

Target: Multiply and divide whole and decimal numbers by 10, 100 and 1,000.

By the end of this half term, children in Year 6 should know the following facts and be able to recall them instantly:

HTh	TTh	Th	H	T	O	.	Tths	Hths	Thths

X 10 digits move LEFT 1 place	÷ 10 digits move RIGHT 1 place
X 100 digits move LEFT 2 places	÷ 100 digits move RIGHT 2 places
X 1,000 digits move LEFT 3 places	÷ 1,000 digits move RIGHT 3 places

When we multiply by 10, 100 and 1000 we shift the digits to the left. One place left for 10, two places left for 100 and three places left for 1000. When we divide by 10, 100 and 1000, we do the opposite and shift the digits to the right instead.

Key Questions

- What number is 10 times greater than 0.1?
- What number is 100 times smaller than 12?
- What is $152 \div 1,000$?
- $45 = __ \times 10$

Vocabulary

- Integer
- Whole number
- Decimal number
- Decimal place
- Place value
- Multiply
- Divide
- Digit

Top Tips

The secret to success? Practise little and often! Can you learn these on your way to school? On a car journey? Or even at the breakfast table? You don't need to learn them all at once: start with those you are more confident with before tackling the rest. Why not practise whilst keeping active? You could throw and catch or kick a ball whilst learning them!

Play games!

- Create a board game or a treasure hunt related to multiplying/dividing by 10, 100 and 1000.
- Make some flashcards and ask a family member to test you- how quickly can you multiply/divide by 10, 100 or 1000?
- Make up a song about how to multiply/divide by 10, 100 and 1000.
- Create a poster for multiplying/dividing by 10, 100 and 1000.

Useful websites (games and information):

- <https://www.bbc.co.uk/bitesize/topics/z36tyrd/articles/zd9cydm>
- <https://www.bbc.co.uk/bitesize/topics/zc3d7ty/articles/zmk72v4>
- <https://www.youtube.com/watch?v=Y45H5aCuymg>
- <https://www.topmarks.co.uk/Flash.aspx?f=bingotimesordivide>
- <https://kids.classroomsecrets.co.uk/resource/year-5-divide-by-10-100-and-1000-game/>
- <https://wordwall.net/en-gb/community/multiplication-by-10-100-1000/>