

KEY INSTANT RECALL FACTS

YEAR 4 – SUMMER 1

I KNOW HOW TO X AND \div 2 DIGIT NUMBERS BY 10 AND 100

By the end of this half term, children should be able to instantly multiply and divide 2 digit numbers by 10 and 100.

Please note, where we have provided links to online activities we expect children to seek parent/carer permission to do this first.

Multiplying by 10 or 100

This half term, Year 4 children are being introduced to decimal numbers.

Before introducing decimal numbers it is best to make sure children are secure with multiplying and dividing whole numbers by 10 or 100. Using a place value chart is a good way to model this.

This place value chart shows 24:

thousands	hundreds	tens	ones	tenths	hundredths
		● ●	● ● ● ●		

If you calculate $24 \times 10 =$ you need to move the counters 1 place value position to the left:

thousands	hundreds	tens	ones	tenths	hundredths
	● ●	● ● ● ●			

You now have 2 hundreds, 4 tens and 0 ones or **240**.

If you calculate $24 \times 100 =$ you will need to move the counters 2 place value positions to the left:

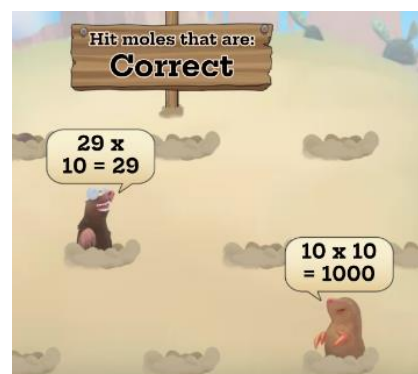
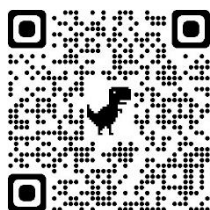
thousands	hundreds	tens	ones	tenths	hundredths
● ●	● ● ● ●				

You now have 2 thousands, 4 hundreds, 0 tens and 0 ones or **2400**.

Whack-a-mole

If you are feeling confident with multiplying by 10 or 100, test your skills with Whack-a-mole but be warned, it is quick!

<https://wordwall.net/resource/2161647/maths/multiply-by-10-and-100>



Dividing by 10 or 100

Dividing by 10 or 100 is the same as multiplying by 10 or 100, except you move 1 or 2 place value columns to the right.

To calculate $2400 \div 10 =$ you need to move the counters 1 place value position to the right:

thousands	hundreds	tens	ones	.	tenths	hundredths
	● ● ● ●			●		

Can you predict what the answer will be?

What if you calculate $2400 \div 100 =$?

thousands	hundreds	tens	ones	.	tenths	hundredths
	● ● ● ●			●		

Can you predict what the answer will be now?

Multiplying and dividing by 10 with decimal numbers

There is nothing new to learn for this except to know that you may now need to use the tenths and hundredths columns on the place value chart:

thousands	hundreds	tens	ones	.	tenths	hundredths
		● ●	● ● ● ●	●		

So, $24 \div 10 = 2.4$ because you move the counter 1 place value position to the right:

thousands	hundreds	tens	ones	.	tenths	hundredths
			● ●	● ● ● ●		

You now have **2** ones and **4** tenths (remember there is a decimal point in the middle) or **2.4**

What would happen if you divide 24 by 100?

thousands	hundreds	tens	ones	.	tenths	hundredths
		● ●	● ● ● ●	● ● ● ●		

Did you work out that the answer was 0.24 because you had **0** ones, **2** tenths and **4** hundredths (and you remembered the decimal point).

Multiplying decimal numbers by 10 or 100 uses the same method. You simply move place value columns to the left instead.

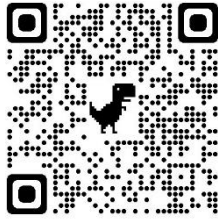
Try these: $0.7 \times 10 =$ $0.4 \times 10 =$ $0.5 \times 100 =$ $0.25 \times 100 =$ $0.36 \times 10 =$ $0.9 \times 100 =$

If you're feeling confident, try some of the games below to test your skills.

Balloon Pop

Now to practice some quick-fire dividing by 10 or 100. Simply pop the correct balloon to drop the answer into the carriage.

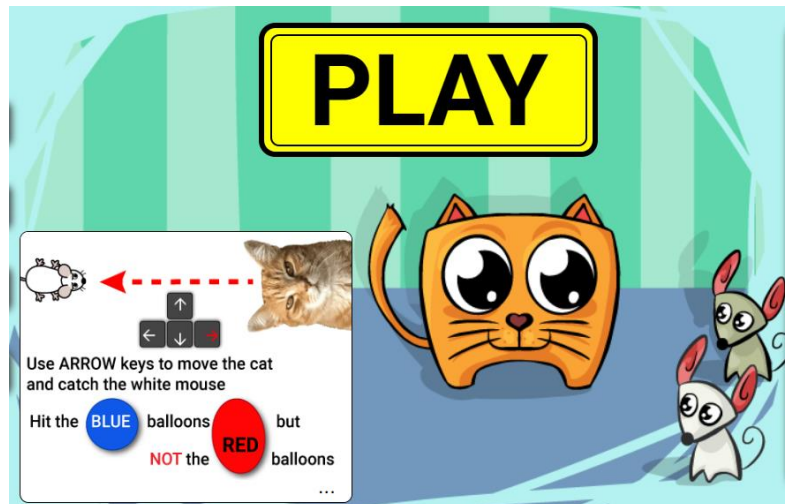
<https://wordwall.net/resource/29291661/divide-by-10-100>



Cat and Mouse

Test your skills by multiplying decimals by 10. Simply use the arrow keys on your keyboard to catch mice. Every time you catch a mouse you have the opportunity to answer a question and earn points.

<https://uk.free-maths.games/cat-and-mouse/year3/multiplication/multiply-decimals-by-10-move-point-right>



One Final Challenge

Do you think you have mastered multiplying and dividing 2 digit numbers by 10 and 100? Put your skills to the test with this quiz:

What is 70
divided by 100



<https://wordwall.net/resource/10828139/multiplying-and-dividing-by-10-and-100>