

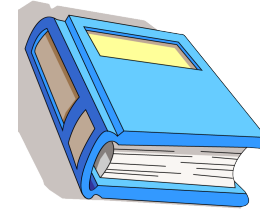
Spring: Block Six

Ratio

Lesson Seven:

Lesson Objective: To solve problems involving ratio and proportion.

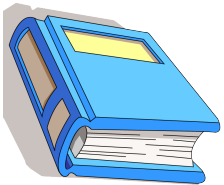
ANCHOR TASK:



Joan has 44 books and she has read 6 of them.

Jason has 8 times more books than Joan.

How many books does Jason have ?



MATHEMATICAL FLUENCY:

Here is part of a recipe to make curry for 6 people:



Recipe for six people.

- 360g of chicken
 - 45g butter
- 2 tbsp curry powder
- 2.7 litres coconut milk.
 - 3 onions.



How much of each ingredient will be needed to make the curry for:

- 3 people
- 9 people
- 1 person

MATHEMATICAL FLUENCY:

Here is part of a recipe to make curry for people:



Recipe for six people.

- of chicken
 - butter
- curry powder
- coconut milk.
 - onions.



How much of each ingredient will be needed to make the curry for:

- people
- people
- person

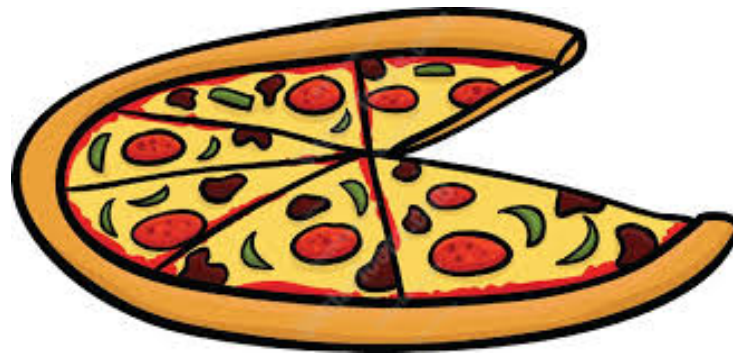
MATHEMATICAL FLUENCY:

To make a tomato pizza topping for a normal pizza, Harry uses 600 g of tomatoes, 240 g of onions and 150 g of mushrooms.

Harry wants enough sauce for a giant pizza, so he uses 1800 g of tomatoes.

What mass of onions will be used?

How many 240 g boxes of mushrooms will he have to buy?



MATHEMATICAL FLUENCY:

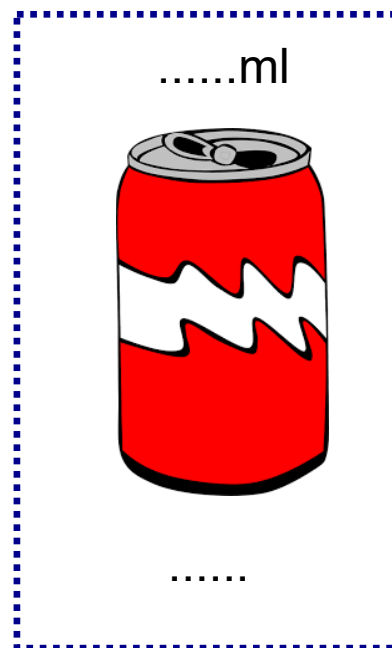
Find the better value cola.



*How can finding 100 ml help you?
Why might this be important in real life?*

MATHEMATICAL FLUENCY:

