

# RECALL - BAR MODEL TO DIVIDE

Fifth means dividing by five.

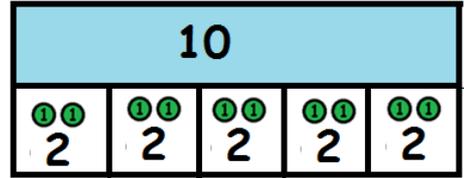
Colour in one fifth.

$\frac{1}{5}$

The whole is \_\_\_\_.

It is shared between \_\_\_\_ boxes.

\_\_ ÷ 5 = \_\_



Seventh means dividing by seven.

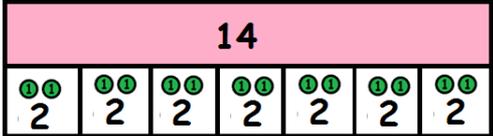
Colour in one seventh.

$\frac{1}{7}$

The whole is \_\_\_\_.

It is shared between \_\_\_\_ boxes.

\_\_ ÷ 7 = \_\_



Eighth means dividing by eight.

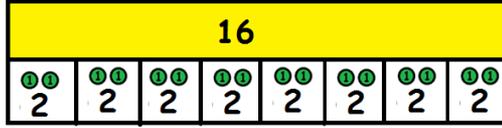
Colour in one eighth.

$\frac{1}{8}$

The whole is \_\_\_\_.

It is shared between \_\_\_\_ boxes.

\_\_ ÷ 8 = \_\_



Ninth means dividing by nine.

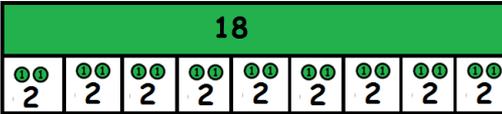
Colour in one ninth.

$\frac{1}{9}$

The whole is \_\_\_\_.

It is shared between \_\_\_\_ boxes.

\_\_ ÷ 9 = \_\_



# LO: I CAN FIND FRACTIONS FOR A SET OF OBJECTS (DIFFERENT DENOMINATORS).

Page

## Success Criteria

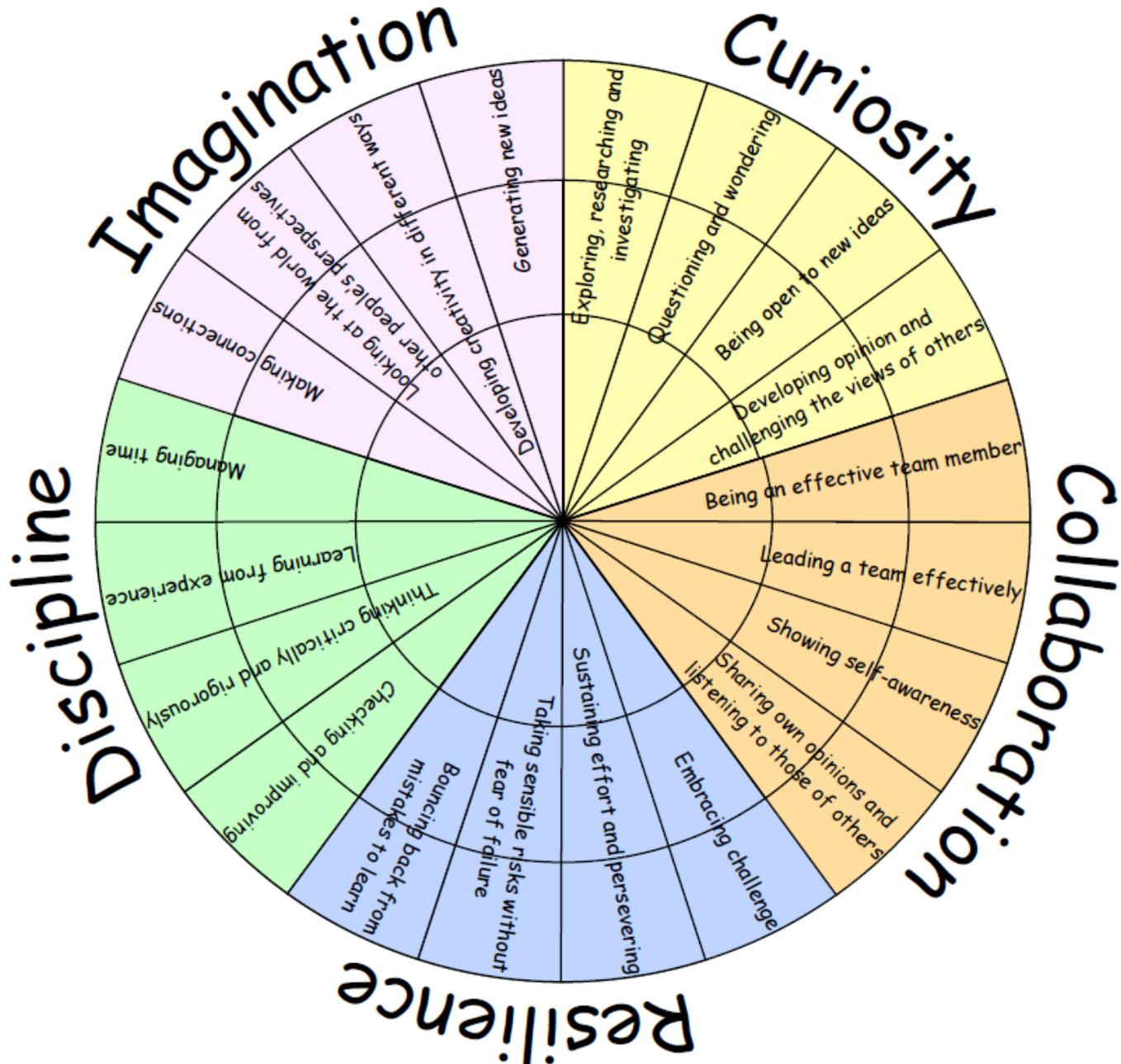
**Some will even** solve a variety of reasoning problems.

