



Key Instant Recall Facts

Year 4 – Autumn

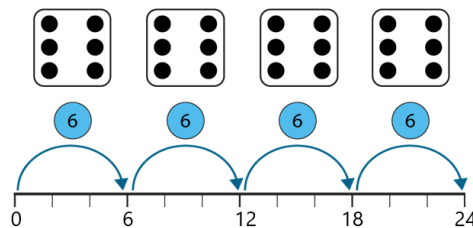
I know the six times table and related division facts.

I know 4×25 , 5×20 .

2×50 and $100 \div 4$, $100 \div 5$, $100 \div 2$.

New multiplication facts to learn: 6×6 7×6 9×6 11×6 12×6	New division facts to learn: $36 \div 6$ $42 \div 6$ $54 \div 6$ $66 \div 6$ $72 \div 6$	<u>Key Vocabulary</u> What is 8 multiplied by 6? What is 6 times 8? What is 24 divided by 6?
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How many dots? Count in groups of 6.



There are 24 dots.

$$4 \times 6 = 24$$

$$6 \times 4 = 24$$

Use items which have 6 things e.g. 6 spots on a dice. Count in sixes. The number line is a good way to represent the information.

Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

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?

Warning! – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g. $6 \times 12 = 72$. The answer to the multiplication is 72, so $72 \div 6 = 12$ and $72 \div 12 = 6$

Web links:

[Times Tables Rock Stars \(ttrockstars.com\)](http://ttrockstars.com)

[Daily 10 - Mental Maths Challenge - Topmarks](http://topmarks.co.uk)

[Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](http://topmarks.co.uk)



Key Instant Recall Facts

Year 4 – Autumn

I know all pairs of multiples of 10 with a total of 1,000.

Facts to learn:

10 + 990	20 + 980	30 + 970	40 + 960	50 + 950	60 + 940
70 + 930	80 + 920	90 + 910	110 + 890	120 + 880	130 + 870
140 + 860	150 + 850	160 + 840	170 + 830	180 + 820	190 + 810

These continue using the same pattern for each hundred. It is useful if children can also reorder these for the related subtraction facts.

e.g. $10 + 990 = 1,000$ so $1,000 - 990 = 10$ and $1,000 - 10 = 990$

Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

Fact families: It is important that children can see connections so try to learn the facts in fact families.

$530 + 470 = 1000$, $470 + 530 = 1000$, $1000 - 470 = 530$ and $1000 - 530 = 470$.

Discuss the rules and patterns: The tens equal 100 and the hundreds equal 900.

Pairs: Make pairs of numbers from number cards. These could be used to play a version of snap when two cards equal a thousand.










Key Instant Recall Facts

Year 4 – Spring

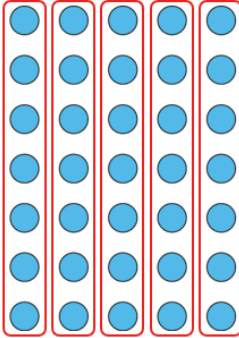
I know the seven times table and related division facts.

New multiplication facts to learn: 7×7 7×11 7×12	New division facts to learn: $49 \div 7$ $77 \div 7$ $84 \div 7$	Key Vocabulary What is 7 multiplied by 6? What is 7 times 8? What is 84 divided by 7?
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Images of seven.

Circle the groups of 7.



There are groups of 7.

Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

Web links:

[Times Tables Rock Stars \(trockstars.com\)](http://trockstars.com)

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[Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](http://topmarks.co.uk)

Your child has now learnt all the times tables. Regular of practise is needed to ensure tables remain quick and accurate. Here is a game which uses the knowledge of all times tables facts.

<http://nrich.maths.org/1252>



Key Instant Recall Facts

Year 4 – Spring

I know decimal equivalents for tenths and hundredths.

