

1&2LS20 Y2: Step 6

Rehearse and Reason – answers

Finding $\frac{1}{3}$ and $\frac{1}{4}$ of amounts linked to sharing

REHEARSE

Complete the models to show how to find thirds.

15		
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
5	5	5

15 shared into 3 equal groups.
There are 5 in each group.
 $\frac{1}{3}$ of 15 is 5.

What is a third of 60?

60		
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
20	20	20

60 shared into 3 equal groups.
There are 20 in each group.
 $\frac{1}{3}$ of 60 is 20.

Calculate $\frac{1}{3}$ of 21.

21		
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
7	7	7

21 shared into 3 equal groups.
There are 7 in each group.
 $\frac{1}{3}$ of 21 is 7.

APPLY AND EXPLORE

whole

divided

equal

group

$\frac{1}{3}$

$\frac{1}{4}$

Use the word bank to explain what is the same and different in the models below.

12		
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
4	4	4

12			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
3	3	3	3

Both wholes are 12.
Both have been divided into equal parts.

The number of equal parts is different.

12 divided into 3 equal groups is 4.
 $\frac{1}{3}$ of 12 = 4

12 divided into 4 equal groups is 3.
 $\frac{1}{4}$ of 12 = 3

REHEARSE

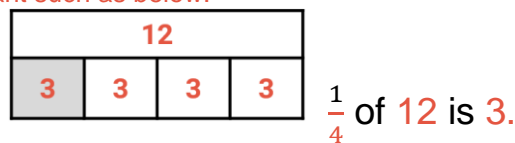
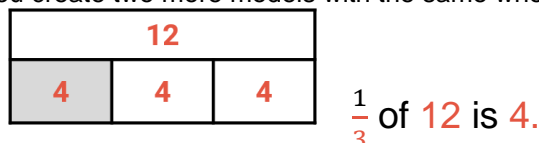
Sort the cards into two groups: showing thirds and showing quarters.
Complete the models to show the fractions calculated.

Showing thirds	<div> <div>15</div> <div>5 5 5</div> <div>$\frac{1}{3}$ of 15 is 5.</div> </div>	<div> <div>18</div> <div>6 6 6</div> <div>$\frac{1}{3}$ of 18 is 6.</div> </div>
	<div> <div>24</div> <div>8 8 8</div> <div>$\frac{1}{3}$ of 24 is 8.</div> </div>	<div> <div>18</div> <div>6 6 6</div> <div>$\frac{1}{3}$ of 18 is 6.</div> </div>
Showing quarters	<div> <div>24</div> <div>6 6 6 6</div> <div>$\frac{1}{4}$ of 24 is 6.</div> </div>	<div> <div>20</div> <div>5 5 5 5</div> <div>$\frac{1}{4}$ of 20 is 5.</div> </div>

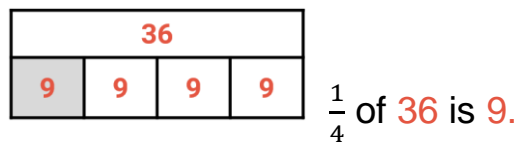
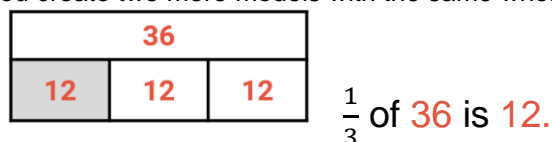
APPLY AND EXPLORE

Look at the models already completed. Do any of them have the same whole? Yes – 24.

Can you create two more models with the same whole? Any relevant such as below.



Can you create two more models with the same whole?



What is important about the whole? It must be able to be put into 3 equal groups and 4 equal groups (be divisible by 3 and 4).

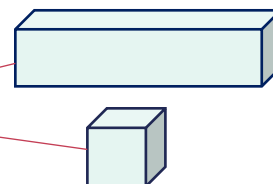
RETRIEVE

Can I still name and describe 3-D shapes?

Complete the sentences and match each to the correct image.

A cube has 6 faces, 8 vertices and 12 edges.

A cuboid has 6 faces, 8 vertices and 12 edges.



APPLY AND EXPLORE

Can you find $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ of 20 strawberries?

Prove it.

Any model that proves that 20 can be put into 2 equal groups and 4 equal groups but not 3 equal groups.



APPLY AND EXPLORE

Are there any numbers less than 20 that can be halved, quartered and put into thirds? 12