

Key Instant Recall Facts

Year 5 – Autumn 1

I know the multiplication and division facts for all times tables up to 12×12 .

The Year 5 children should already know **ALL** the times tables up to 12×12 . The aim is for them to recall these facts **instantly**. This half term is a chance for Year 5 children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall.

1	2	3	4	5	6	<u>Key Vocabulary</u>
$1 \times 1 = 1$	$2 \times 2 = 4$	$3 \times 3 = 9$	$4 \times 4 = 16$	$5 \times 5 = 25$	$6 \times 6 = 36$	
$1 \times 2 = 2$	$2 \times 3 = 6$	$3 \times 4 = 12$	$4 \times 5 = 20$	$5 \times 6 = 30$	$6 \times 7 = 42$	
$1 \times 3 = 3$	$2 \times 4 = 8$	$3 \times 5 = 15$	$4 \times 6 = 24$	$5 \times 7 = 35$	$6 \times 8 = 48$	
$1 \times 4 = 4$	$2 \times 5 = 10$	$3 \times 6 = 18$	$4 \times 7 = 28$	$5 \times 8 = 40$	$6 \times 9 = 54$	
$1 \times 5 = 5$	$2 \times 6 = 12$	$3 \times 7 = 21$	$4 \times 8 = 32$	$5 \times 9 = 45$	$6 \times 10 = 60$	
$1 \times 6 = 6$	$2 \times 7 = 14$	$3 \times 8 = 24$	$4 \times 9 = 36$	$5 \times 10 = 50$	$6 \times 11 = 66$	
$1 \times 7 = 7$	$2 \times 8 = 16$	$3 \times 9 = 27$	$4 \times 10 = 40$	$5 \times 11 = 55$	$6 \times 12 = 72$	
$1 \times 8 = 8$	$2 \times 9 = 18$	$3 \times 10 = 30$	$4 \times 11 = 44$	$5 \times 12 = 60$		
$1 \times 9 = 9$	$2 \times 10 = 20$	$3 \times 11 = 33$	$4 \times 12 = 48$			
$1 \times 10 = 10$	$2 \times 11 = 22$	$3 \times 12 = 36$				
$1 \times 11 = 11$	$2 \times 12 = 24$					
$1 \times 12 = 12$						
7	8	9	10	11	12	
$7 \times 7 = 49$	$8 \times 8 = 64$	$9 \times 9 = 81$	$10 \times 10 = 100$	$11 \times 11 = 121$	$12 \times 12 = 144$	
$7 \times 8 = 56$	$8 \times 9 = 72$	$9 \times 10 = 90$	$10 \times 11 = 110$	$11 \times 12 = 132$		
$7 \times 9 = 63$	$8 \times 10 = 80$	$9 \times 11 = 99$	$10 \times 12 = 120$			
$7 \times 10 = 70$	$8 \times 11 = 88$	$9 \times 12 = 108$				
$7 \times 11 = 77$	$8 \times 12 = 96$					
$7 \times 12 = 84$						

Key Vocabulary

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

They should be able to answer these questions in any order, including missing number questions e.g. $7 \times \bigcirc = 28$ or $\bigcirc \div 6 = 7$. Children who have already mastered their times tables should apply this knowledge to answer questions including decimals e.g. $0.7 \times \bigcirc = 4.2$ or $\bigcirc \div 60 = 0.7$

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 start with one particular times tables and ensure they know all of them before moving onto another times table.

Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

<https://www.topmarks.co.uk/maths-games/daily10> - Level 5 Multiplication/Level 5 Division



<https://play.ttrockstars.com/> - Children should be regularly practising their times tables on TTRS and improving their speed.

Key Instant Recall Facts

Year 5 – Autumn 2

I can find factor pairs of a number.

By the end of this half term, children should know the factor pairs of numbers in the times tables. The aim is for them to recall these facts fairly **instantly**.

Children should now know all multiplication and division facts up to 12×12 . When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

$$24 = 4 \times 6 \quad 42 = 6 \times 7$$

$$24 = 8 \times 3 \quad 25 = 5 \times 5$$

$$56 = 7 \times 8 \quad 84 = 7 \times 12$$

$$54 = 9 \times 6 \quad 15 = 5 \times 3$$

Choose other numbers from the times tables. Can your child find some factor pairs? Repeat!

Key vocabulary

Can you find a **factor** of 28?

Find two numbers whose **product** is 20.

I know that 6 is a factor of 72 because 6 multiplied by 12 equals 72.

Children should be able to explain how they know that a number is a common factor. E.g. 8 is a common factor of 24 and 56 because $24 = 8 \times 3$ and $56 = 8 \times 7$.

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? If your child is not yet confident with their times tables, you may want to practise this first.

If you would like more ideas, please speak to your child's teacher.

Play games - There is an activity at <http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html> to practise finding factor pairs.

Think of the question – One player thinks of a times table question (e.g. 4×12) and states the answer. The other player has to guess the original question.

<https://www.topmarks.co.uk/maths-games/7-11-years/multiplication-and-division> - lots of games here

Choose two numbers between 1 and 144. Take it in turns to name factor pairs. Who can find the most?