

# Key Instant Recall Facts

## Year 4

To help develop children's fluency in mathematics, we ask them to learn Key Instant Recall Facts each half term. We expect children to practise their KIRFs at least 3 times a week.

Each KIRF has an entry level target, which they must be able to do before attempting the main target.

Also, if a child is working above and finding this target comfortable, they may have a go at the challenge to be pushed further.

These KIRFs are used in every day mathematics lessons as well as general, day-to-day life. They are the basic facts of mathematics that every individual should know instantly.



# Key Instant Recall Facts

## Year 4 – Autumn 1

### Know number bonds to 100.

Some examples:

$60 + 40 = 100$	$37 + 63 = 100$
$40 + 60 = 100$	$63 + 37 = 100$
$100 - 40 = 60$	$100 - 63 = 37$
$100 - 60 = 40$	$100 - 37 = 63$
$75 + 25 = 100$	$48 + 52 = 100$
$25 + 75 = 100$	$52 + 48 = 100$
$100 - 25 = 75$	$100 - 52 = 48$
$100 - 75 = 25$	$100 - 48 = 52$

#### Key Vocabulary

What do I **add** to 65 to make 100?

What is 100 **take away** 6?

What is 13 **less than** 100?

**How many more** than 98 is 100?

What is the **difference** between 89 and 100?

Entry level: Know the number numbers to 10, 20 and 50.

Challenge: Know decimal number bonds to 1 and 10.

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

Buy one get three free - If your child knows one fact (e.g.  $7 + 13 = 20$ ), can they tell you the other three facts in the same fact family? ( $13 + 7$ ,  $20 - 7$  and  $20 - 13$ )

Use number bonds to 10 - How can number bonds to 10 help you work out number bonds to 100?

Use real life – Work out change from £1 (100p) in shops for single items.



# Key Instant Recall Facts

## Year 4 – Autumn 2

**Multiply and divide single-digit numbers by 10 and 100.**

$7 \times 10 = 70$

$10 \times 7 = 70$

$70 \div 7 = 10$

$70 \div 10 = 7$

$30 \times 10 = 300$

$10 \times 30 = 300$

$300 \div 30 = 10$

$300 \div 10 = 30$

$0.8 \times 10 = 8$

$10 \times 0.8 = 8$

$8 \div 0.8 = 10$

$8 \div 10 = 0.8$

$6 \times 100 = 600$

$100 \times 6 = 600$

$600 \div 6 = 100$

$600 \div 100 = 6$

$40 \times 100 = 4000$

$100 \times 40 = 4000$

$4000 \div 40 = 100$

$4000 \div 100 = 40$

$0.2 \times 10 = 2$

$10 \times 0.2 = 2$

$2 \div 0.2 = 10$

$2 \div 10 = 0.2$

### Key Vocabulary

What is 5 **multiplied by** 10?

What is 10 **times** 0.9?

What is 700 **divided by** 70?

**hundreds, tens, units**

**tenths, hundredths**

Entry level: Count up in 10s and 100s.

Challenge: Recall 3, 4, 8 and 12 times tables.

### 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.



# Key Instant Recall Facts

## Year 4 – Spring 1

Recall the 6 times tables up to 12x6, in any order.

$6 \times 1 = 6$	$1 \times 6 = 6$	$6 \div 6 = 1$	$6 \div 1 = 6$
$6 \times 2 = 12$	$2 \times 6 = 12$	$12 \div 6 = 2$	$12 \div 2 = 6$
$6 \times 3 = 18$	$3 \times 6 = 18$	$18 \div 6 = 3$	$18 \div 3 = 6$
$6 \times 4 = 24$	$4 \times 6 = 24$	$24 \div 6 = 4$	$24 \div 4 = 6$
$6 \times 5 = 30$	$5 \times 6 = 30$	$30 \div 6 = 5$	$30 \div 5 = 6$
$6 \times 6 = 36$	$6 \times 6 = 36$	$36 \div 6 = 6$	$36 \div 6 = 6$
$6 \times 7 = 42$	$7 \times 6 = 42$	$42 \div 6 = 7$	$42 \div 7 = 6$
$6 \times 8 = 48$	$8 \times 6 = 48$	$48 \div 6 = 8$	$48 \div 8 = 6$
$6 \times 9 = 54$	$9 \times 6 = 54$	$54 \div 6 = 9$	$54 \div 9 = 6$
$6 \times 10 = 60$	$10 \times 6 = 60$	$60 \div 6 = 10$	$60 \div 10 = 6$
$6 \times 11 = 66$	$11 \times 6 = 66$	$66 \div 6 = 11$	$66 \div 11 = 6$
$6 \times 12 = 72$	$12 \times 6 = 72$	$72 \div 6 = 12$	$72 \div 12 = 6$

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

Entry level: Count in 6s up to 72

Challenge: Work with the division facts of the 6x table (e.g.  $24 \div 6 =$  )

### 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.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Double your threes – Multiplying a number by 6 is the same as multiplying by 3 and then doubling the answer.  $7 \times 3 = 21$  and double 21 is 42, so  $7 \times 6 = 42$ .

