

## Finding half and a quarter of an amount

### REHEARSE

Use 1LS32\_step4\_finding\_quarters\_of\_an\_amount to find  $\frac{1}{4}$  and complete the recording below.

8 cubes			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
2	2	2	2

8 shared into 4 equal groups.  
There are 2 in each group.  
 $\frac{1}{4}$  of 8 is 2.

20 cubes			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
5	5	5	5

20 shared into 4 equal groups.  
There are 5 in each group.  
 $\frac{1}{4}$  of 20 is 5.

16 cubes			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
4	4	4	4

16 shared into 4 equal groups.  
There are 4 in each group.  
 $\frac{1}{4}$  of 16 is 4.

### APPLY AND EXPLORE

Use the models to build the fractions and complete the sentences.

14	
7	7

The whole is 14.  
It has been divided into 2 equal parts.  
There are 7 in each group.  
 $\frac{1}{2}$  of 14 is 7.

20			
5	5	5	5

The whole is 20.  
It has been divided into 4 equal parts.  
There are 5 in each group.  
 $\frac{1}{4}$  of 20 is 5.

28			
7	7	7	7

The whole is 28.  
It has been divided into 4 equal parts.  
There are 7 in each group.  
 $\frac{1}{4}$  of 28 is 7.

20	
10	10

The whole is 20.  
It has been divided into 2 equal parts.  
There are 10 in each group.  
 $\frac{1}{2}$  of 20 is 10.

## APPLY AND EXPLORE

Look at the models, which have 20 in them. What do you notice?

Half of 20 is 10 and half of 10 is 5. This means that a quarter of 20 is 5.

Look at the models which have 7 in them. What do you notice?

2 lots of 7 are 14 and 4 lots of 7 are 28. Double 14 is also 28.

Half of 28 is 14 and half of 14 is 7 so a quarter of 28 is 7.

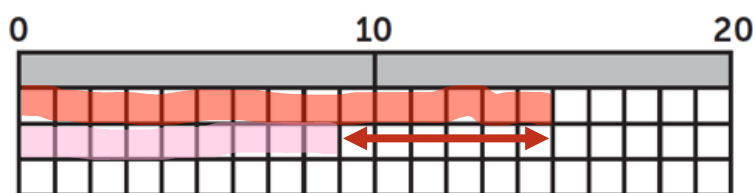
Can you draw two models of your own that are connected? Any two relevant models that show the relationship between half and a quarter of the same whole.

## RETRIEVE

Can I still find the difference?

Complete the model to show the difference between 15 and 9.

What is the difference? 6



## REHEARSE

Draw your own models to show the following. Any relevant models showing details provided. Example below.

The whole is 18.

It has been divided into 2 equal parts.

There are 9 in each group.

$\frac{1}{2}$  of 18 is 9.

18 cubes	
$\frac{1}{2}$	$\frac{1}{2}$
9	9

The whole is 24.

It has been divided into 4 equal parts.

There are 6 in each group.

$\frac{1}{4}$  of 24 is 6.

24 cubes			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
6	6	6	6

## APPLY AND EXPLORE

Porchia found  $\frac{1}{2}$  of 32 was 16.

What would  $\frac{1}{4}$  of 32 be?

How do you know?

$\frac{1}{4}$  of 32 = 8

Half of 16 is 8 and 32 divided into 4 equal groups is 8.