

Arithmetic LO: To multiply and divide numbers by 10 and 100.

I know that when I multiply, my answer will be bigger and when I divide, my answer will be smaller.

I can multiply and divide numbers by 10 and 100.

I understand that multiplying and dividing by 10 and 100 is the same as making a number 10 or 100 times smaller/bigger and making a number 1 tenth or 1 hundredth times the size.



GET READY

On your whiteboards, answer these questions:

$$2 \times 10$$

$$4 \times 10$$

$$8 \times 10$$

$$11 \times 10$$

$$5 \times 100$$

$$7 \times 100$$

$$9 \times 100$$

What do you notice about your answers and the questions?

When we multiply, what happens to our answer?

So, which way will the digits move on a PV chart?

When we divide, what happens to our answer?

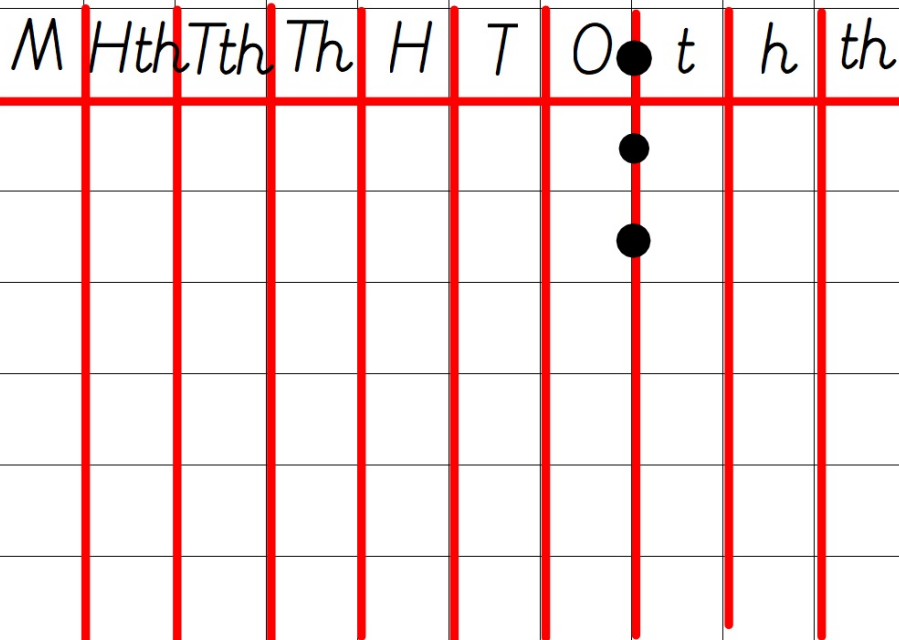
So, which way will the digits move on a PV chart?

How many spaces will they move if it is by 10?

How many spaces will they move if it is by 100?

On your whiteboards, draw a place value chart like this:

M Hth Tth Th H T O ● t h th



T - give children numbers to multiply and divide by 10 or 100.

Your turn:

1) $34 \times 10 = \underline{\hspace{2cm}}$

2) $65 \times 100 = \underline{\hspace{2cm}}$

3) $53 \div 10 = \underline{\hspace{2cm}}$

4) $87 \times 10 = \underline{\hspace{2cm}}$

5) $785 \div 100 = \underline{\hspace{2cm}}$

6) $34 \times 100 = \underline{\hspace{2cm}}$

7) $24 \div 10 = \underline{\hspace{2cm}}$

8) $124 \div 100 = \underline{\hspace{2cm}}$

9) $67 \times \underline{\hspace{2cm}} = 670$

10) $640 \div \underline{\hspace{2cm}} = 6.4$

11) $68 \div \underline{\hspace{2cm}} = 6.8$

12) $73 \times \underline{\hspace{2cm}} = 7300$

13) $542 \underline{\hspace{1cm}} 10 = 54.2$

14) $473 \underline{\hspace{1cm}} 100 = 4.73$

Extension activity:

Jack is thinking of a 3-digit number.

When he multiplies his number by 100, the ten thousands and hundreds digit are the same.

The sum of the digits is 10

What number could Jack be thinking of?

Use the digit cards to fill in the missing digits.

1 2 3 4 5 6 7 8 9

$170 \div 10 = \underline{\hspace{1cm}} \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}}20 \times 10 = 3\underline{\hspace{1cm}}00$

$18\underline{\hspace{1cm}}0 \div 10 = 1\underline{\hspace{1cm}}6$

$\underline{\hspace{1cm}}9 \times 100 = 5\underline{\hspace{1cm}}00$

$6\underline{\hspace{1cm}} = 6,400 \div 100$

