Key Instant Recall Facts

Year 5: Autumn 1

Target: Know one & two decimal place number bonds for 1 and 10

By the end of the 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	**4.7 + 5.3 = 10**
0.25 + 0.75 = 1	**5.3 + 4.7 = 10**
1 – 0.25 = 0.75	**10 – 4.7 = 5.3**
1 – 0.75 = 0.25	**10 – 5.3 = 4.7**

Example questions:

What do I add to 0.8 to make 1?

What is 1 subtract 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?

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 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.

Useful Links:

Decimal Number Bonds to 1 Worksheets (math-salamanders.com)

Decimal Number Bonds | Oak National Academy (thenational.academy)

Decimals number bonds to 1 and 10 | Teaching Resources (tes.com)

Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk) – (Number Bonds section)

Don't practise until you get it right, practise until you can't get it wrong!

Key Instant Recall Facts

Year 5: Autumn 2

Target: Know multiplication & division facts up to 12 x 12

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

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

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 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.

Useful Links:

Have Fun Teaching - YouTube

Daily 10 - Mental Maths Challenge - Topmarks Select Level 5 > Multiplication (or Division) > Under mixed tables select x12

Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)

Don't practise until you get it right, practise until you can't get it wrong!

Key Instant Recall Facts

Year 5: Spring 1

Target: Know factor pairs of numbers

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

Following the previous KIRF, children now know all multiplication and division facts up to 12 x 12. When given a number in one of these times tables, they should be able to state a factor pair which multiply together to make the given number. e.g:

If given the number 72, children could say:
"6 multiplied by 12 is equal to 72 so 6 and 12 are factor pairs of 72"

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 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.

Useful Links:

Understanding factors, factor pairs and multiples in Maths - BBC Bitesize

Factor Game (nctm.org)

Factors and Multiples Game (maths.org)

Multiples and Factors (topmarks.co.uk)

Don't practise until you get it right, practise until you can't get it wrong!

Key Instant Recall Facts

Year 5: Spring 2

Target: Identify prime numbers within 100

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

Prime numbers are numbers <u>greater than one</u> that cannot be divided by any number except themselves and one.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The numbers shown in purple are all prime numbers.

To test if a number is a prime number, divide it by 2, 3, 5, 7, 9, or 11.

7 **is** a prime number because it can only be divided by itself (7) and 1.

70 **is not** a prime number because it can be divided by 70, 35, 14, 10, 7, 5, 2 and 1.

Top Tips:

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Useful Links:

Prime Numbers Up to 100 | Prime Numbers 1 to 100 (byjus.com)

What is a prime number? Definition and examples - BBC Bitesize

Pick The Primes (transum.org)

Number Ninja - Prime Numbers • ABCya!

Don't practise until you get it right, practise until you can't get it wrong!

Key Instant Recall Facts

Year 5: Summer 1

Target: Recall square numbers up to 12^2 and their square roots

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

SQUARES	SQUARE ROOTS
$1^2 = 1$	$\sqrt{1} = 1$
$2^2 = 4$	$\sqrt{4} = 2$
$3^2 = 9$	$\sqrt{9} = 3$
$4^2 = 16$	$\sqrt{16} = 4$
$5^2 = 25$	$\sqrt{25} = 5$
$6^2 = 36$	$\sqrt{36} = 6$
$7^2 = 49$	$\sqrt{49} = 7$
$8^2 = 64$	$\sqrt{64} = 8$
$9^2 = 81$	$\sqrt{81} = 9$
$10^2 = 100$	$\sqrt{100} = 10$

A **square number** is a number that is multiplied by itself. If you square a value, you will always get a positive answer.

E.g. 4 squared means: 4 x 4 and can be written as 4^2. It is spoken as "4 squared" or "4 to the power of 2".

The **square root** is the opposite of a square number. It's a number with identical factor pairs.

E.g. the square root of 64 is 8 because 8 x 8 = 64

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 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.

Useful Links:

THE SQUARE ROOT 🚀 What is the Square Root? 🤖 Math for Kids (youtube.com)

Square Numbers Explained (youtube.com)

Don't practise until you get it right, practise until you can't get it wrong!

Key Instant Recall Facts

Year 5: Summer 2

Target: Know multiplication & division facts up to 12 x 12

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

Counting forwards in steps of powers of 10

Counting on in powers of ten just means adding on 10, 100, 1000, or any other power of 10, each time!

For example…
From 53197 count on in steps of 10000:

Ten Thousands	Thousands	Hundreds	Tens	Ones
5	3	1	9	7

***Add** 1 to the ten thousands digit each time*
63197, 73197, 83197 etc…

Counting backwards in steps of powers of 10

Counting backwards in powers of ten just means subtracting 10, 100, 1000, or any other power of 10, each time!

For example…
From 53197 count backwards in steps of 10000:

Ten Thousands	Thousands	Hundreds	Tens	Ones
5	3	1	9	7

***Subtract** 1 to the ten thousands digit each time*
43197, 33197, 23197 etc…

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 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.

Useful Links:

Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 - Master The Curriculum

Jumpy: Powers of 10 | Game | Education.com

Don't practise until you get it right, practise until you can't get it wrong!