Fast Maths Facts –

Year 5 – Autumn 1

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**.

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 x __ = 28 or __ ÷ 6 = 7.

Advice

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

Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Fast Maths Facts –

Year 5 – Autumn 2

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 8 **squared?**

What is 7 **multiplied by itself?**

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

Is 81 a **square number?**

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

Advice

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

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?

Fast Maths Facts –

Year 5 – Spring 1

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 × 12. When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

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

Key Vocabulary

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

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

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

Advice

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

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

Fast Maths Facts –

Year 5 – Spring 2

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 – 6.3 = 3.7
1– 0.6 = 0.4	10 – 3.7 = 6.3
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** 0.06?

What is 1.3 **less than** 10?

How many more than 9.8 is 10?

What is the **difference between** 0.92 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 + ___ = 10 or 7.2 + ___ = 10.

Advice

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

Buy one get three free - If your child knows one fact (e.g. 8 + 5 = 13), can they tell you the other three facts in the same fact family?

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

Fast Maths Facts –

Year 5 – Summer 1

I can identify prime numbers up to 20.

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

A prime number is a number with no factors other than itself and one.

The following numbers are prime numbers:
2, 3, 5, 7, 11, 13, 17, 19

A composite number is divisible by a number other than 1 or itself.

The following numbers are composite numbers:
4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20

Key Vocabulary

prime number

composite number

factor

multiple

Children should be able to explain how they know that a number is composite.

E.g. 15 is composite because it is a multiple or 3 and 5.

Advice

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

It's really important that your child uses mathematical vocabulary accurately. Choose a number between 2 and 20. How many correct statements can your child make about this number using the vocabulary above?

Make a set of cards for the numbers from 2 to 20. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite number

Fast Maths Facts –

Year 5 – Summer 2

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
1 kilometre = 1000 metres
1 metre = 100 centimetres
1 metre = 1000 millimetres
1 centimetre = 10 millimetres
1 litre = 1000 millilitres

They should also be able to apply these facts to answer questions.

e.g. How many metres n $1\frac{1}{2}$ km?

Advice

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

Look at the 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?