

Key Instant Recall Facts Year 5 – Autumn 1

I know decimal number bonds to 1 and 10.

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. $0.49 + \bigcirc = 10$ or $7.2 + \bigcirc = 10$.

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: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

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?

<u>Use number bonds to 10</u> - How can number bonds to 10 help you work out number bonds to 100?

<u>Play games</u> – There are missing number questions at <u>www.conkermaths.com</u>. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.



Key Instant Recall Facts Year 5 – Autumn 2

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

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 $\bigcirc \div 6 = 7$.

Top Tips

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<u>Speed Challenge</u> – 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.

Online games – There are many games online which can help children practise their multiplication and division facts. www.conkermaths.org is a good place to start.

<u>Use memory tricks</u> – 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.

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 in 1½ km?

Top Tips

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

<u>Be practical</u> – Do some baking and convert the measurements in the recipe.

<u>How far?</u> – 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 identify prime numbers up to 20.

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.

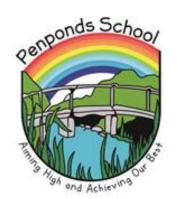
E.g. 15 is composite because it is a multiple of 3 and 5.

Top Tips

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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 numbers?



Key Instant Recall Facts Year 5 – Summer 1

I can recall square numbers up to 12² and their square roots.

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

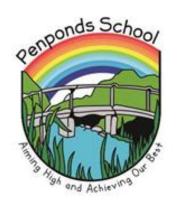
Children should also be able to recognise whether a number below 150 is a square number or not.

Top Tips

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

<u>Use memory tricks</u> – 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.

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:

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

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.

Top Tips

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<u>Play games</u> - There is an activity at <u>www.conkermaths.org</u> to practise finding factor pairs

<u>Think of the question</u> – 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.

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