Buy one get three free – If your child knows one fact (e.g.  $3 \times 6 = 18$ ), can they tell you the other three facts in the same fact family? ( $6 \times 3 = 18$ ,  $18 \div 3 = 6$  and  $18 \div 6 = 3$ )

Play games – Your child has a login for TT Rockstars which is full of engaging and fun games all based around the times tables.



# Key Instant Recall Facts

## Year 4 – Spring 2

Recall the 7 times tables up to  $12 \times 7$ , in any order.

$7 \times 1 = 7$	$1 \times 7 = 7$	$7 \div 7 = 1$	$7 \div 1 = 7$
$7 \times 2 = 14$	$2 \times 7 = 14$	$14 \div 7 = 2$	$14 \div 2 = 7$
$7 \times 3 = 21$	$3 \times 7 = 21$	$21 \div 7 = 3$	$21 \div 3 = 7$
$7 \times 4 = 28$	$4 \times 7 = 28$	$28 \div 7 = 4$	$28 \div 4 = 7$
$7 \times 5 = 35$	$5 \times 7 = 35$	$35 \div 7 = 5$	$35 \div 5 = 7$
$7 \times 6 = 42$	$6 \times 7 = 42$	$42 \div 7 = 6$	$42 \div 6 = 7$
$7 \times 7 = 49$	$7 \times 7 = 49$	$49 \div 7 = 7$	$49 \div 7 = 7$
$7 \times 8 = 56$	$8 \times 7 = 56$	$56 \div 7 = 8$	$56 \div 8 = 7$
$7 \times 9 = 63$	$9 \times 7 = 63$	$63 \div 7 = 9$	$63 \div 9 = 7$
$7 \times 10 = 70$	$10 \times 7 = 70$	$70 \div 7 = 10$	$70 \div 10 = 7$
$7 \times 11 = 77$	$11 \times 7 = 77$	$77 \div 7 = 11$	$77 \div 11 = 7$
$7 \times 12 = 84$	$12 \times 7 = 84$	$84 \div 7 = 12$	$84 \div 12 = 7$

### Key Vocabulary

What is 7 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

Entry level: Count in 7s up to 84

Challenge: Work with the division facts of the 7x table (e.g.  $28 \div 7 =$  )

### 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 have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

Play games – Your child has a login for TT Rockstars which is full of engaging and fun games all based around the times tables.

Order of difficulty – Ask your child to order these facts from the easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

Use memory tricks – For those hard-to-remember facts, [www.multiplication.com](http://www.multiplication.com) has some strange picture stories to help children remember.



# Key Instant Recall Facts

## Year 4 – Summer 1

Recall the 9 times tables up to  $12 \times 9$ , in any order.

$9 \times 1 = 9$	$9 \div 9 = 1$
$9 \times 2 = 18$	$18 \div 9 = 2$
$9 \times 3 = 27$	$27 \div 9 = 3$
$9 \times 4 = 36$	$36 \div 9 = 4$
$9 \times 5 = 45$	$45 \div 9 = 5$
$9 \times 6 = 54$	$54 \div 9 = 6$
$9 \times 7 = 63$	$63 \div 9 = 7$
$9 \times 8 = 72$	$72 \div 9 = 8$
$9 \times 9 = 81$	$81 \div 9 = 9$
$9 \times 10 = 90$	$90 \div 9 = 10$
$9 \times 11 = 99$	$99 \div 9 = 11$
$9 \times 12 = 108$	$108 \div 9 = 12$

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

Entry level: Count in 9s up to 108

Challenge: Work with the division facts of the 9x table (e.g.  $54 \div 9 =$  )

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

Look for patterns – These times tables are full of patterns for your child to find. How many can they spot?

Use your ten times table – Multiply a number by 10 and subtract the original number (e.g.  $7 \times 10 - 7 = 70 - 7 = 63$ ). What do you notice?  
What happens if you add your original number instead?

Play games – Your child has a login for TT Rockstars which is full of engaging and fun games all based around the times tables.

What do you already know? – Your child will already know many of these facts from the 2, 3, 4, 5, 6, 8 and 10 times tables. It might be worth practising these again!



# Key Instant Recall Facts

## Year 4 – Summer 2

Recall multiples of numbers up to 12 in any order, including missing numbers and related division facts with growing fluency.

$$\frac{1}{2} = 0.5$$

$$\frac{1}{4} = 0.25$$

$$\frac{3}{4} = 0.75$$

$$\frac{1}{10} = 0.1$$

$$\frac{2}{10} = 0.2$$

$$\frac{5}{10} = 0.5$$

$$\frac{6}{10} = 0.6$$

$$\frac{9}{10} = 0.9$$

$$\frac{1}{100} = 0.01$$

$$\frac{7}{100} = 0.07$$

$$\frac{21}{100} = 0.21$$

$$\frac{75}{100} = 0.75$$

$$\frac{99}{100} = 0.99$$

### Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**?

Write  $\frac{1}{4}$  as a **decimal**?

Entry level: Count up in 6s, 7s, 8s and 9s in order.

Challenge: Work out the times tables where the numbers are 10x greater (e.g.  $3 \times 70 = 210$ )

### 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: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

Play games - 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.