THIRD SPACE LEARNING

$\frac{4}{?} = \frac{2}{3}$

$\frac{2}{16} = \frac{?}{8}$

HELLO!

Today we are going to revise fractions, decimals and percentages

$\frac{4}{6} = \frac{8}{?}$

Use the space under each question to show your working out.

Arithmetic Warm Up
Long multiplication

THIRD SPACE LEARNING

1. 45 x 32 =

2. 256 x 13 =

$$\begin{array}{r} 45 \\ \times\ 32 \\ \hline \end{array}$$

$$\begin{array}{r} 256 \\ \times\ 13 \\ \hline \end{array}$$

THIRD SPACE LEARNING

Revision on Fractions, Decimals and Percentages

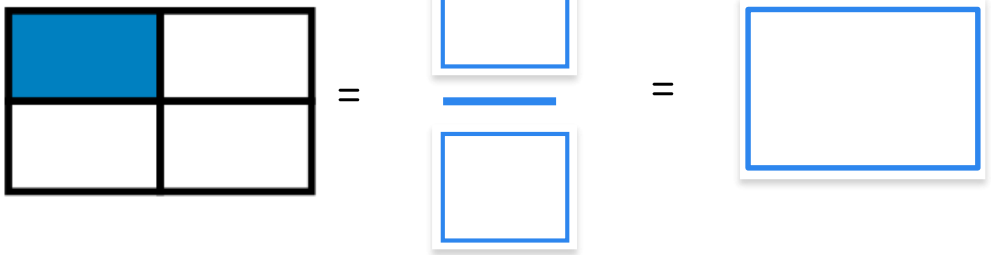
Today we are going to revise how to:

- find decimal equivalents of fractions
- represent fractions, decimals and percentage equivalents
- multiply decimal numbers by a whole number
- find percentages of an amount
- multiply fractions by whole numbers and by fractions
- divide fractions by whole numbers

THIRD SPACE LEARNING

Revision: Fraction and decimal equivalents

1. Can a fraction be written as a decimal?



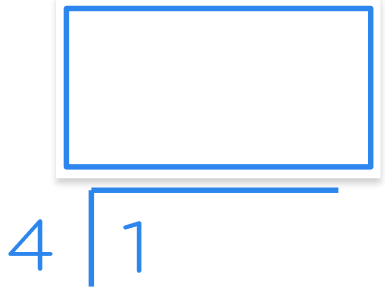
Think about a quarter – how do you write it as a fraction and how do you write it as a decimal number?

2. So how do you change a fraction into a decimal?

Did you know that the fraction bar in a fraction means the same as the fraction bar in the division sign?

$\frac{1}{4}$ ← same → ÷

3. $\frac{1}{4}$ is the same as $1 \div 4$ so,



THIRD SPACE LEARNING

Question 1

Complete

What do you notice?

22 Write these in order of size, starting with the smallest.

$\frac{2}{3}$ 0.5 $\frac{3}{5}$ 0.65

smallest			

What do you know?

Can you show your working out?

How could you extend the question?

THIRD SPACE LEARNING

Revision: Fractions, decimals and percentages

Percentage (%) simply means 'out of 100'

So when a fraction has 100 as the denominator, it can easily be written as a decimal or a percentage.

$$\frac{3}{4} = \frac{75}{100}$$

$= 75 \div 100 = 0.75$

$= 75\%$

Find the equivalent fraction, making the denominator 100

Think – how would you write 75% as a fraction and a decimal?

1. Write 64% as a fraction and a decimal.

Question 2

Complete

What do you notice?

23 Write these in order of size, starting with the smallest.

$\frac{3}{4}$ 0.34 0.7 43%

smallest

What do you know?

Can you show your working out?

How could you extend the question?

