

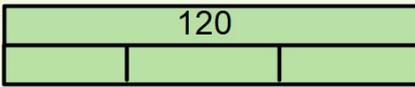
2.3.21 - Quick Maths

A ○ Multiply each of these by 10

30 10 15 25

- $60 + \underline{\quad} = 100$
- $-4, \underline{\quad}, 0, 2, \underline{\quad}, 6$

○ Complete -

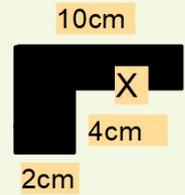


Are there lots of possibilities? Why?

Challenge

- B**
- $\underline{\quad} \times 100 = 2,100$
 - XL =
 - Partition 2,050
 - $1/?$ of 48 = 16
 - $1/2 + 3/4 =$
 - $60 \times \underline{\quad} = 2,400$

Explain - Is x 6cm? Why?

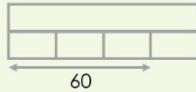


Investigation

Which picture?

Draw lines to match the questions to the bar models:

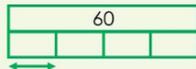
$60 \div 4$



$\frac{3}{4}$ of a number is 60. What is the number?



$\frac{3}{4}$ of 60



I'm thinking of a number. All of the digits add up to 7, there's no zero and the number is ODD.

What are the possibilities?

Flashback 4!

Flashback 4

1) Calculate $\frac{1}{8}$ of 32

2) Subtract $\frac{8}{11}$ from $\frac{10}{11}$

3) What fraction of the shape is shaded?



4) Find the sum of 2,409 and 3,930



Complete this as quickly as you can (verbally or through writing it down).

2.3.21



Learning Objective:

Today I am learning to calculate fractions of amounts.

Key Vocabulary

- fraction
- denominator
- unit
- out of
- non-unit
- parts
- numerator
- equal
- improper fraction

Success Criteria

I will be successful if I can -

- Identify a quantity.
- Use division to find one part of a quantity.
- Find more than one part of an amount/quantity.
- Find fractions of larger amounts and problem solve.

No White Rose Slides today.

Quick Review! - Column Addition

Spot the mistakes!

A	B	C
$\begin{array}{r} 349 \\ + 173 \\ \hline 412 \\ \hline 11 \end{array}$	$\begin{array}{r} 762 \\ + 638 \\ \hline 1300 \\ \hline 11 \end{array}$	$\begin{array}{r} 693 \\ + 243 \\ \hline 8136 \end{array}$

Challenge - Can you choose one and explain the mistake - not just correct it?

Fractions of Amounts - Review

$$\frac{2}{5} \text{ of } 30$$

Remember! - Divide the total by the denominator and then multiply by the numerator!

$$30 \text{ divided by } 5 = 6$$

$$6 \times 2 = 12$$

WHAT FRACTION HAS BEEN COLOURED IN?

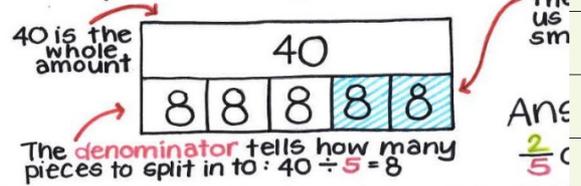


DENOMINATOR
How many had the whole one been split into? → **4**

NUMERATOR
How many pieces have been selected? ← **1**

Fractions of Amount

Example: Find $\frac{2}{5}$ of 40.



40 is the whole amount

The denominator tells how many pieces to split in to: $40 \div 5 = 8$

The numerator tells how many pieces to take

The answer is 12

1. Find of

2. Find of

Fractions of Amounts - Review

Finding Fractions of Amounts

To find the fraction of an amount you need to divide your number by the denominator, then multiply your answer by the numerator.

$$\frac{2}{6} \text{ of } 72 \div$$

72 divided by 6 = 12

Next, I need to multiply my answer by the numerator.

$$12 \times 2 = 24$$

$\frac{2}{6}$ of 72 is therefore 24!

Match Each

$$\frac{2}{6} \text{ of } 36$$

80

$$\frac{4}{5} \text{ of } 40$$

32

$$\frac{4}{10} \text{ of } 200$$

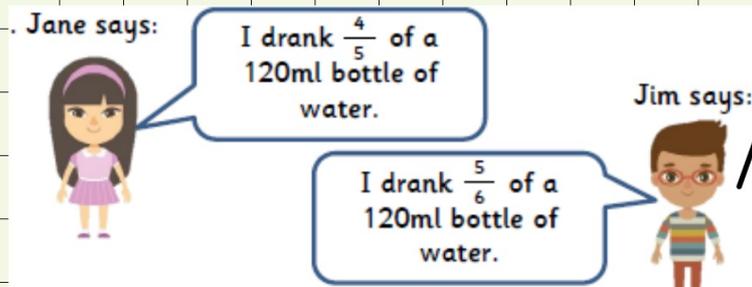
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Fractions of Amounts - Problems

Could you remove the 0 first to work this one out?

Jane says: I drank $\frac{4}{5}$ of a 120ml bottle of water.

Jim says: I drank $\frac{5}{6}$ of a 120ml bottle of water.



_____ drank more water. I know this because I

Fractions of Amounts - Problems

R	Read the question carefully
U	Understand the question
C	Choose the correct method of calculation
S	Solve the problem
A	Answer the question
C	Check your answer

In Year 6 there are 90 children. A third of them wear a jumper with the school badge on it. How many children do NOT wear a school jumper with a badge on it?

Highlight key parts of the question!

$\frac{1}{3}$ of 90 = 30 so $\frac{2}{3}$ did NOT wear a jumper with a badge, which makes 60. $60 + 30 = 90$, which is the total.

Fractions of Amounts - Problems

R	Read the question carefully
U	Understand the question
C	Choose the correct method of calculation
S	Solve the problem
A	Answer the question
C	Check your answer

In Year 3 there are 75 children. A third ($\frac{1}{3}$) of them have brown hair. A third ($\frac{1}{3}$) of them have blond hair. How many children do NOT have brown or blond hair?

Highlight key parts of the question!

I think that the answer is _____ because

Main Task

2.3.21

Fractions of Amounts



Now complete '2.3.21 - Maths Main Task A,B or C.

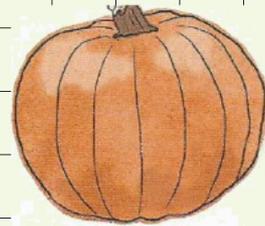
Remember - you can move between the different levels if you wish but you are not expected to complete them all. It is challenge by choice :)

Challenges

What Am I?

- 1. I am one half of a fifth of twenty =*
- 2. I am three less than double one third of 21.*

Mr Smith is growing an enormous pumpkin. He weighs it every week. Last week it weighed 112 kg. This week it is $\frac{4}{7}$ heavier. What does it weigh this week?



True or False?

Try to explain your reasoning

True or False?

To find $\frac{3}{6}$ of a number, divide by 3 and multiply by 6



Convince me.