I know decimal equivalents for 1, 1, 3
4 2 4

Facts to learn:

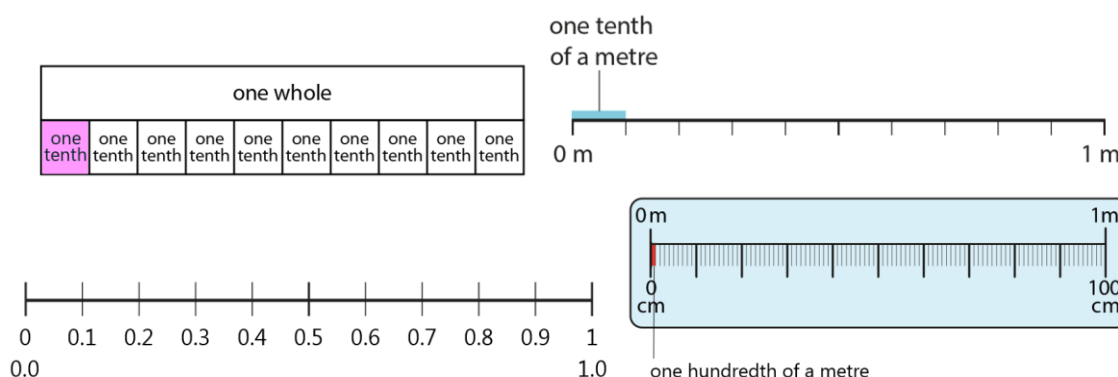
Decimal equivalents to tenths.

$0.1 = \frac{1}{10}$	$0.2 = \frac{2}{10}$
$0.3 = \frac{3}{10}$	$0.4 = \frac{4}{10}$
$0.5 = \frac{5}{10}$	$0.6 = \frac{6}{10}$
$0.7 = \frac{7}{10}$	$0.8 = \frac{8}{10}$
$0.9 = \frac{9}{10}$	$1 = \frac{10}{10}$

Decimal equivalents to hundredths.

$0.01 = \frac{1}{100}$	$0.02 = \frac{2}{100}$
$0.03 = \frac{3}{100}$	$0.04 = \frac{4}{100}$
$0.05 = \frac{5}{100}$	$0.06 = \frac{6}{100}$
$0.21 = \frac{21}{100}$	$0.65 = \frac{65}{100}$
$0.98 = \frac{98}{100}$	$1 = \frac{100}{100}$

$$0.25 = \frac{1}{4} \quad 0.5 = \frac{1}{2} \quad 0.75 = \frac{3}{4}$$



Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

There are lots of links with metric measurement and money. 10p is a tenth of £1 and 1p is 1 hundredth of a £1. Make different amounts of money and write these as a decimal. Measure something and write the measurement as a decimal and a fraction. 3.45 m = 3 m and 45 hundredth of a metre.

Decimal Line up!

Skill to be learnt: To use decimal notation for tenths and hundredths and position on a number line.

What you will need: 0-9 dice, 0-10 blank number line, coloured pencil for each player.

How to play: Players take it in turns to roll the dice to generate a 2-digit number. The first roll represents the ones and the second is the tenths e.g. 3.4. Plot the number on the number line. First to get 3 numbers in a line is the winner.

Talk points: On an empty number line your child will need to have an idea about where to position the number that has been generated. You can therefore discuss how to correctly position the number.

Extension of this game: Extend to 2 decimal places using a 0 – 1 number line.



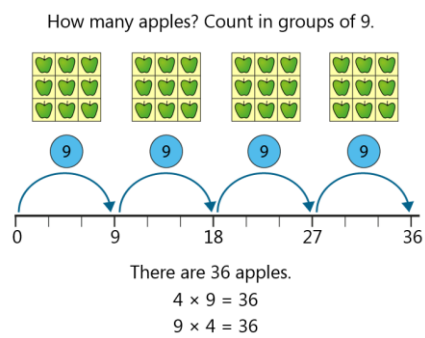
Key Instant Recall Facts

Year 4 – Summer

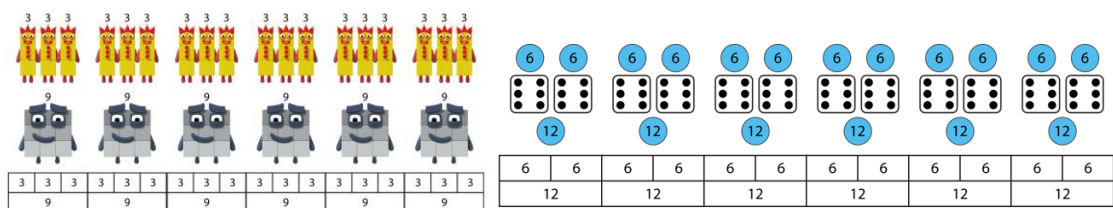
I know the nine times table and related division facts.
I know the eleven and twelve-times tables and related division facts.

