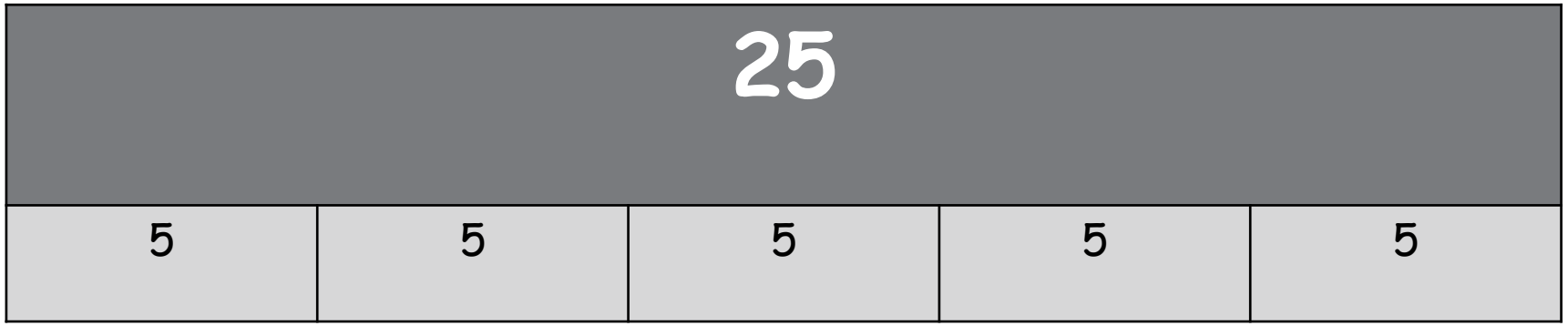
Year 4 Maths, 20/1/21

RECALL- WHAT DOES THIS BAR MODEL SHOW?



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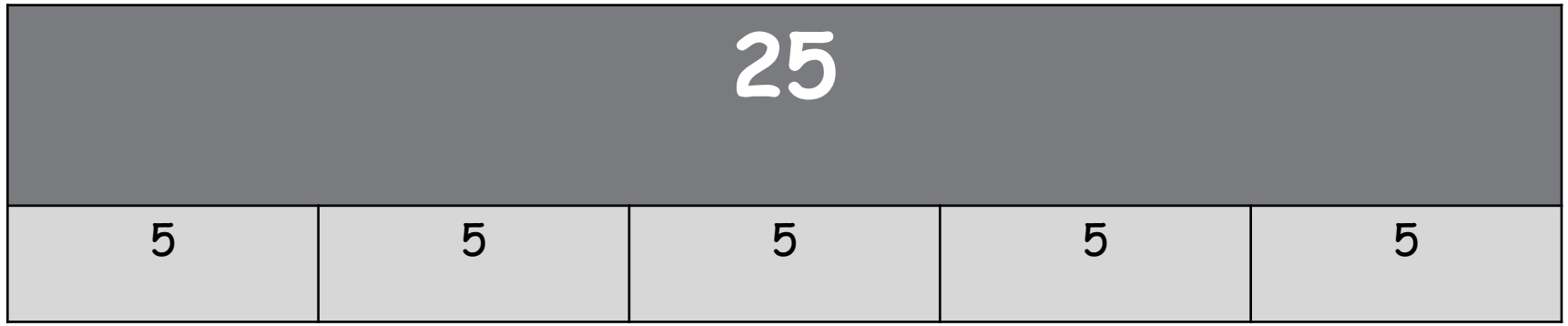


This bar model shows that 25 has been split into 5 equal parts.
Each of the 5 parts equals 5.
25 ÷ 5 = 5

Another way of saying this is that one fifth of 25 equals 5.
1/5 of 25 = 5

L.O. TO RECOGNIZE AND WORK OUT NON-UNIT FRACTIONS.

A non-unit fraction is a fraction that has a numerator greater than 1.

Here are some examples:

