



THIRD SPACE
LEARNING



HELLO!

Today we are going to revise ratio

Arithmetic Warm Up



1. $40 \times 70 =$

2. $60 - 42 \div 6 =$

Revision on ratio



Today we are going to revise how to:

-  to write, multiply and divide ratios
-  to solve problems using ratio

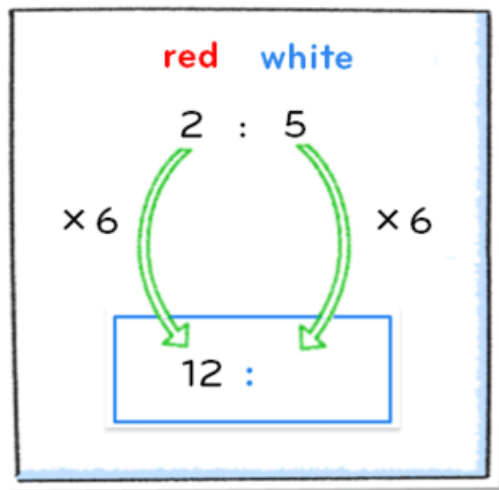
Revision: Ratios using multiplication



The ratio of red beads to white beads is 2 : 5

If there are 12 red beads in this **pattern**, how many white beads will there be?

We solve this using multiplication.



Why can't we
add 10 to each
side?

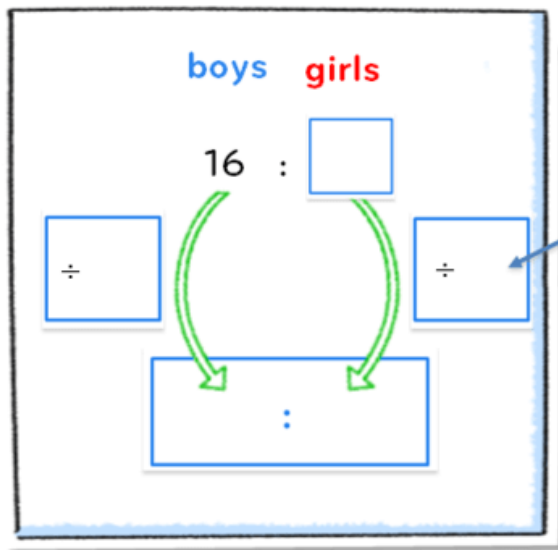
We CAN'T use addition
because we need to
repeat the whole set of
beads to keep the pattern
the same.

Revision: Ratios using division

We can also solve similar problems using division.

There are 28 children in a class.

- There are 16 boys; how many girls are there?
- What is the ratio of boys to girls written in its simplest form?



What is the highest common factor we can divide both the numbers by?



So, the ratio of boys to girls

in this class is

 :

Question 1



Complete

Two numbers are in the ratio 4:5
One of the numbers is 60

There are **two possible values** for the other number.
What are the two possible values?

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Question 2



Complete

David and his friends prepare a picnic.

Each person at the picnic will get:

3 sandwiches

2 bananas

1 packet of crisps



The children pack **45** sandwiches.

How many **bananas** do they pack?

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Question 3



Complete

Tesco sells a pack of 4 crumpets. If they use 5 cups of crumpet mixture to make 2 crumpets, how many full packs of crumpets can be made from 15 cups of crumpet mixture?



1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Let's review:



to write, multiply and divide ratios



to solve problems using ratio

Draw a circle around the smiley face to show how you feel
about what we've just been doing.



CHALLENGE



Complete

If $\frac{1}{3}$ cup of kernels makes 50g of popcorn,
how much popcorn could you make with 4 cups
of kernels?



1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?



Increasing quantities

Daisy's tower is 10cm tall.

Jim's tower is twice as tall as Daisy's.

Kurt's tower is three times as tall as Daisy's.



Daisy cm

Jim × 10 = cm

Kurt × 10 = cm



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Increasing quantities

Kate's skipping rope is 1.5 metres long.

Rose's skipping rope is twice as long.



$\square \times 1.5 \text{ m}$

Jane's skipping rope is four times as long.



$\square \times 1.5 \text{ m}$



Decreasing quantities

Tim's tower is 8cm tall.

Jen's tower is half as tall as Tim's.

Sue's tower is one quarter as tall as Tim's.

Tim 8 cm

Jen $8 \div \square = \square \text{ cm}$

Sue $8 \div \square = \square \text{ cm}$

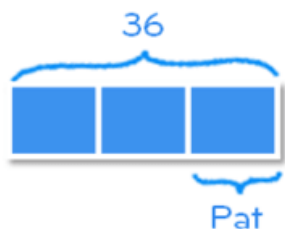


Decreasing quantities



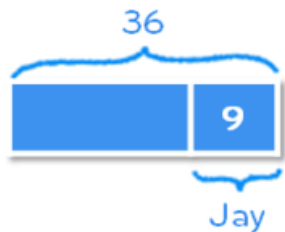
Dinesh has 36 stickers.

Pat has one third as many stickers as Dinesh.



How many stickers does Pat have?

$$36 \div \square = \square$$



as many stickers as Dinesh.