**Some will** find totals when the numerator changes for more than 1.

**Most will** find fifths, sevenths, eighths and ninths of simple totals.

**All will** find a fifths and sixths of simple totals (with equipment).

# LEARNING HABITS?



# GUIDED PRACTICE

Liam opens his dinosaur lunchbox.



Inside he finds:

- $\frac{1}{5}$  of a punnet of raspberries 
- $\frac{1}{6}$  of a bag of sugar snap peas. 
- $\frac{1}{7}$  of a pomegranate's seeds. 
- $\frac{1}{8}$  a box of raisins. 

There are 35 raspberries.

There are 36 sugar snap peas.

There are 42 pomegranate seeds.

There are 40 raisins in a box.

How many of each item does he have in his lunchbox?

## 3 BEFORE ME



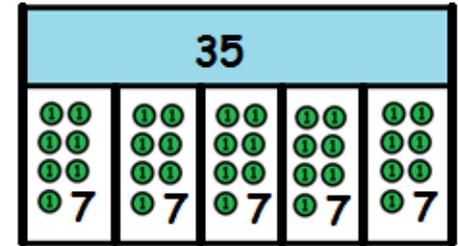
Denominator = how many to share by.

Numerator = how many boxes to count.

To split the raspberries into fifths, I need to share them equally into five groups. (5 is the denominator).

Liam has one fifth, so I count 1 of the 5 boxes.

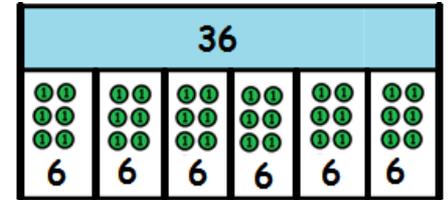
$\frac{1}{5}$  of 35 raspberries is 7. 



To split the sugar snap peas into sixths, I need to share them equally into six groups. (6 is the denominator).

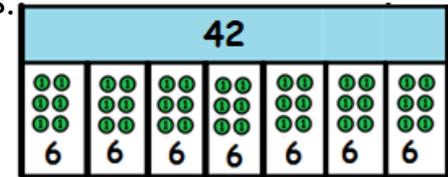
Liam has one sixth, so I count 1 of the 6 boxes.

$\frac{1}{6}$  of 36 sugar snap peas is 6. 



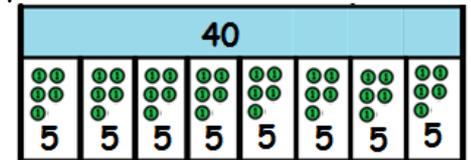
I share the seeds equally into 7 groups. Liam has one seventh so I count 1 of the 7 boxes.

$\frac{1}{7}$  of 42 sugar snap peas is 6. 



I share the raisins equally into 8 groups. Liam has one eighth so I count 1 of the 8 boxes.

$\frac{1}{8}$  of 40 raisins is 5. 



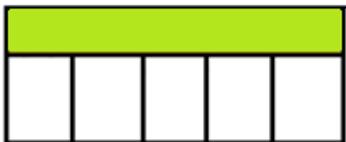
Remember, if the numerator (top number) is more than one, you will need to count more than one box.

# INTELLIGENT PRACTICE

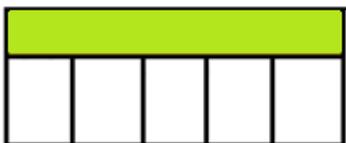
Share the total equally using units. ①



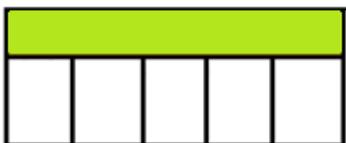
$\frac{1}{5}$  of 15



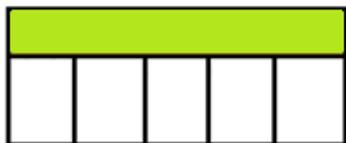
$\frac{1}{5}$  of 20



$\frac{1}{5}$  of 25



$\frac{1}{5}$  of 30

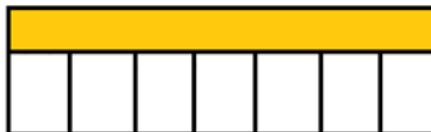


Look at the sequence, what pattern do you notice? What will come next?