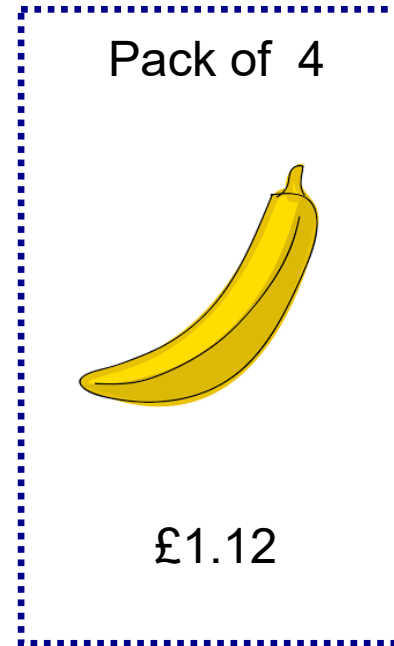
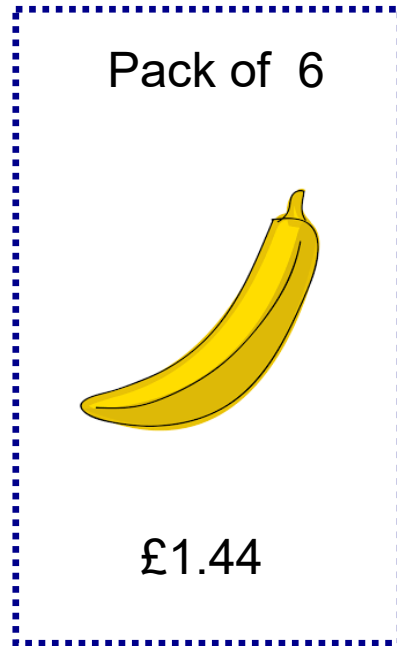
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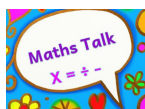
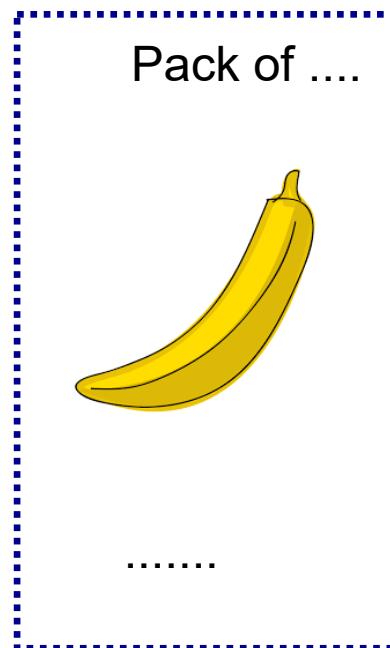
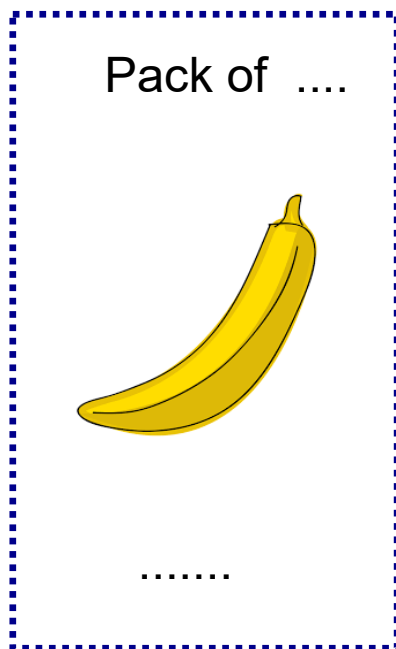
Which pack of bananas offers the better value?



*What method do you have to use here?
Why might this be important in real life?*

MATHEMATICAL FLUENCY:

Which pack of bananas offers the better value?



*What method do you have to use here?
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MATHEMATICAL FLUENCY:

A smoothie contains three times as many oranges as apples.
The combined weight of the oranges and apples is 920 g.

What weight of apples is needed?

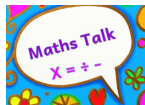
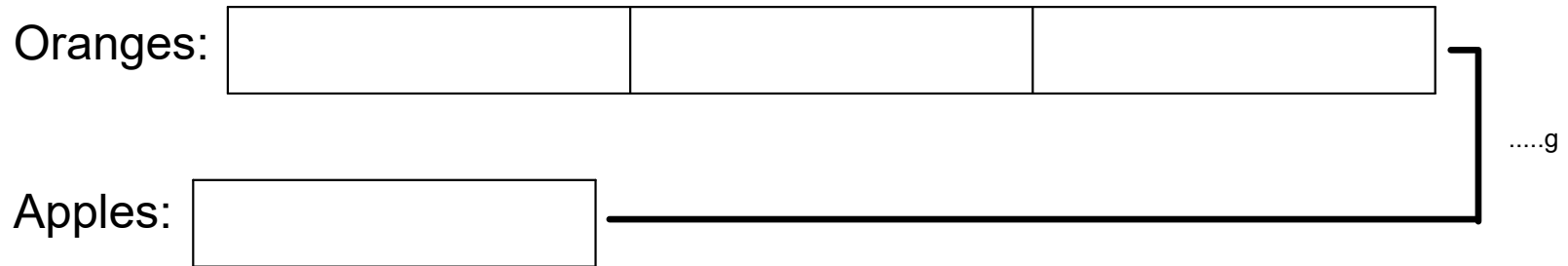


*Can we represent this ratio using a bar model?
What does each part represent?*

MATHEMATICAL FLUENCY:

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The combined weight of the oranges and apples is g.

What weight of apples is needed?



*Can we represent this ratio using a bar model?
What does each part represent?*

REASONING AND PROBLEM SOLVING:

Think back to our pizza problem earlier.
Harry has now made his giant pizza. He says, 'I made three times as much sauce to cover the giant pizza as I do to cover a normal pizza, so the giant pizza is three times as big as the normal pizza.'
Do you agree with Harry?

REASONING AND PROBLEM SOLVING:

Mum is 28 years older than Terry.

Mum is 4 years younger than Dad.

The total age of the three of them is 84 years.

What is Mum's age?

REASONING AND PROBLEM SOLVING:

To make a sponge cake, I need six times as much flour as I do when I'm making a fairy cake.

If a sponge cake needs 270 g of flour, how much does a fairy cake need?