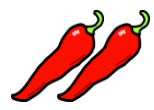


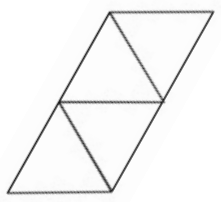
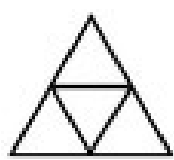
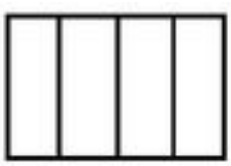
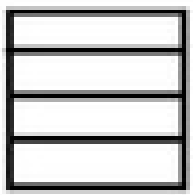
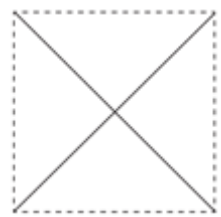
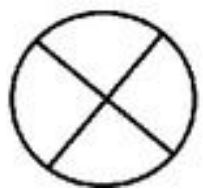
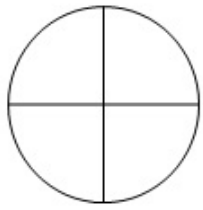
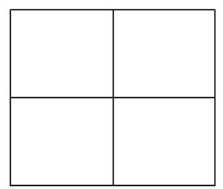
RECALL – QUARTER



Quarter means to share into four groups.



Colour in one quarter of these shapes.



Quarter of 4 is

$4 \div 4 = \underline{\quad}$

Quarter of 8 is

$8 \div 4 = \underline{\quad}$

Quarter of 12 is

$12 \div 4 = \underline{\quad}$

Quarter of 16 is

$\underline{\quad} \div 4 = \underline{\quad}$

Quarter of 20 is

$\underline{\quad} \div 4 = \underline{\quad}$

Quarter these 2-digit numbers. Share the **tens** first and then the **units**.

44			

48			

84			

88			

"You can not quarter an odd number."

True or false?

Investigate.



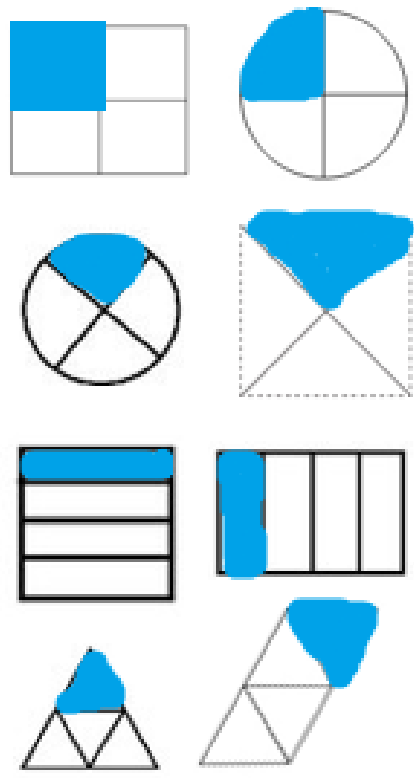
RECALL – QUARTER



Quarter means to share into four groups.



Colour in one quarter of these shapes.



Quarter of 4 is

$4 \div 4 = 1$

Quarter of 8 is

$8 \div 4 = 2$

Quarter of 12 is

$12 \div 4 = 3$

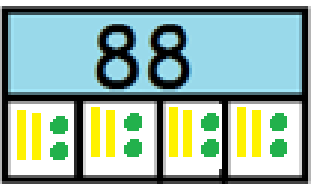
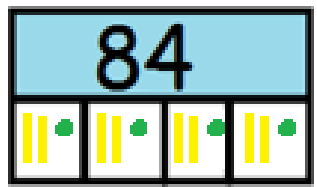
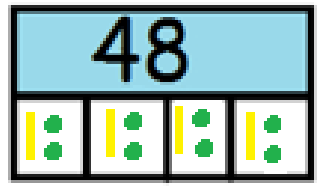
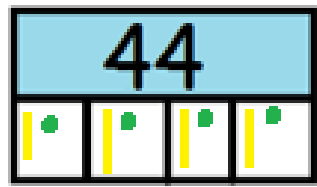
Quarter of 16 is

$16 \div 4 = 4$

Quarter of 20 is

$20 \div 4 = 5$

Quarter these 2-digit numbers. Share the tens first and then the units.



"You can not quarter an odd number."

True or false?

Investigate.



**LO: I CAN DIVIDE A 2 DIGIT
NUMBER BY A 1 DIGIT NUMBER.**

Page

MODELLED EXAMPLE

Four friends release lanterns onto the river. There are 48 lanterns on the river.



How many did they release each?

$$48 \div 4 = \square$$

A quarter of 48 is _____

Act out the problems with equipment.



Working it out - bar model

First, make 48 on a place value mat. You will need 4 tens and 8 ones.

Hundreds	Tens	Ones
	10 10 10 10	1 1 1 1 1 1 1 1

Second, divide the 4 tens into 4 equal group. This will make four groups of 10.

Then, divide the 8 units into 4 equal groups. This will make 4 groups of 2.

Hundreds	Tens	Ones
	10	1 1
	10	1 1
	10	1 1
	10	1 1

$$48 \div 4 = 12$$

A quarter of 48 is 12.

INTELLIGENT PRACTICE

Use the place value mat and counters to quarter these numbers.

10

1



Split your place value mat into 4 groups first.

