



## Key Instant Recall Facts

Year 4

Autumn 1

**I know the multiplication and division facts for the 6 times table**

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

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

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

They should be able to answer these questions in any order, including missing number questions e.g.  $6 \times \bigcirc = 72$  or  $\bigcirc \div 6 = 7$ .

### Patterns in Multiplying by 6's:

Multiples of 6 have a pattern of 6, 2, 8, 4, 0 in the ones place. When a multiple of 2 and 3 overlap, you get a multiple of 6. All multiples of 6 are even numbers.

There's no special rule for multiplying by 6. You just have to remember this. When you multiply an even number by 6, the last digit of the answer is the same as the number that's being multiplied.

Practice number facts online:

<https://www.topmarks.co.uk/maths-games/hit-the-button>



## Key Instant Recall Facts

Year 4

Autumn 2

I know the multiplication and division facts for the 9 and 11 times tables

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

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

$9 \times 1 = 9$	$9 \div 9 = 1$	$11 \times 1 = 11$	$11 \div 11 = 1$
$9 \times 2 = 18$	$18 \div 9 = 2$	$11 \times 2 = 22$	$22 \div 11 = 2$
$9 \times 3 = 27$	$27 \div 9 = 3$	$11 \times 3 = 33$	$33 \div 11 = 3$
$9 \times 4 = 36$	$36 \div 9 = 4$	$11 \times 4 = 44$	$44 \div 11 = 4$
$9 \times 5 = 45$	$45 \div 9 = 5$	$11 \times 5 = 55$	$55 \div 11 = 5$
$9 \times 6 = 54$	$54 \div 9 = 6$	$11 \times 6 = 66$	$66 \div 11 = 6$
$9 \times 7 = 63$	$63 \div 9 = 7$	$11 \times 7 = 77$	$77 \div 11 = 7$
$9 \times 8 = 72$	$72 \div 9 = 8$	$11 \times 8 = 88$	$88 \div 11 = 8$
$9 \times 9 = 81$	$81 \div 9 = 9$	$11 \times 9 = 99$	$99 \div 11 = 9$
$9 \times 10 = 90$	$90 \div 9 = 10$	$11 \times 10 = 110$	$110 \div 11 = 10$
$9 \times 11 = 99$	$99 \div 9 = 11$	$11 \times 11 = 121$	$121 \div 11 = 11$
$9 \times 12 = 108$	$108 \div 9 = 12$	$11 \times 12 = 132$	$132 \div 11 = 12$

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

They should be able to answer these questions in any order, including missing number questions e.g.  $9 \times \bigcirc = 54$  or  $\bigcirc \div 9 = 11$ .

What is the trick for the 9 times tables?

Count all the fingers after the one that's held down – 6. This is the last number of your answer. To find the answer to another  $9 \times$  table question, just hold down the correct finger and count the fingers on either side. So you hold down your 5th finger for  $5 \times 9$ , your 7th finger for  $7 \times 9$ , and so on.

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## Key Instant Recall Facts

Year 4

Spring 1

**I know the multiplication and division facts for the 7 times table**

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

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

### Key Vocabulary

What is 7 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

They should be able to answer these questions in any order, including missing number questions e.g.  $7 \times \bigcirc = 28$  or  $\bigcirc \div 6 = 7$ .

Is there a pattern in the 7 times table?

Some believe that the 7 times table is the hardest to learn because 7 is a prime number and the numeric pattern isn't quite as obvious as for other numbers. There are no obvious patterns or quick tricks like for the 9 times table. However, there is an easy way to help students remember  $7 \times 8 = 56$ . The answer to  $7 \times 8$  is the two numbers that come before the numbers being multiplied (i.e. **5, 6, 7, 8**).

**Practice number facts online:**

<https://www.topmarks.co.uk/maths-games/hit-the-button>



## Key Instant Recall Facts

Year 4

Spring 2

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

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

Please see separate sheet for all times table facts.

### 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  $\bigcirc \div 6 = 7$ .

Always remember that there are only  $12 \times 12$  (144) maths facts to learn for the national curriculum.

Once you remove the 1 and 10 times tables that leaves 102 maths facts.

Know your 2, 9 and 11 times tables and then there's 60 maths facts left – fewer than half the 144.

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## Key Instant Recall Facts

Year 4

Summer 1

I can recognise decimal equivalents of fractions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 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**?

Children should 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: 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.

Practice number facts online:

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# Key Instant Recall Facts

Year 4

Summer 2

**I can multiply and divide single-digit numbers by 10 and 100**

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

$7 \times 10 = 70$

$10 \times 7 = 70$

$70 \div 7 = 10$

$70 \div 10 = 7$

$30 \times 10 = 300$

$10 \times 30 = 300$

$300 \div 30 = 10$

$300 \div 10 = 30$

$0.8 \times 10 = 8$

$10 \times 0.8 = 8$

$8 \div 0.8 = 10$

$8 \div 10 = 0.8$

$6 \times 100 = 600$

$100 \times 6 = 600$

$600 \div 6 = 100$

$600 \div 100 = 6$

$40 \times 100 = 4000$

$100 \times 40 = 4000$

$4000 \div 40 = 100$

$4000 \div 100 = 40$

$0.2 \times 10 = 2$

$10 \times 0.2 = 2$

$2 \div 0.2 = 10$

$2 \div 10 = 0.2$

## 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**

## Multiplying by 1, 10, or 100

• When you multiply by 1 the answer stays the same.  $21 \times 1 = 21$

• When you multiply by 10, move all the digits one place to the left, putting a zero in the empty space.

$21 \times 10 = 210$

• When you multiply by 100, move all the digits two places to the left, putting a zero in the empty spaces.

$21 \times 100 = 2100$

## Dividing by 1, 10 or 100

• When you divide by 1 the answer stays the same.  $21 \div 1 = 21$

• When you divide by 10, move all the digits one place to the right.  $210 \div 10 = 21$

• When you divide by 100, move all the digits two places to the right.  $2100 \div 100 = 21$

**Practice number facts online:**

<https://www.topmarks.co.uk/maths-games/hit-the-button>