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 Fluency 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?

Fluency 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.

$1^2 = 1 \times 1 = 1$

$2^2 = 2 \times 2 = 4$

$3^2 = 3 \times 3 = 9$

$4^2 = 4 \times 4 = 16$

$5^2 = 5 \times 5 = 25$

$6^2 = 6 \times 6 = 36$

$7^2 = 7 \times 7 = 49$

$8^2 = 8 \times 8 = 64$

$9^2 = 9 \times 9 = 81$

$10^2 = 10 \times 10 = 100$

$11^2 = 11 \times 11 = 121$

$12^2 = 12 \times 12 = 144$

$\sqrt{1} = 1$

$\sqrt{4} = 2$

$\sqrt{9} = 3$

$\sqrt{16} = 4$

$\sqrt{25} = 5$

$\sqrt{36} = 6$

$\sqrt{49} = 7$

$\sqrt{64} = 8$

$\sqrt{81} = 9$

$\sqrt{100} = 10$

$\sqrt{121} = 11$

$\sqrt{144} = 12$

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 Fluency 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 – 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.

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

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these Fluency 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.