Hundreds	Tens	Ones

Use cubes to solve these.



$$4 \div 4 = \square$$

$$8 \div 4 = \square$$

$$12 \div 4 = \square$$

$$16 \div 4 = \square$$

$$20 \div 4 = \square$$



$$40 \div 4 = \square$$

$$44 \div 4 = \square$$

$$48 \div 4 = \square$$

$$80 \div 4 = \square$$

$$84 \div 4 = \square$$

$$88 \div 4 = \square$$



$$404 \div 4 = \square$$

$$448 \div 4 = \square$$

$$480 \div 4 = \square$$

$$844 \div 4 = \square$$

$$880 \div 4 = \square$$

Explain how you solved questions in Chilli 2 and 3.

First I ...
Then I ...



INTELLIGENT PRACTICE

Use the place value mat and counters to quarter these numbers.

10

1



Split your place value mat into 4 groups first.

Hundreds	Tens	Ones

Use cubes to solve these.



$$4 \div 4 = 1$$

$$8 \div 4 = 2$$

$$12 \div 4 = 3$$

$$16 \div 4 = 4$$

$$20 \div 4 = 5$$



$$40 \div 4 = 10$$

$$44 \div 4 = 11$$

$$48 \div 4 = 12$$

$$80 \div 4 = 20$$

$$84 \div 4 = 21$$

$$88 \div 4 = 22$$



$$404 \div 4 = 101$$

$$448 \div 4 = 112$$

$$480 \div 4 = 120$$

$$844 \div 4 = 211$$

$$880 \div 4 = 220$$

Explain how you solved questions in Chilli 2 and 3.

First I ...
Then I ...




DIVE DEEPER

1 Jason has 40 ducks. He shares them equally between 4 ponds.
How many go into each pond?

Make 40 on your board and share into four.

Draw it on this board.


Hundreds	Tens	Ones



2 A pack of Skittles has 44 sweets and I quarter them.

First I make 44 using ___ tens and ___ ones.
Next I share them into ___ groups.

A quarter of 44 is .




3 There are 80 caterpillars in a garden.

A quarter of them make a cocoon to become a butterfly.

How many make a cocoon?

Write the number sentence. ___ ÷ 4 = ___

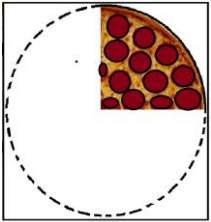



4 Sophie orders a pizza and takes a slice.
On her quarter, she has 13 pieces of peperoni.

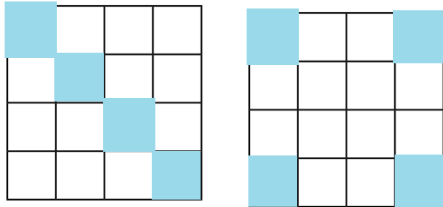
a How many pieces are on the whole pizza?

b Is Sophie true or false? Explain your answer.


To solve the total, I needed to do $13 \div 4$.

5 **Problem solving.**
A 4 by 4 grid has a total of 16 squares. A quarter of 16 is 4. How many different ways can you represent a quarter with this shape? Two have been done for you.



Draw your ideas neatly in your book.




DIVE DEEPER

1 Jason has 40 ducks. He shares them equally between 4 ponds.
How many go into each pond? 10

Make 40 on your board and share into four.

Draw it on this board.


Tens	Tens	Ones
	●	
	●	
	●	
	●	



2 A pack of Skittles has 44 sweets and I quarter them.

First I make 44 using 4 tens and 4 ones.
Next I share them into 4 groups.



A quarter of 44 is 11.



3 There are 80 caterpillars in a garden.
A quarter of them make a cocoon to become a butterfly.

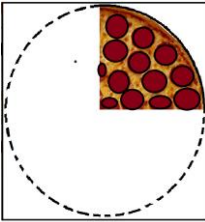
How many make a cocoon? 20


Write the number sentence. $80 \div 4 = 20$

4 Sophie orders a pizza and takes a slice.
On her quarter, she has 13 pieces of peperoni.

a How many pieces are on the whole pizza? 52



 To solve the total, I needed to do $13 \div 4$.


B Is Sophie true or false? Explain your answer. **False. She needs to do 13×4 .**

5 **Problem solving.**
A 4 by 4 grid has a total of 16 squares. A quarter of 16 is 4. How many different ways can you represent a quarter with this shape? Two have been done for you.

■			
	■		
		■	
			■

■			
			■
■			

Draw your ideas neatly in your book.



DIVE DEEPER 2

1 Compare the statements using $<$, $>$ or $=$

$$48 \div 4 \bigcirc 36 \div 3$$

$$52 \div 4 \bigcirc 42 \div 3$$

$$60 \div 3 \bigcirc 60 \div 4$$

2 Alex uses place value counters to help her calculate $63 \div 3$



Tens	Ones
10	10 1
10	10 1
10	10 1

She gets an answer of 12
Is she correct?



Mr Price is going back home to Wales to see his family. His journey is 260 miles. He stops to get a drink at the quarter point in his journey. How far has he driven?
How many miles has he got left to drive?

DIVE DEEPER 2

1 Compare the statements using $<$, $>$ or $=$

$$48 \div 4 \bigcirc 36 \div 3$$

$$52 \div 4 \bigcirc 42 \div 3$$

$$60 \div 3 \bigcirc 60 \div 4$$

2 Alex uses place value counters to help her calculate $63 \div 3$



Tens	Ones
10	10 1
10	10 1
10	10 1

She gets an answer of 12.
Is she correct?

Alex is incorrect as she has placed some of her tens in the wrong column. The answer should be 21.



Mr Price is going back home to Wales to see his family. His journey is 260 miles. He stops to get a drink at the quarter point in his journey. How far has he driven?
How many miles has he got left to drive?

A half of 260 is 130.
A half of 130 is 65.

Mr Price stops after 65 miles.
He has 195 miles left to drive.