Maths Tuesday Answers

1. When dividing a number by 10 I move the digit one place to the right.

8.2 5.5 9 32

2. 0.72 0.85 0.05 3.21

3. 10 75 100 4.3 100

4. Length = 19cm Width= 9.1cm

Challenge:

1) This is always true. Possible examples:

9 ÷ 100 = 0.09

11 ÷ 100 = 0.11

8 ÷ 100 = 0.08

25 ÷ 100 = 0.25

Children's explanations should show an understanding that when a 1-digit number is divided by 100, there will not be a digit in the tenths column. However, a 2-digit number will always have a tenth. This means that a 2-digit number divided by 100 will always be greater than a 1-digit number divided by 100.

2) a) Shona's number is 0.48. Leo's number could be 0.45, 0.46, 0.47, 0.48, 0.49, 0.50 or 0.51 so Leo's number could be greater or smaller than 0.48. There is not enough information to say who has the greater number. Shona is correct.

b) One of the following:

49 ÷ 100 = 0.49

50 ÷ 100 = 0.50

51 ÷ 100 = 0.51

Key Vocabulary
tenths
hundredths
decimal tenths
decimal hundredths
decimal equivalents
part-whole model
rounding
decimal point
place value

17.06.20

I can multiply numbers by multiples of 10 and 100.

Recap what happens when we multiply numbers by 10 and 100:

https://www.youtube.com/watch?v=7Y0zSnhiShc

Multiplying by 10 and 100

When you multiply any number by 10, the number is getting 10 times bigger. For example:

0.6 x 10 = 6

6 x 10 = 60

60 x 10 = 600

600 x 10 = 6000

What do you notice?

Make the number on a place value grid and see if you can spot any rules.

When I multiply by 100, the number is getting 100 times bigger. For example:

0.05 x 100 = 5

5 x 100 = 500

50 x 100 = 5,000

Write down a rule or any patterns that help you remember what happens when I multiply a number by 10 and 100.

Multiplying by multiples of 10 and 100

When multiplying by multiples of 10 and 100 I can use facts I already know to help me.

If I know what 5 x 6 = 30 I also know

50 x 6 = 300 or 5 x 60 = 300

500 x 6 = 3,000 or 5 x 600 = 3,000

What do you notice has happened to the place value of those numbers? Make it on a place value chart to help you.

Can the rule or pattern you noticed for multiplying by 10 and 100 apply to these questions?

Activities:

1. Solve these questions (use a place value grid to help you):

3 x 10 =	43 x 10 =
94 x 100 =	61 x 100 =
0.4 x 10 =	1.5 x 10 =
3.2 x 100 =	9.5 x 100 =

2. Use your knowledge of times tables to solve these questions:

3 x 60 =	12 x 40 =
50 x 8 =	400 x 7 =
8 x 600 =	900 x 4 =

3. Circle the number that is **10 times** greater than nine hundred and seven.

9,700 907 9,007 970 9,070

4. Complete the missing boxes:

____ x 32 = 320	5.3 x ____ = 53
12 x ____ = 480	0.23 x ____ = 23

5. Sally buys 28 new towels for the swimming club. She is then told that she will need 10 times that amount. How many towels does Sally need?

6. Mr Diego needs to buy pencils for the whole school. He knows that they come in packs of 40. He buys 12 packs. How many pencils does he now have?

Challenge:

1. What do you notice about the following calculations? Can you use one calculation to work out the answer to other calculations?

$2 \times 3 =$	$6 \times 7 =$	$9 \times 8 =$
$2 \times 30 =$	$6 \times 70 =$	$9 \times 80 =$
$2 \times 300 =$	$6 \times 700 =$	$9 \times 800 =$
$20 \times 3 =$	$60 \times 7 =$	$90 \times 8 =$
$200 \times 3 =$	$600 \times 7 =$	$900 \times 8 =$

I notice that

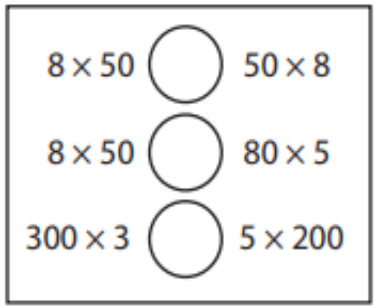
_____

_____

_____

2. Place one of these symbols in the circle to make the number sentence correct: >, < or =.

Explain your reasoning.



I made these choices because

_____

_____

_____