

Maths 4U

Fifth Grade

Pages 9 - 10

Ss will need a calculator or you can use a projector – use an app – for ss to be able to see how numbers move.

Start

Working out the Take the challenge section.

Get some ss reading the description of the situation.

Ask ss to explain what...

- the boy has to do.
- he needs to do it.
- they can do to work out the situation.
- they can do to get the result / final number.

During

Use the calculator to show ss how numbers move when you do some multiplying or dividing.

Ask ss to explain / describe what they saw.

Draw ss' attention to the blue and orange boxes on page 9. Tell ss to count the digits so they can see / notice / try the moving of the numbers.

Write the first number in the purple box on page 10 on the board.

Draw three columns and label them Times 10, Times 100 and Times 1000.

Explain to ss that Times means multiplying and that they must keep in mind the direction digits move towards when it comes with multiplying – write it on the

board so they can see it all the time.

- **Times = multiplying**
- **Direction = move left**

Tell ss to use the information to work out what the new number is – after multiplying by 10.

$$\begin{aligned} 0.413 \times 10 &= \\ 4.13 & \end{aligned}$$

“There was a 1-place moving to the left.”

Do the same with the Times 100 and 1000 so ss can see and compare.

$$\begin{aligned} 0.413 \times 10 &= 4.13 \\ 0.413 \times 100 &= 41.3 \\ 0.413 \times 1000 &= 413 \end{aligned}$$

Walk ss through working out the next two lines of numbers, and then invite some ss to do it on the board.

Remind ss that they must write nothing at this point, they must wait until you tell them all the answers are correct and ready to be copied / written down in their books.

Tell ss to see the numbers in the box below, and then ask them to explain what they have to do to work out the activity.

Try the same process / strategy you used for the multiplications, but to the opposite side.

End

Tell ss that the activity at the bottom must be done as quickly as possible because they must set up a record.

Tell them that all the groups the same grade will do it because

you will discover who the Math Champs are.

Tell ss that all the class must work together as a team.

Divide the class into small groups and tell each group to select one or two questions.

Remind them to work quickly and as a team.

Keep track on the time it takes ss to complete the activity.

The moment they give you the answers, check they are right and write them on the board.

Write on the board the time and praise kids for the effort they put in the activity.

Tell ss to copy the answers and to write their record time in their books.

It is time for you to decide on the notes for ss to write.

It could be the number model used for illustrating how numbers move with some sentences explaining how to read the modeling.

Ex

$$\begin{aligned} 0.413 \times 10 &= 4.13 \\ 0.413 \times 100 &= 41.3 \\ 0.413 \times 1000 &= 413 \end{aligned}$$