$\frac{3}{9}$ $\frac{4}{8}$ $\frac{12}{16}$

SOME WILL EVEN fill in the missing gaps of non-unit fractions of numbers

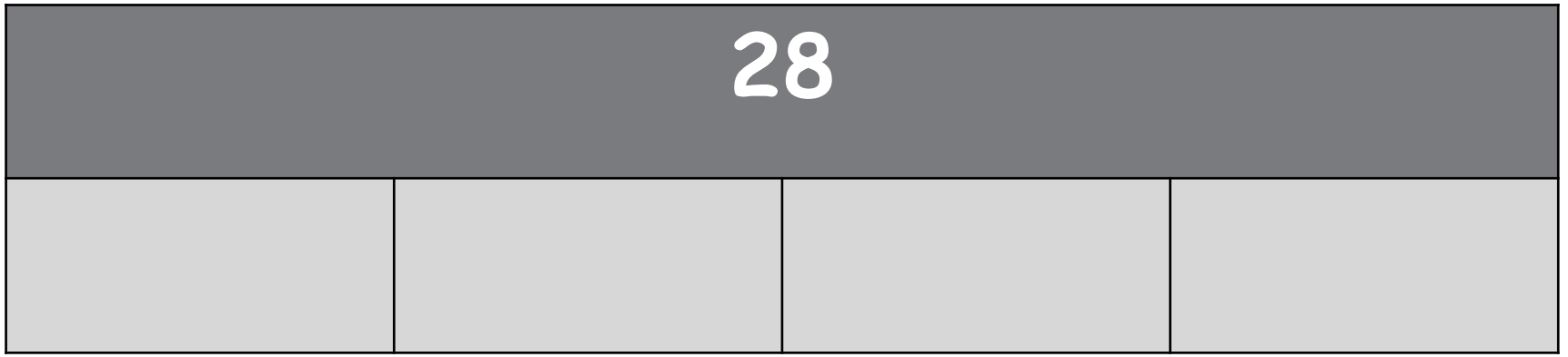
SOME will use short division to work out non-unit fractions of bigger numbers

MOST will use bar models to show how to find various non-unit fractions

ALL will find non-unit fractions of shapes

To find $\frac{3}{4}$ of 28, we first need to find ONE quarter of 28.

Three quarters

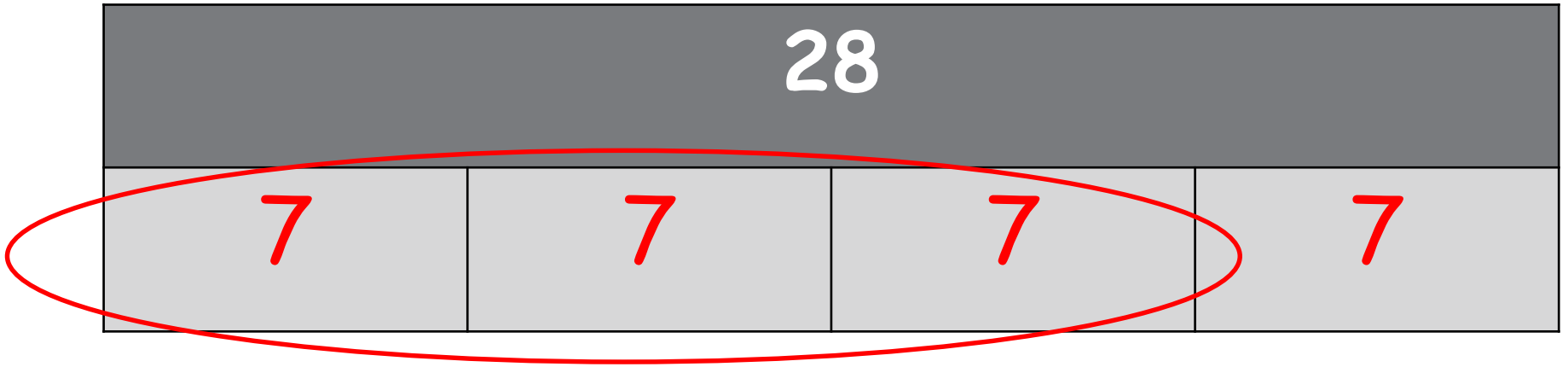


Once we have found one quarter, we can multiply by three to find three quarters.

Can we write the process as a number sentence?

GUIDED PRACTICE

To find $\frac{3}{4}$ of 28, we first need to find ONE quarter of 28.



I can find one quarter of 28 by dividing it by 4.
28 ÷ 4 = 7
So one quarter of 28 is 7.

Three quarters of 28 =

3 x 7 = 21

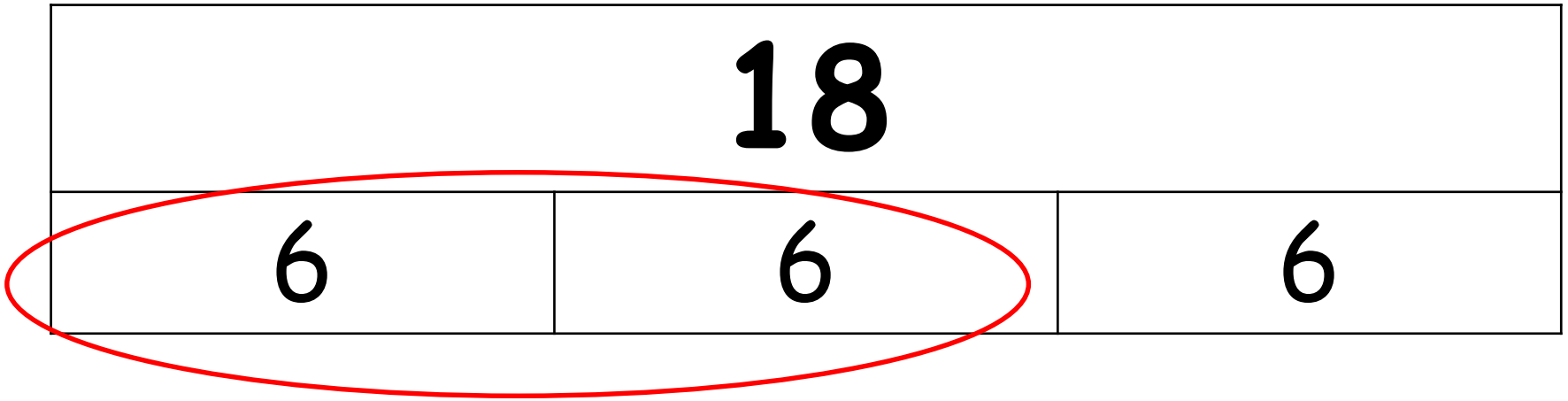
Three quarters of 28 is 21

GUIDED PRACTICE

How could we use a bar model to represent two thirds of 18?