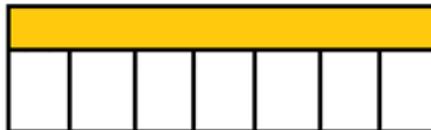
Share the total equally using units.



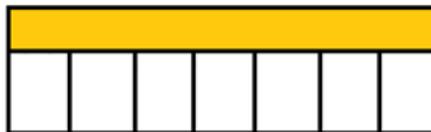
$\frac{1}{7}$  of 7



$\frac{1}{7}$  of 14



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



$\frac{1}{7}$  of 28



Look at the sequence, what pattern do you notice? What will be next?

In your maths book, solve these questions using a bar model.

$\frac{1}{8}$  of 8

$\frac{1}{8}$  of 16

$\frac{1}{8}$  of 24



These fractions have a numerator greater than 1. **DO NOT** redraw the bar model. Use the data in chilli 1 and 2 to help you solve them.



- Two fifths of 25
- Three sevenths of 21

Explain how you solved it.

## 3 BEFORE ME

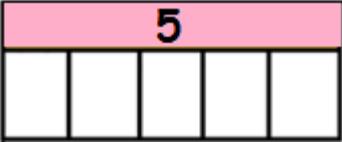


Denominator = how many to share by.  
Numerator = how many boxes to count.

# DIVE DEEPER 1

1 Five cheeky monkeys are jumping on a bed.  
 $\frac{1}{5}$  fell off and bumped their head.

Solve it using a bar model.

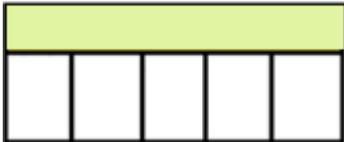



\_\_\_\_\_ monkey/s banged their head.

2 Ten green bottles are standing on a wall.  
 $\frac{1}{5}$  accidentally fall.



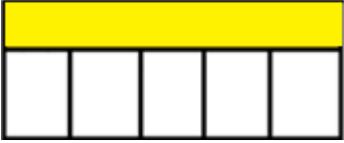
Solve it on the bar model.



\_\_\_\_\_ green bottle/s accidentally fall.

3 Twenty little ducks went out one day.  
 $\frac{1}{5}$  went over the hill and far away.

Solve it on the bar model.




\_\_\_\_\_ ducks went over the hill and far away.

4 Melissa has 14 Pringles left. She gives one seventh of them to her little sister.



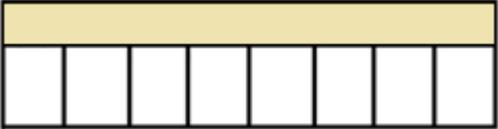

\_\_\_\_\_ Pringles to her sister.

5 There are 21 people on a bus.  
 One seventh of the people get off at the next stop.




\_\_\_\_\_ people get off the bus at the next stop.

6 A farmer has 16 chickens on his farm.  
 One eighth of them laid an egg on Monday.




\_\_\_\_\_ chickens laid an egg on Monday.

Write the calculation.

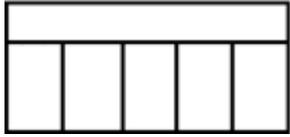
÷  =

# DIVE DEEPER 2

1 Here are 10 strawberries.  
Four fifths of them go mouldy.



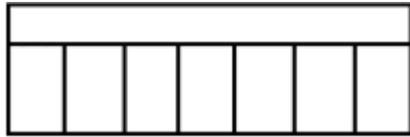
$\frac{4}{5}$  of 10 strawberries is \_\_\_\_\_.



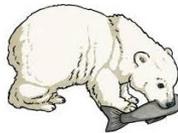
2 I build 14 sandcastles on the beach. A large wave comes and destroys three sevenths of them.



$\frac{3}{7}$  of 14 sandcastles is \_\_\_\_\_.



3 A polar bear catches 24 fish.  
It eats six eighths of them.



$\frac{6}{8}$  of 24 fish is \_\_\_\_\_.



4 Which money box would you rather have?



The lady bird money box has £35 inside.

You can take out  $\frac{3}{5}$ . This is £\_\_\_\_\_.



The rocket money box has £18 inside.

You can take out  $\frac{5}{6}$ . This is £\_\_\_\_\_.



The unicorn money box has £28 inside.

You can take out  $\frac{4}{7}$ . This is £\_\_\_\_\_.



The train money box has £24 inside.

You can take out  $\frac{4}{8}$ . This is £\_\_\_\_\_.

5 In 2019, I sprinkled 350 grass seeds  
on my garden and  $\frac{6}{7}$  grew.

In 2020, I sprinkled 450 grass seeds on  
My garden and  $\frac{4}{5}$  grew.



Which year was most successful at growing grass?  
What is the difference (compare the two totals).

