

# Key Instant Recall Facts

## Year 6 – Autumn 1

### I know the multiplication and division facts for all times tables up to $12 \times 12$ .

The Year 6 children should already know **ALL** the times tables up to  $12 \times 12$ . The aim is for them to recall these facts **instantly**. This half term is a chance for Year 6 children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall.

1	2	3	4	5	6
$1 \times 1 = 1$	$2 \times 2 = 4$	$3 \times 3 = 9$	$4 \times 4 = 16$	$5 \times 5 = 25$	$6 \times 6 = 36$
$1 \times 2 = 2$	$2 \times 3 = 6$	$3 \times 4 = 12$	$4 \times 5 = 20$	$5 \times 6 = 30$	$6 \times 7 = 42$
$1 \times 3 = 3$	$2 \times 4 = 8$	$3 \times 5 = 15$	$4 \times 6 = 24$	$5 \times 7 = 35$	$6 \times 8 = 48$
$1 \times 4 = 4$	$2 \times 5 = 10$	$3 \times 6 = 18$	$4 \times 7 = 28$	$5 \times 8 = 40$	$6 \times 9 = 54$
$1 \times 5 = 5$	$2 \times 6 = 12$	$3 \times 7 = 21$	$4 \times 8 = 32$	$5 \times 9 = 45$	$6 \times 10 = 60$
$1 \times 6 = 6$	$2 \times 7 = 14$	$3 \times 8 = 24$	$4 \times 9 = 36$	$5 \times 10 = 50$	$6 \times 11 = 66$
$1 \times 7 = 7$	$2 \times 8 = 16$	$3 \times 9 = 27$	$4 \times 10 = 40$	$5 \times 11 = 55$	$6 \times 12 = 72$
$1 \times 8 = 8$	$2 \times 9 = 18$	$3 \times 10 = 30$	$4 \times 11 = 44$	$5 \times 12 = 60$	
$1 \times 9 = 9$	$2 \times 10 = 20$	$3 \times 11 = 33$	$4 \times 12 = 48$		
$1 \times 10 = 10$	$2 \times 11 = 22$	$3 \times 12 = 36$			
$1 \times 11 = 11$	$2 \times 12 = 24$				
$1 \times 12 = 12$					

  

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 6 Multiplication/Level 6 Division



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

# Key Instant Recall Facts

## Year 6 – Autumn 2

### I can identify common factors of a pair of numbers.

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

The factors of a number are all numbers which it can divide into with no remainder.

E.g. the factors of **24** are 1, 2, 3, 4, 6, 8, 12, and 24. The factors of **56** are 1, 2, 4, 7, 8, 14, 28 and 56.

The common factors of two numbers are the factors they share.

E.g. **the common factors of 24 and 56 are 1, 2, 4 and 8.**

The greatest common factor of 24 and 56 is 8.

*Choose 2 other numbers from the times tables. Can your child find the factors, then the common factors and then the greatest common factor? Repeat!*

#### Key vocabulary

factor common  
factor multiple  
greatest common  
factor

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 identifying factor pairs of a number, you may want to practise this first.

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

<https://www.mathsisfun.com/greatest-common-factor.html>

<http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html>

<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 factors. Who can find the most?