

## Fraction of an Amount (1)

### Notes and Guidance

Children find a unit fraction of an amount by dividing an amount into equal groups.

They build on their understanding of division by using place value counters to find fractions of larger quantities including where they need to exchange tens for ones.

### Mathematical Talk

Which operation do we use to find a fraction of an amount?

How many equal groups do we need?

Which part of the fraction tells us this?

How does the bar model help us?

### Varied Fluency

Find  $\frac{1}{5}$  of Eva's marbles. 

I have divided the marbles into  equal groups.

There are  marbles in each group.

$\frac{1}{5}$  of Eva's marbles is  marbles.

Dexter has used a bar model and counters to find  $\frac{1}{4}$  of 12



Use Dexter's method to calculate:

$\frac{1}{6}$  of 12     $\frac{1}{3}$  of 12     $\frac{1}{3}$  of 18     $\frac{1}{9}$  of 18

Amir uses a bar model and place value counters to find one quarter of 84



Use Amir's method to find:

$\frac{1}{3}$  of 36     $\frac{1}{3}$  of 45     $\frac{1}{5}$  of 65

## Fraction of an Amount (2)

### Notes and Guidance

Children need to understand that the denominator of the fraction tells us how many equal parts the whole will be divided into. E.g.  $\frac{1}{3}$  means dividing the whole into 3 equal parts.

They need to understand that the numerator tells them how many parts of the whole there are. E.g.  $\frac{2}{3}$  means dividing the whole into 3 equal parts, then counting the amount in 2 of these parts.

### Mathematical Talk

What does the denominator tell us?

What does the numerator tell us?

What is the same and what is different about two thirds and two fifths?

How many parts is the whole divided into and why?

### Varied Fluency

Find  $\frac{2}{5}$  of Eva's marbles. 

I have divided the marbles into  equal groups.

There are  marbles in each group.

$\frac{2}{5}$  of Eva's marbles is  marbles.

Dexter has used a bar model and counters to find  $\frac{3}{4}$  of 12



Use Dexter's method to calculate:

$\frac{5}{6}$  of 12     $\frac{2}{3}$  of 12     $\frac{2}{3}$  of 18     $\frac{7}{9}$  of 18

Amir uses a bar model and place value counters to find three quarters of 84



Use Amir's method to find:

$\frac{2}{3}$  of 36     $\frac{2}{3}$  of 45     $\frac{3}{5}$  of 65

## Fraction of an Amount (3)

### Notes and Guidance

Children will apply their knowledge and understanding of fractions to solve problems in various contexts.

They recap and build their understanding of different measures.

### Mathematical Talk

Do we need to make an exchange?

Can we represent the problem in a bar model?

When finding  $\frac{5}{6}$ , what will we need to do and why?

What is the whole? How can we represent this problem?

Whitney has 12 chocolates.



On Friday, she ate  $\frac{1}{4}$  of her chocolates and gave one to her mum.

On Saturday, she ate  $\frac{1}{2}$  of her remaining chocolates, and gave one to her brother.

On Sunday, she ate  $\frac{1}{3}$  of her remaining chocolates.

How many chocolates does Whitney have left?

### Varied Fluency

- Ron has £3 and 50p  
He wants to give half of his money to his brother.  
How much would his brother receive?



- A bag of sweets weighs 240 g  
There are 4 children going to the cinema,  
each receives  $\frac{1}{4}$  of the bag.  
What weight of sweets will each child receive?



- Find  $\frac{2}{3}$  of 1 hour.  
Use the clock face to help you.



1 hour =  minutes

$\frac{1}{3}$  of  minutes =

$\frac{2}{3}$  of  minutes =

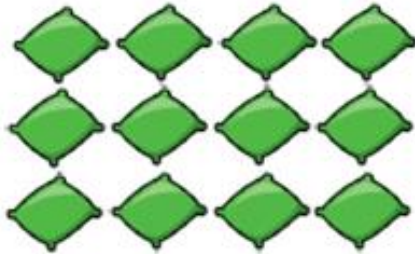
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### Fill in the Blanks

$$\frac{1}{3} \text{ of } 60 = \frac{1}{4} \text{ of } \boxed{\phantom{00}}$$

$$\frac{1}{\boxed{\phantom{00}}} \text{ of } 50 = \frac{1}{5} \text{ of } 25$$

This is  $\frac{3}{4}$  of a set of beanbags.



How many were in the whole set?

Ron has £28

On Friday, he spent  $\frac{1}{4}$  of his money.

On Saturday, he spent  $\frac{2}{3}$  of his remaining money and gave £2 to his sister.

On Sunday, he spent  $\frac{1}{5}$  of his remaining money.

How much money does Ron have left?

What fraction of his original amount is this?

Mo makes 3 rugby shirts.



Each rugby shirt uses 150 cm of material.

He has a 600 cm roll of material.

How much material is left after making the 3 shirts?

What fraction of the original roll is left over?

Alex and Eva share a bottle of juice.

Alex drinks  $\frac{3}{5}$  of the juice.

Eva drinks 200 ml of the juice.



One fifth of the juice is left in the bottle.

How much did Alex drink?

What fraction of the bottle did Eva drink?

What fraction of the drink is left?