New multiplication facts to learn:	New division facts to learn:	<u>Key Vocabulary</u>
7×9 11×11 9×9 12×12 11×9 12×9	$63 \div 9$ $121 \div 11$ $81 \div 9$ $144 \div 12$ $99 \div 9$ $108 \div 9$	What is 9 multiplied by 9? What is 11 times 9? What is 121 divided by 11? How many lots of 12 make 144?

Make links between the 3 and 9-times tables. $7 \times 3 = 21$ so 7×9 is three times this, 63.
Make links between the 6 and 12-times tables. $12 \times 6 = 72$ so 12×12 is double this, 144



Use items which have 9 things e.g. 9 items in a bag. Count in nines. The number line is a good way to represent the information.



Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

Pattern spotting: There are lots of opportunities here to find links between the times tables that have been learnt so far.

Web links:

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<http://nrich.maths.org/1252> - multiplication tables matching cards

Skill to be learnt:

To know by heart multiplication facts for 2, 3, 4, 5, 6, 7, 8, 9 and 10 times-tables and the related division facts.

What you will need: 2 sets of 0-9 cards

How to play:

Shuffle 2 packs of 0 – 9 cards and choose the times table you are working on. Against the clock turn over a card and multiply it by your chosen times table, saying the answer to your partner.

Players go through the pack as fast as they can, trying to beat previous times.

Extension of this game:

Make number cards which have the answers to a given times table.

When shown a card your child can tell you the associated multiplication fact e.g. if shown 36, they may say 6 lots of 6 or 6×6 .

Fishy, fishy fingers

Skill to be learnt: To know by heart multiplication facts for 2, 3, 4, 5, 6, 7, 8, 9 and 10 times-tables and the related division facts.

What you will need: Yourselves!

How to play: Two players face each other and both chant 'fishy, fishy, fingers (in the same way as you would if playing 'paper, scissors, stones)'. Both players show a number of fingers to each other. The first player to say the product (total when 2 numbers are multiplied together e.g. the product of 2 and 5 is 10) of the fingers shown scores a point. First player to 10 points wins.

Talk points: Try and think of tricks to help your child remember their times tables e.g. think of $\times 2$ as doubling. Encourage children to be thinking of the times tables they might need as they reveal their fingers for example if they know you are going to show 6 fingers have possible facts to the 6 times table in their head ready!



Key Instant Recall Facts

Year 4 – Summer

I know decimals pairs to total 1 or 10 (one-decimal place).

I know all multiples of 100 with a total to 10,000.

Facts to learn:

Decimal pairs to total 1.

$0.1 + 0.9$	$0.2 + 0.8$	$0.3 + 0.7$
$0.4 + 0.6$	$0.5 + 0.5$	$0.6 + 0.4$
$0.7 + 0.3$	$0.8 + 0.2$	$0.9 + 0.1$

Also $1 - 0.9 = 0.1$

Decimal pairs to total 10

$1.1 + 8.9$	$1.2 + 8.8$	$1.3 + 8.7$
$1.4 + 8.6$	$1.5 + 8.5$	$1.6 + 8.4$
$1.7 + 8.3$	$1.8 + 8.2$	$1.9 + 8.1$

Continue with $2.1 + 7.9$, $3.1 + 6.9$ etc

Multiples of 100 with a total of 10,000

$1,100 + 8,900$	$1,200 + 8,800$
$1,300 + 8,700$	$1,400 + 8,600$
$1,500 + 8,500$	$1,600 + 8,400$
$1,700 + 8,300$	$1,800 + 8,200$
$1,900 + 8,100$	$2,100 + 7,900$

Continue using this pattern.

Also learn in the form:

$$10,000 - 5,600 = 4,400$$

Top tips to help with learning:

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 or focus on the facts which your child finds tricky.

Make connections: $1 + 9 = 10$ so $0.1 + 0.9 = 1$ $11 + 89 = 100$ so $1.1 + 8.9 = 10$

$19 + 81 = 100$ so $190 + 810 = 1000$ and $1,900 + 8,100 = 10,000$

Fact families: If you know one fact can you find the other three? $3.5 + 6.5 = 10$ so $6.5 + 3.5 = 10$ and

$10 - 3.5 = 6.5$ also $10 = 6.5 + 3.5$

Pairs games: Make cards with the numbers on. Turn them over on the table. Each player turns over two. If they match to make 1 the player keeps them. Winner has the most cards at the end of the game.

Connect four: create a 6 by 5 grid containing the facts which your child is learning. Take it in turns to colour a grid square and give the answer. Winner has four correct squares in a row.