GUIDED PRACTICE

How could we use a bar model to represent two thirds of 18?

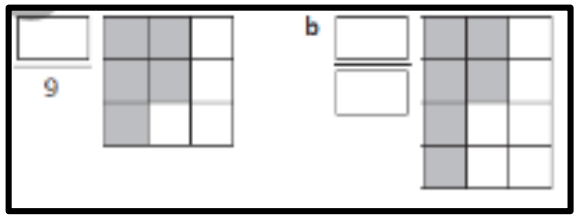


GUIDED PRACTICE

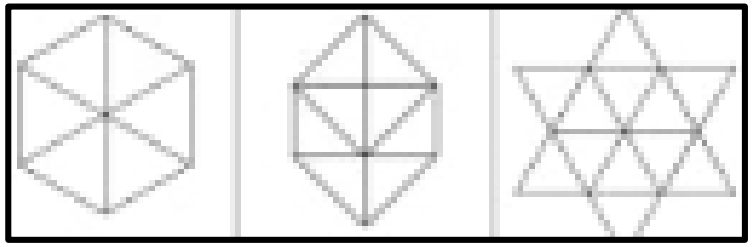
INTELLIGENT PRACTICE

ONE CHILLI

What fraction of each shape has been shaded?



Now shade:



2/6 3/8 5/12

TWO CHILLI

A: 2/4 of 12 = ?

B: 2/3 of 9 = ?

C: $\frac{3}{4}$ of 28 = ?

D: 4/6 of 18 = ?

THREE CHILLI

A: 3/8 of 96 = ?

B: 2/5 of 150 = ?

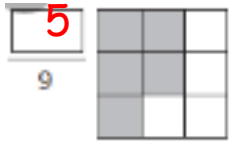
C: 4/9 of 63 = ?

D: 11/12 of 108 = ?

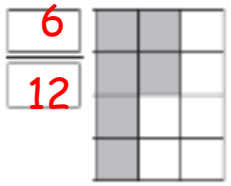
INTELLIGENT PRACTICE ANSWERS

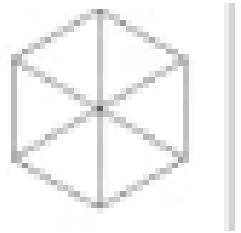
ONE CHILLI

What fraction of each shape has been shaded?

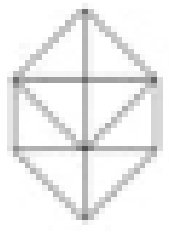


b

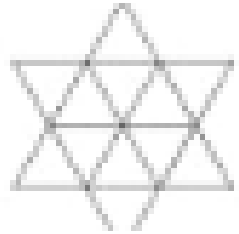




Any 2 bits shaded



Any 3 bits shaded



Any 5 bits shaded

TWO CHILLI

A: 2/4 of 12 6

B: 2/3 of 9 6

C: $\frac{3}{4}$ of 28 21

D: 4/6 of 18 12

THREE CHILLI
Calculate:

A: 3/8 of 96 36

B: 2/5 of 150 60

C: 4/9 of 63 28

D: 11/12 of 108 99

DIVE DEEPER

?/3 of 18 = 12

?/4 of 32 = 24

4/6 of ? = 28

5/8 of ? = 45

True or False?

To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8

Convince me

How many ways can you make the statement correct?

$\frac{2}{9}$ of 81 > $\frac{3}{4}$ of $\square$

DIVE DEEPER ANSWERS

2/3 of 18 = 12

3/4 of 32 = 24

4/6 of 42 = 28

5/8 of 72 = 45

True or False?

To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8

Convince me

False. Divide the whole by 8 to find one part and then multiply your answer by three because we want to find three parts.

How many ways can you make the statement correct?

$\frac{2}{9}$ of 81 > $\frac{3}{4}$ of $\square$

20
16
12
8
4

Self assessment – how did you do?

SOME WILL EVEN fill in the missing gaps of non-unit fractions of numbers

Did you get Dive Deeper 1 right?

SOME will use short division to work out non-unit fractions of bigger numbers

Did you use short division when you worked out any of your answers?

MOST will use bar models to show how to find various non-unit fractions

Did you draw bar models like in the examples?

ALL will find non-unit fractions of shapes

Did you get the 1 chilli questions right?