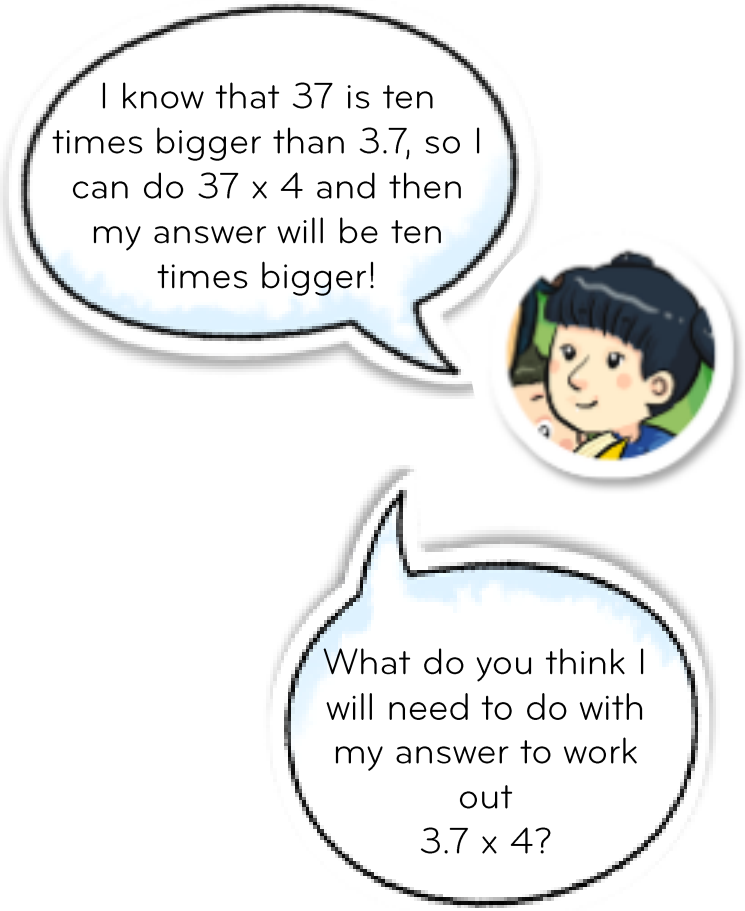
THIRD SPACE LEARNING

Revision: Multiplying decimals

When multiplying decimals you need to remember:
a) Times tables b) Place value

3.7 x 4

$$\begin{array}{r} 3\ 7 \\ \times \quad 4 \\ \hline \square \end{array}$$



So, 3.7 x 4 = ☐

THIRD SPACE LEARNING

Revision: Multiplying decimals

When multiplying decimals you need to remember:
a) Times tables b) Place value

1.06 x 5

106 is ☐ times bigger than 1.06

So, if I do 106 x 5, my answer will be ☐ times bigger

```
  1 0 6
x     5
-------
   ☐
```

So, 1.06 x 5 = ☐

THIRD SPACE LEARNING

Question 3

Complete

What do you notice?

Pizzas cost £6.20 each.

Candida buys 5 pizzas for a party.

How much does it cost her?

Write your answer in pounds (£)

What do you know?

Can you show your working out?

How could you extend the question?

THIRD SPACE LEARNING

Let's review:

- I can find decimal equivalents of fractions
- I can represent percentages as fractions and decimals
- I can multiply decimal numbers by a whole number

How do you feel about what we've been doing?

Is there something you would like to go over?

THIRD SPACE LEARNING

Revision: Finding percentages

Remember percent mean out of 100!

Find 30% of 48

1) This whole bar could represent 48 (this is the 100% of the amount)

2) How many equal parts has this bar been divided into? So what percent does each part represent?

3) What number would go into each part if the whole bar is 48?

4) So how many parts would give you 30%? What is 30% of 48? Check your answer – does it seem reasonable?

1. What would 35% of 48 be?

35% is 5% more than 30%. If I know what 10% is, I'm sure I can use this information to work out 5%!

Question 4

Complete

What do you notice?

What do you know?

15 200 children went on holiday.

10% of the children went to Wales.

25% of the children went to Scotland.

How many **more** children went to Scotland than went to Wales?

Show your working

children

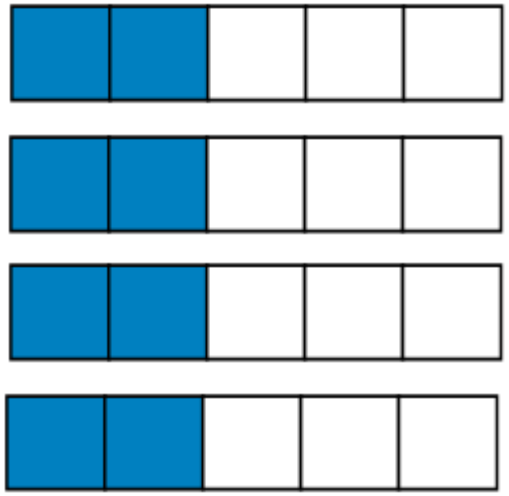
Can you show your working out?

How could you extend the question?

THIRD SPACE LEARNING

Revision: Multiplying fractions by whole numbers and by fractions

1. $\frac{2}{5} \times 4$

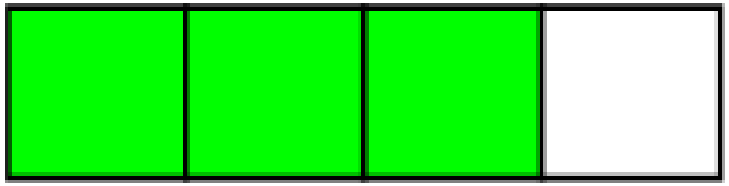


How many 'fifths' can you see?

$\frac{2}{5} \times 4 =$ ☐

2. $\frac{1}{2} \times \frac{3}{4}$

This is the same as saying 'half of $\frac{3}{4}$'



Split this $\frac{3}{4}$ in half. What are the parts called now? ☐

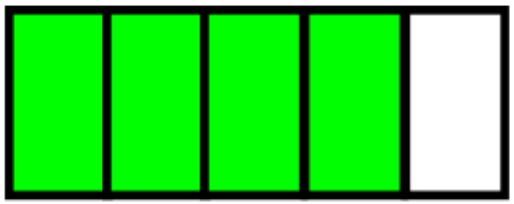
How many of these parts are shaded in one half?

$\frac{1}{2} \times \frac{3}{4} =$ ☐

Revision: Dividing fractions by whole numbers

1. $\frac{4}{5} \div 2$

What does this mean? – can you draw a line on this diagram to represent this?



So, $\frac{4}{5} \div 2 = \frac{\square}{\square} = \frac{\square}{\square}$

What do you notice about the calculation and your answer?

2. $\frac{3}{4} \div 2$

So, $\frac{3}{4} \div 2 = \frac{\square}{\square}$

THIRD SPACE LEARNING

Question 5

Complete

What do you notice?

$\frac{5}{8} \div 4 =$

What do you know?

Can you show your working out?

How could you extend the question?

THIRD SPACE LEARNING

Let's review:

- I can find percentages of an amount
- I can multiply fractions by whole numbers and by fractions
- I can divide fractions by whole numbers

How do you feel about what we've been doing?

Is there something you would like to go over?