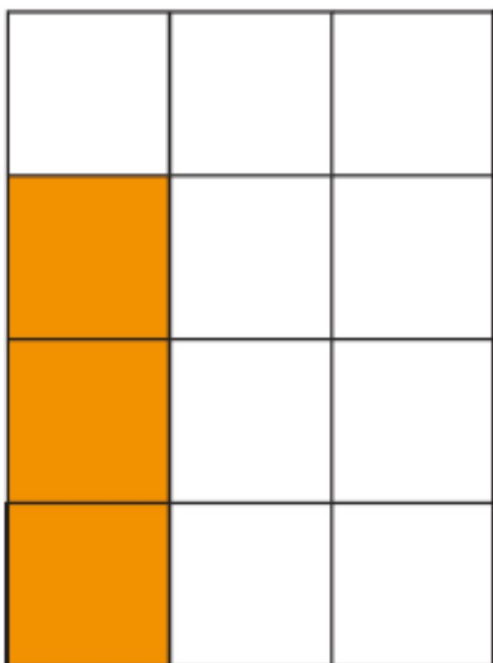
Fractions match up game



Match the fraction to the written fraction. Explain how you did it.

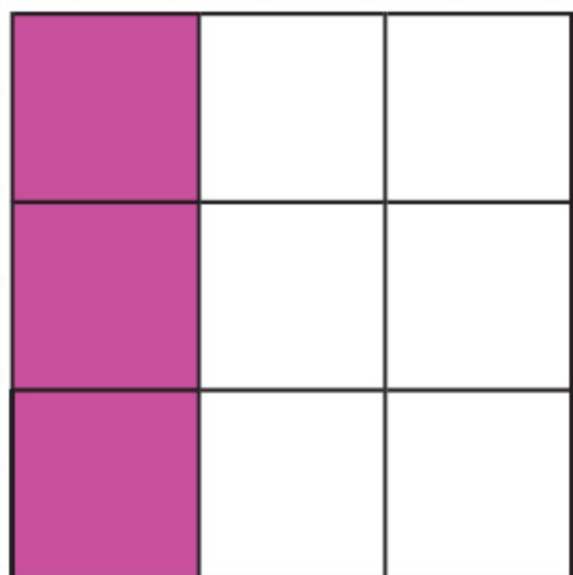
5 HP for using: numerator, denominator, part, whole and equal.

I do - identify a fraction



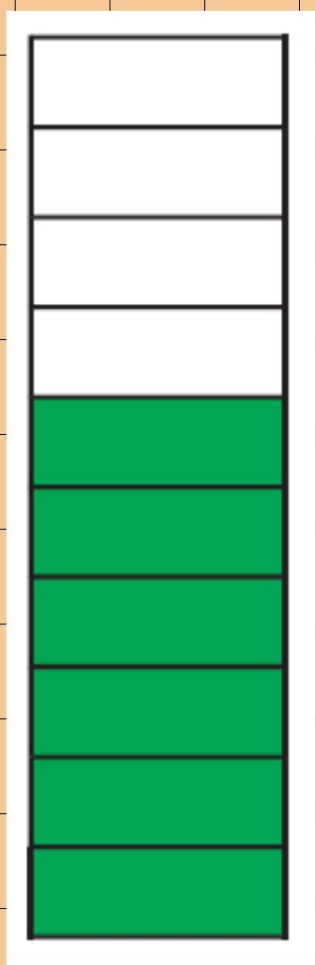
| Say | Write |
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| "The whole has been divided..." | The fraction bar: – |
| "...into 3 equal parts." | The denominator: 3 |
| "1 of these parts is shaded." | The numerator: 1 |

We do - identify a fraction



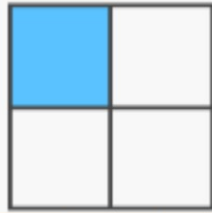
| Say | Write |
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| "The whole has been divided..." | The fraction bar: – |
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You do - identify a fraction



| Say | Write |
|---------------------------------|---------------------------|
| "The whole has been divided..." | The fraction bar: – |
| "...into 3 equal parts." | The denominator: 3 |
| "1 of these parts is shaded." | The numerator: 1 |

