

3.3.21 - Quick Maths

A ○ Divide each of these by 100

3,000 500 200 100

- $500 + \underline{\hspace{2cm}} = 1,000$
- Count **forwards** 3 from $-5 =$
- Complete -

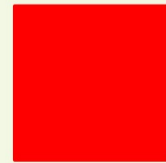
| | | | | |
|----|--|--|--|--|
| | | | | |
| 15 | | | | |

B

- $25\text{m} = \underline{\hspace{2cm}}\text{cm}$
- $1/2 = ?/6$
- $\underline{\hspace{2cm}} \times 10 = 2$
- $\text{DXIV} =$
- $0.4\text{cm} = \underline{\hspace{2cm}}\text{mm?}$

Explain

Why can't a square have a perimeter of 11cm?



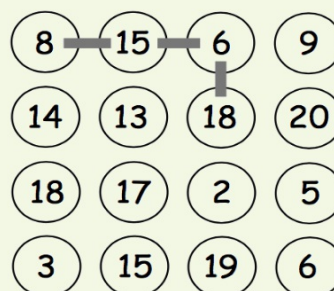
Barvember

- 3** Andy and Cho have some money.
They each buy one of these T-shirts.



They now have a total of £57 left.
If Andy had £60 at first, how much money did Cho have to start with?

Investigation

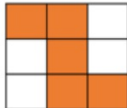


Join any four numbers and find their total.



Flashback 4!

Flashback 4

- 1) Calculate $\frac{3}{8}$ of 32
- 2) Find the difference between $\frac{3}{7}$ and 1
- 3) What fraction of the shape is shaded?

- 4) Multiply 37 by 4



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

Quick Review! - Column Subtraction

Spot the mistakes!

| | | |
|---|---|---|
| 1) | 2) | 3) |
| $\begin{array}{r} 2407 \\ - 2336 \\ \hline 131 \end{array}$ | $\begin{array}{r} 5688 \\ - 103 \\ \hline 4658 \end{array}$ | $\begin{array}{r} 2738 \\ - 655 \\ \hline 2183 \end{array}$ |

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

3.3.21

Learning Objective:

Today I am learning to solve problems involving calculating 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.

Use the White Rose slides/video to support these teaching slides before you complete the main task.



Fractions of Amounts

- Word Problems

Read this part carefully to know what you are calculating.

If Mike had $\frac{4}{5}$ of a bag of 40 sweets and gave **the rest to Steve**, how much would Steve have?

| | |
|----------|--|
| 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 |

$$\frac{1}{5} \text{ of } 40 = 40 \text{ divided by } 5 = 8$$

CHECK

$$\frac{4}{5} = 8 \times 4 \text{ which is } 32. \text{ So } 8 \text{ more would } = 40 \text{ (the whole)}$$

Steve would have 8 sweets as $\frac{5}{5} - \frac{4}{5} = \frac{1}{5}$. $\frac{1}{5}$ of 40 is 8 as I divided the whole by the total parts (denominator). I checked how much Mike would have, which is 32. $32 + 8 =$ the total 40.

Fractions of Amounts

- Missing Numbers

Divide by 2

$$\frac{2}{3} \text{ Of } \underline{\quad\quad} = 22$$



So the total is 33!

When there are missing numbers, you can still work out one part **BUT**

This time divide by the numerator and multiply by the denominator.

If $\frac{2}{5}$ of the number is 14, then $\frac{1}{4}$ is 7. So the total is $7 \times 5 = 35$.

So $\frac{5}{7}$ of 35 is the question here. Try as many as you can.

Fractions of Amounts

- Missing Numbers

| | | |
|---|---|--|
| $\frac{2}{5}$ of my number is 14 Find $\frac{5}{7}$ of my number | $\frac{3}{4}$ of my number is 9 Find $\frac{1}{2}$ of my number | $\frac{3}{10}$ of my number is 18 Find $\frac{4}{5}$ of my number |
| $\frac{2}{9}$ of my number is 12 Find $\frac{1}{2}$ of my number | $\frac{3}{8}$ of my number is 15 Find $\frac{3}{5}$ of my number | $\frac{3}{10}$ of my number is 24 Find $\frac{3}{4}$ of my number |

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So $\frac{5}{7}$ of 35 is the question here. Try as many as you can.

True or False?

Try to explain your reasoning!

True or False? Problem solving - calculate quantities

Rosie has 24 sweets and Dexter has 14 sweets.

Dexter: I have eaten $\frac{4}{7}$ of my sweets

Rosie: I have eaten $\frac{7}{8}$ of my sweets

Rosie has more sweets left than Dexter.

White Rose Maths

Main Task

3.3.21

Fractions of Amounts Problems



Now complete '1.3.21 - Maths Main Task ABC. Gold Extra Challenge - Fractions Investigations

Challenges

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$
How much do they eat altogether?

$$\frac{7}{8} + \frac{3}{8} = \frac{\square}{\square}$$

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ less.
How much do they eat altogether?

$$\frac{7}{8} + \frac{4}{8} = \frac{\square}{\square}$$

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{3}{8}$ less.
How much does Dora eat?

$$\frac{7}{8} - \frac{3}{8} = \frac{\square}{\square}$$

How many ways can you make the statement correct?

$$2 - \frac{\square}{8} = \frac{5}{8} + \frac{\square}{8}$$