



KEY INSTANT RECALL FACTS

STAGE: 4

SUMMER: 1

I can multiply and divide one and two digit numbers by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Also I can recognise decimal equivalents of fractions.

By the end of this half term, children should be able to work out the following facts and other similar facts.

$7 \times 10 = 70$	$6 \times 100 = 600$	$\frac{1}{2} = 0.5$
$4 \times 10 = 40$	$4 \times 100 = 400$	$\frac{1}{4} = 0.25$
$56 \times 10 = 560$	$48 \times 100 = 4800$	$\frac{3}{4} = 0.75$
$73 \times 10 = 730$	$62 \times 100 = 6200$	$\frac{1}{10} = 0.1$
$80 \div 10 = 8$	$70 \div 100 = 0.7$	$\frac{5}{10} = 0.5$
$50 \div 10 = 5$	$20 \div 100 = 0.2$	$\frac{1}{100} = 0.01$
$3 \div 10 = 0.3$	$56 \div 100 = 0.56$	$\frac{2}{10} = 0.2$
$9 \div 10 = 0.9$	$48 \div 100 = 0.48$	$\frac{7}{100} = 0.07$
$28 \div 10 = 2.8$	$4 \div 100 = 0.04$	$\frac{75}{100} = 0.75$
$45 \div 10 = 4.5$	$6 \div 100 = 0.06$	$\frac{99}{100} = 0.99$

Key Vocabulary

What is 5 **multiplied by** 10?

What is 10 **times** 0.9?

What is 70 **divided by** 10?

hundreds, tens, ones

tenths, hundredths

How would you write 48/100 as a decimal?

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. $10 \times \bigcirc = 5$ or $\bigcirc \div 10 = 60$. Children should also be able to convert between decimals and fractions for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ and any number of tenths and hundredths.

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

It is important to refer to the digits, rather than the decimal point, moving when multiplying or dividing by 10 or 100. Using the following place value chart: <http://www.greatmathsteachingideas.com/wp-content/uploads/2012/02/Multiplying-and-dividing-by-10-100-and-1000.pdf> and writing the number on the chart first can help pupils see how the decimal point remains fixed and the digits shift left if multiplying and right if dividing.

Play games – This website is a game to help practise multiplying and dividing by 10 and 100: http://kids.britannica.com/lm/games/GM_5_5/GM_5_5.htm

Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.