### Introducing Fractions of Numbers

twinkl

#### Contents

Finding half

Finding quarter

Finding one third



Finding three quarters

Finding two thirds





To find half of a number, you need to divide the number by two.

## 6 ÷ 2 = 3 so $\frac{1}{2}$ of 6 = 3

Can you find  $\frac{1}{2}$ ?

 $\frac{1}{2}$  of 8 = 4 8 ÷ 2 = 4



So half of 8 is 4



Amina has 4 pencils, she wants to put half of them in her pencil case. How many pencils will she put in her pencil case?

 $\frac{1}{2}$  of 4 = 2  $4 \div 2 = 2$ 

#### So half of 4 is 2 She will put 2 pencils in her pencil case.



Liam has ten sweets, he gives half to his sister. How many sweets will they each get?

#### $\frac{1}{2}$ of 10 = 5 10 ÷ 2 = 5



#### So half of 10 is 5

They will get 5 sweets each.



#### Finding a Quarter $(\frac{1}{4})$

To find a quarter of a number, you need to divide the number by four.

# $8 \div 4 = 2 \quad \text{so} \quad \frac{1}{4} \text{ of } 8 = 2$

#### Finding a Quarter $(\frac{1}{4})$

Can you find  $\frac{1}{4}$ ?



#### So a quarter of 4 is 1



#### Finding a Quarter $\left(\frac{1}{4}\right)$

A cat has 12 fish. It shares them between her four kittens. How many fish will each kitten get.

 $\frac{1}{4}$  of 12 = 3  $12 \div 4 = 3$ 



### So a quarter of 12 is 3 They will get 3 fish each.



We divide by 2 to find half  $(\frac{1}{2})$ , and 4 to find one quarter  $(\frac{1}{4})$ .

What do you think we need to divide by to find one third? Have a look at the one third fraction...



2

You need to divide by 3 to find one third.



To find one third of a number, you need to divide the number by three.

## $6 \div 3 = 2$ so $\frac{1}{3}$ of 6 = 2

Can you find  $\frac{1}{3}$ ?



There are 12 dog biscuits in a packet. Daniel shares them between his three dogs. How many biscuits will each dog get?

 $\frac{1}{3}$  of 12 = 4 12 ÷ 3 = 4

#### So one third of 12 is 4

They will get 4 biscuits each.

#### **Challenge Section**

If you have found it easy to find one half, one quarter and one third, try these next few challenges!



#### Finding Three Quarters $(\frac{3}{4})$

You know how to find one quarter, so now let's look at finding three quarters.

First find one quarter.

There are 8 eggs. If we divide these eggs between 4 baskets, how many eggs will be in each basket?

 $8 \div 4 = 2$  $\frac{1}{4}$  of 8 = 2

#### Finding Three Quarters $\left(\frac{3}{4}\right)$

There will be 2 eggs in each basket.

To find **three** quarters, we want to find out how many eggs there are in **three** baskets, so we can do this:



Three baskets = 3 × 2 eggs

 $3 \times 2 = 6$ 

There are 6 eggs in the 3 baskets.

So three quarters of 8 is 6.  $\frac{3}{4}$  of 8 = 6

#### Finding Two Thirds $(\frac{2}{3})$

You know how to find one third, so now let's look at finding two thirds. First find one third.

There are 6 paintbrushes. If we divide these brushes between 3 jars, how many brushes will be in each jar?

 $6 \div 3 = 2$  $\frac{1}{3}$  of 6 = 2

#### Finding Two Thirds $\left(\frac{2}{3}\right)$

There will be 2 brushes in each jar.

To find **two** thirds, we want to find out how many brushes there are in **two** jars, so we can do this:

Two jars = 2 × 2 brushes

 $2 \times 2 = 4$ 

There are 4 brushes in the 2 jars. So two thirds of 6 is 4.  $\frac{2}{3}$  of 6 = 4

Red	Yellow	Green
Complete your extension from the tray.	Copy and complete the following calculations.	Grab a partner and complete the challenge.
	$^{1}/_{10}$ of 60 = 60 ÷ 10 =	
	<sup>1</sup> / <sub>8</sub> of 40 = 40 ÷ =	
	<sup>1</sup> / <sub>5</sub> of 45 = ÷ =	
	<sup>1</sup> / <sub>9</sub> of 36 = ÷ =	
	<sup>1</sup> / <sub>8</sub> of 56 = ÷ = <sup>1</sup> / <sub>6</sub> of 36 = 36 ÷ =	
	<sup>1</sup> / <sub>7</sub> of 42 = ÷ =	
	¼ of 32 = ÷ =	
	<sup>1</sup> / <sub>7</sub> of 70 = ÷ =	