

What could go here?



140

- Ten more...
- Ten less ...
- One more ...
- One less...
- 100 more
- 100 less

What do you notice?

$$2 \times 100 = 200$$
 $3 \times 100 = 300$
 $4 \times 100 = 400$
 $5 \times 100 = 500$
 $6 \times 100 = 600$
 $7 \times 100 = 700$
 $8 \times 100 = 800$
 $9 \times 100 = 900$

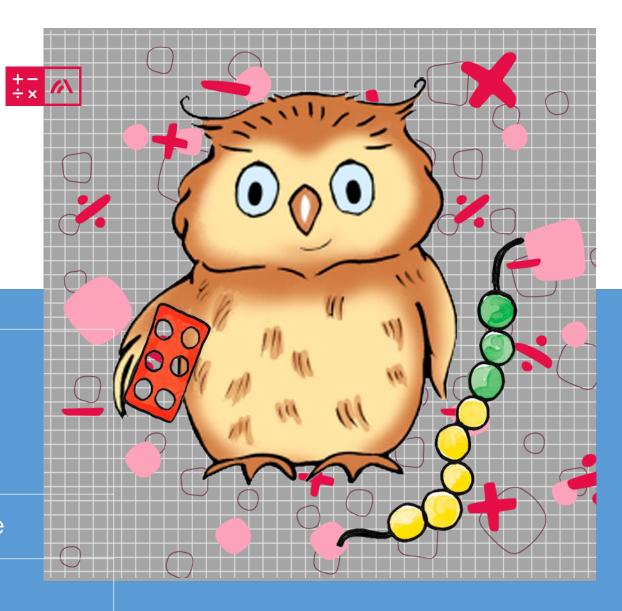
Ark Curriculum+

Monday 1.2.21

Year 3 Unit 7: Deriving multiplication and division facts

Dividing by ten using place value

Mathematics **Mastery**



Review



Complete the calculations using the clues about zero

$$21 \times 10 = _{0}$$

$$22 \times 10 = _{0}$$

$$= 13 \times 10$$

$$= 14 \times 10$$

$$= 15 \times 10$$

$$12 \times 100 =$$

$$15 \times 100 =$$



Key learning: I will know how to divide multiples of ten and 100 by ten







ten times less



divide





division



value



ten times fewer



inverse



Connecting multiplying and dividing by ten

If I know this, what else do I know?

$$4 \times 2 = 8$$

$$2x4=8$$

$$8 \div 4 = 2$$

$$8 \div 2 = 4$$

$$40 \times 2 = 80$$

$$4 \times 20 = 80$$



$$4 \times 1 = 4$$

$$4 \times 10 = 40$$

Hundreds	Tens	Ones

When we multiplied by 10, what happened to the value of the number?

It was ten times greater.

When moving to the left, digits have a value that is ten times greater.



What do you think will happen to this value if we now divide it by 10?

 $40 \div 10 =$

Hundreds	Tens	Ones

The value will be ten times less.

When moving to the right, digits will have a value that is ten times less.

What do you think will happen to this value if we now divide it by 10?

 $50 \div 10 =$

Hundreds	Tens	Ones

The value will be ten times less.

When moving to the right, digits will have a value that is ten times less.

What do you think will happen to this value if we now divide it by 10?

 $70 \div 10 =$

Hundreds	Tens	Ones

The value will be ten times less.

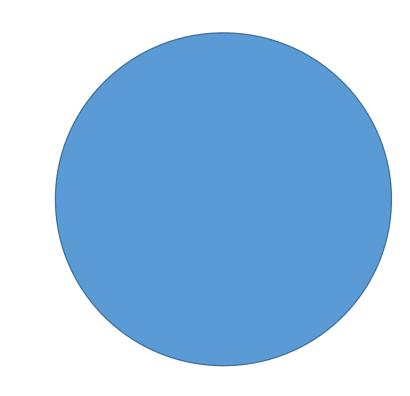
When moving to the right, digits will have a value that is ten times less.

You do

$$80 \div 10 =$$

$$90 \div 10 =$$

$$100 \div 10 =$$



poll

Option 1

$$4 \times 10 = 40$$

4 is ten times the size of 40

Option 2

$$4 \times 10 = 40$$

$$40 \div 10 = 4$$

40 is ten times the size of 4

Let's check we understand

$$90 \div 10 =$$

90 ÷ 10 = ?		
Hundreds 100s	Tens 10s	Ones 1s
	9	Ο

If we were to multiply 90 our digits would move 1 place to the left.

10 times the size

10 times

the size



If we are to divide, which way do the digits move then?

YES! 1 place to the right.



90) ÷ 10 = 1	?	
Hundreds	Tens	Ones	7
100s	10s	1s	
		9	(
			1

Our zero has fallen off the end, but that's ok because our 9 tens has become 9 ones.

Assignment

Go and find your assignment in the general folder.

Choose your chilli.



Click the Editing button so you can type straight onto your task sheet. If you can't write on the assignment sheet you can copy it onto paper and take a photograph of it.