

KIRF: Multiply & divide decimals by 10, 100 & 1000



Pupils should be able to multiply & divide decimals by 10, 100 & 1000 quickly.

Some example questions

$7.3 \times 100 = 730$

$4.5 \times 10 = 45$

$9.2 \times 100 = 920$

$8.7 \times ? = 870$

$823 \div 100 = 8.23$

$6 \div 100 = 0.06$

$61 \div ? = 0.61$

$150 \div 1000 = 0.15$

Questions to ask at home

What is 0.56 multiplied by 1000?

What is 100 times 2.7?

What is 700 divided by 1000?

Key vocabulary


7.2 **multiplied** by 1000 is equal to 7200


120 **shared by** 100 is equal to 1.2

50 **divided by** 100 equals 0.5

What can this look like?


Multiplying by 10, 100 or 1000


 Move digits to the left

 One place for each zero

- $\times 10 \rightarrow$ move digits 1 place left
- $\times 100 \rightarrow$ move digits 2 places left
- $\times 1000 \rightarrow$ move digits 3 places left

Dividing by 10, 100 or 1000

 Move digits to the right

 One place for each zero

- $\div 10 \rightarrow$ move digits 1 place right
- $\div 100 \rightarrow$ move digits 2 places right
- $\div 1000 \rightarrow$ move digits 3 places right

Things to try

Dice Game: You'll need: Two dice (or use an online dice roller)

How to play:

1. Roll two dice to create a decimal number (e.g., 3 and 2 = 3.2).
2. Take turns multiplying the number by 10, 100 or 1000.
e.g. " $3.2 \times 1000 = 3200$ ".

Websites:

<https://www.topmarks.co.uk/Flash.aspx?f=bingotimesordivide>