Plenary - Identify the fractions



| | | |
|---|---|--|
| L4 | WALT: I can problem solve using unit fractions | |
|  | I can prove why I can use part of a shape to find a whole shape | |
|  | I can explain why I can use part of a shape to find a whole shape | |
|  | I can use part of a shape to find a whole shape | |
| Nasty Maths | No Nasty Maths | |

Recap

Tell me how to find the missing numbers.

$$923 - \boxed{} = 452$$

$$\boxed{} - 342 = 247$$

$$345 + \boxed{} = 577$$

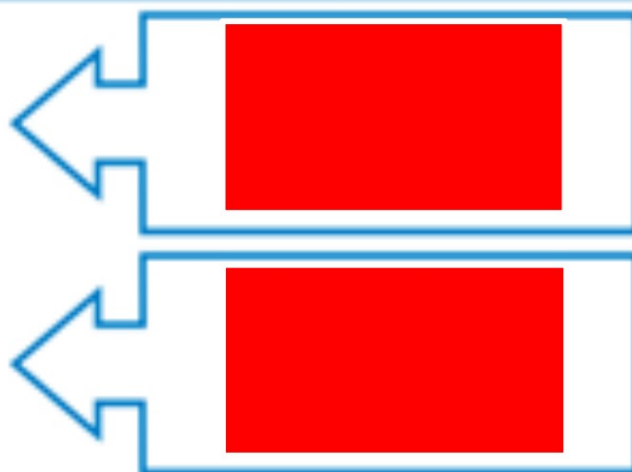
A is an part of a

Which shapes shows $\frac{3}{5}$? Explain your answer.



Can you remember....?

Recognising Fractions

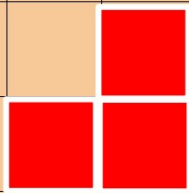


Today we will be problem solving.

Mr Gilbert started to draw some shapes
but he ran out of time.

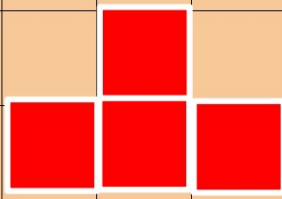
He only drew a fraction of the shape.
We need to find the whole shape.....

I do - use a unit fraction to build a whole shape



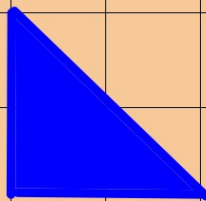
This is $\frac{1}{2}$ a shape.

We do - use a unit fraction to build a whole shape



This is $\frac{1}{4}$ a shape.

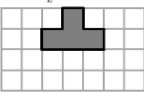
You do - use a unit fraction to build a whole shape



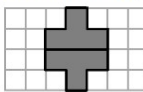
This is $\frac{1}{2}$ a shape.

First....


This is $\frac{1}{2}$ of a shape:



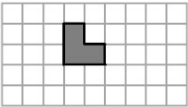
This is the whole shape:



Shade $\frac{1}{4}$ of the shape:

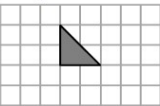
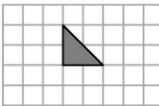


This is $\frac{1}{4}$ of a shape. Draw the whole shape:



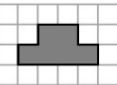

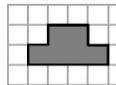
Next....

This is $\frac{1}{4}$ of a symmetrical shape. Draw the whole shape.

Answer in two ways.


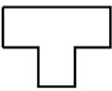

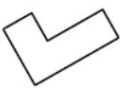
This is $\frac{3}{4}$ of a symmetrical shape. Draw the whole shape.

Answer in three ways.

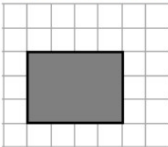
....Finally.

Shade $\frac{3}{4}$ of each shape:

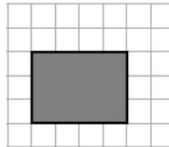





Which shape was easiest? Which shape was hardest?

This is $\frac{3}{4}$ of a rectangle. Draw the whole rectangle.



This is $\frac{2}{3}$ of a rectangle. Draw the whole rectangle.



Plenary

£ 1 2 is $\frac{1}{4}$ of all of my money.

How much money do I have altogether?

Prove it!