KEY INSTANT RECALL FACTS

Year 5
Autumn 1

I know decimal number bonds to 1 and 10.

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

Some examples:

0.6 + 0.4 = 1	3.7 + 6.3 = 10
0.4 + 0.6 = 1	6.3 + 3.7 = 10
1 – 0.4 = 0.6	10 – 3.7 = 6.3
1 – 0.6 = 0.4	10 – 6.3 = 3.7
0.75 + 0.25 = 1	4.8 + 5.2 = 10
0.25 + 0.75 = 1	5.2 + 4.8 = 10
1 – 0.25 = 0.75	10 – 5.2 = 4.8
1 – 0.75 = 0.25	10 – 4.8 = 5.2

Key Vocabulary

What do I **add** to 0.8 to make 1?

What is 1 **take away** 0.6?

What is 1.3 **less than** 10?

How many more than 9.8 is 10?

What is the **difference** between 8.9 and 10?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions. e.g 0.49 +☐ = 1 or 10 -☐ = 7.2

Top Tips - The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not need to practise them all at once; perhaps you could have a fact of the day.

Buy one get three free – If your child knows one fact (e.g. 0.7 + 0.3 = 1), can they tell you the other three facts in the same fact family?

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

Play Games – There are missing number questions at www.conkermaths.org See how many questions you can answer in 90 seconds.

KEY INSTANT RECALL FACTS

Year 5
Autumn 2

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

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

They should be able to answer these questions in any order, including missing number questions e.g. 6 x ☐ = 72 or ☐ ÷ 6 = 4

Key Vocabulary

What is 8 **multiplied by** 6?

What is 7 **times** 4?

What is 81 **divided by** 9?

What is the **product** of 5 and 7?

Top Tips - The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not need to practise them all at once; perhaps you could have a fact of the day.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. You can also use Education City songs and websites www.timestables.co.uk www.timestables.me.uk and www.conkermaths.org

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

KEY INSTANT RECALL FACTS

Year 5
Spring 1

I can recall metric conversions.

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

1 kilogram = 1000 grams

2 kilograms = 2000 grams

3 kilograms = 3000 grams

1 kilometre = 1000 metres

1 metre = 100 centimetres

1 metre = 1000 millimetres

1 centimetre = 10 millimetres

1 litre = 1000 millilitres

2 litres = 2000 millilitres etc…

They should also be able to apply these facts to answer questions. E.g. How many metres in 1 ½ km?

Top Tips - The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not 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.

Look at prefixes – Can your child work out the meanings of kilo-, centi- and milli-? What other words begin with these prefixes?

Be practical – Do some baking and convert the measurements in the recipe.

How far? – Calculate some distances using unusual measurements. How tall is your child in mm? How far away is London in metres?

KEY INSTANT RECALL FACTS

Year 5
Spring 2

I can double and halve any number up to 100.

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

Double 35 = 70

Double 70 = 140

Double 82 = 164

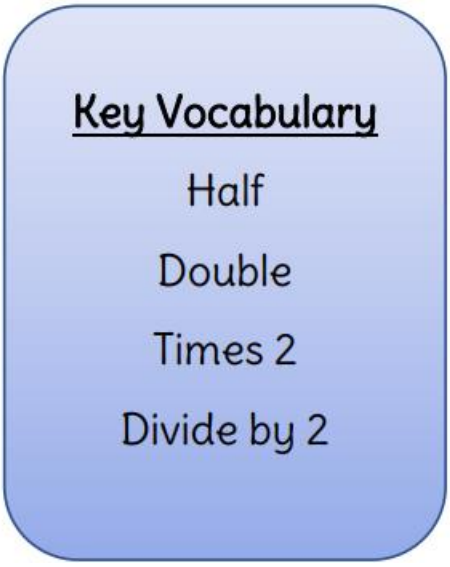
Etc…

Half of 34 = 17

Half of 15 = 7.5 or 7 and a half

Half of 99 = 44.5 or 44 and a half

Etc…



Children should be able to quickly work out any double or half up to 100. They should be able to explain how they found the answers.

Top Tips The secret to success is practising **little** and **often.** Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not 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. Encourage the children to partition the number into its tens and ones. They can quickly half each of these and then add them together. The same applies for doubling.

e.g. Half of 47 - Half of 40 is 20 and … Half of 7 is 3.5 or 3 and a half so… Half of 47 is 23.5 or 23 and a half

KEY INSTANT RECALL FACTS

Year 5

Summer 1

I can recall square numbers up to 12^2 and their square roots.

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

$1^2 = 1 \times 1 = 1$	$\sqrt{1} = 1$
$2^2 = 2 \times 2 = 4$	$\sqrt{4} = 2$
$3^2 = 3 \times 3 = 9$	$\sqrt{9} = 3$
$4^2 = 4 \times 4 = 16$	$\sqrt{16} = 4$
$5^2 = 5 \times 5 = 25$	$\sqrt{25} = 5$
$6^2 = 6 \times 6 = 36$	$\sqrt{36} = 6$
$7^2 = 7 \times 7 = 49$	$\sqrt{49} = 7$
$8^2 = 8 \times 8 = 64$	$\sqrt{64} = 8$
$9^2 = 9 \times 9 = 81$	$\sqrt{81} = 9$
$10^2 = 10 \times 10 = 100$	$\sqrt{100} = 10$
$11^2 = 11 \times 11 = 121$	$\sqrt{121} = 11$
$12^2 = 12 \times 12 = 144$	$\sqrt{144} = 12$

Key Vocabulary

What is 7 **squared**?

What is 7 **multiplied by itself**?

What is the **square root** of 144?

Is 30 a **square number**?

Children should also be able to recognise whether a number below 150 is a square number or not.

Top Tips - The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not need to practise them all at once; perhaps you could have a fact of the day.

Online games – You can use Education City songs and websites www.timestables.co.uk and www.timestables.me.uk

Cycling squares- At http://nrich.maths.org/1151 there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

KEY INSTANT RECALL FACTS

Year 5
Summer 2

I can find factor pairs of a number

By the end of this half term, children should know the following facts.

The aim is for them to recall these facts instantly. Children should now know all multiplication and division facts up to 12 x 12. When given a number in one of those times tables, they should be able to state a factor pair which multiply to make this number (product). Below are some examples:

24 = 4 x 6
24 = 8 x 3
56 = 7 x 8
54 = 9 x 6
42 = 6 x 7
25 = 5 x 5
84 = 7 x 12
15 = 5 x 3

Key Vocabulary

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

Find 2 numbers whose **product** is 20.

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

Top Tips - The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not 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**.**

Online games – Activities on www.educationcity.com www.conkermaths.org www.timestables.co.uk and www.timestables.me.uk

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

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.