Maths

Key Instant Recall Facts

To help develop children's fluency in Mathematics, each half term we ask them to learn Key Instant Recall Facts (KIRFs).

The lists of KIRFs have been created to align with the National Curriculum and the end of year expectations for each year group. Children will be taught the foundations and necessary Maths in lessons beforehand, introducing them to specific visual models to support their understanding.

We expect the majority of children within a year group to be working towards these targets. Children should know these thoroughly and be able to recall the facts instantly for their year group. By helping to develop these skills, your child will be more able to access other areas of the Maths curriculum such as calculation methods, problem solving and reasoning. If your child is struggling to recall facts, please concentrate on a smaller number and practise more frequently.

Thank you for your support,
Miss Cole
Headteacher

Key Instant Recall Facts

Year 1 – Autumn 1

I can recite the number names in order to 50 and beyond.

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

Start off by creating a number square like the one below or creating your own number flash cards and as confidence grows try without any aides.
Also try starting at different numbers and asking your child to continue counting on from e.g.15

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

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?

Make it fun by using interactive resources such as Splat 100 square
https://www.primarygames.co.uk/pg2/splat/splatsq100.html

Key Instant Recall Facts

Year 1 – Autumn 2

I know number bonds for each number to 6.

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

0 + 1 = 1	0 + 4 = 4	0 + 6 = 6
1 + 0 = 1	1 + 3 = 4	1 + 5 = 6
	2 + 2 = 4	2 + 4 = 6
0 + 2 = 2	3 + 1 = 4	3 + 3 = 6
1 + 1 = 2	4 + 0 = 4	4 + 2 = 6
2 + 0 = 2		5 + 1 = 6
	0 + 5 = 5	6 + 0 = 6
0 + 3 = 3	1 + 4 = 5	
1 + 2 = 3	2 + 3 = 5	
2 + 1 = 3	3 + 2 = 5	
3 + 0 = 3	4 + 1 = 5	
	5 + 0 = 5	

Key Vocabulary

What is 3 **add** 2?

What is 2 **plus** 2?

What is 5 **take away** 2?

What is 1 **less than** 4?

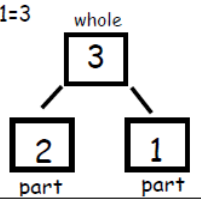
What is the **whole**?

What are the **parts**?

Key Imagery:

Prove using whole/part model:

Eg- 2+1=3



They should be able to answer these questions in any order, including missing number questions e.g. 3 + ◯ = 5 or 4 – ◯ = 2.

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.

Use practical resources – Your child has one potato on their plate and you give them three more. Can they predict how many they will have now?

Make a poster – We use Numicon at school. You can find pictures of the Numicon shapes here: bit.ly/NumiconPictures – your child could make a poster showing the different ways of making 5.

Play games – You can play number bond pairs online at www.conkermaths.org and then see how many questions you can answer in just one minute.

Key Instant Recall Facts

Year 1 – Spring 1

I know doubles and halves of numbers to 10.

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

0 + 0 = 0	½ of 0 = 0
1 + 1 = 2	½ of 2 = 1
2 + 2 = 4	½ of 4 = 2
3 + 3 = 6	½ of 6 = 3
4 + 4 = 8	½ of 8 = 4
5 + 5 = 10	½ of 10 = 5
6 + 6 = 12	
7 + 7 = 14	
8 + 8 = 16	
9 + 9 = 18	
10 + 10 = 20	

Key Vocabulary

What is **double** 9?

What is **half** of 6?

What is the **whole**?

What is the **parts**?

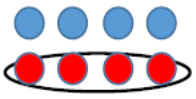
Key Imagery:

Prove using array:

Eg- 4 + 4 = 8

Prove using array using grouping

$\frac{1}{2}$ of 4 = 2



(the **parts** are 4 and 4 and the **whole** is 8)

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.

Ping Pong – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online – Go to www.conkermaths.org and see how many questions you can answer in just 90 seconds.

Key Instant Recall Facts

Year 1 – Spring 2

I know number bonds to 10.

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

0 + 10 = 10	2 + 8 = 10	4 + 6 = 10
10 + 0 = 10	8 + 2 = 10	6 + 4 = 10
10 – 10 = 0	10 – 8 = 2	10 – 6 = 4
10 – 0 = 10	10 – 2 = 8	10 – 4 = 6
1 + 9 = 10	3 + 7 = 10	5 + 5 = 10
9 + 1 = 10	7 + 3 = 10	10 – 5 = 5
10 – 9 = 1	10 – 7 = 3	
10 – 1 = 9	10 – 3 = 7	

Key Vocabulary

What is 3 **add** 2?

What is 2 **plus** 2?

What is 5 **take away** 2?

What is 1 **less than** 4?

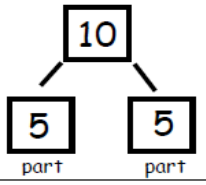
What is the **whole**?

What are the **parts**?

Key Imagery:

Prove using whole/part model:

Eg- 10 - 5 = 5



They should be able to answer these questions in any order, including missing number questions e.g. 6 + ◯ = 10 or 10 – ◯ = 3.

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.

Use practical resources – Your child has one potato on their plate and you give them two more. Can they predict how many they will have now?

Make a poster – We use Numicon at school. You can find pictures of the Numicon shapes here: bit.ly/NumiconPictures – your child could make a poster showing the different ways of making 5.

Play games – You can play number bond pairs online at www.conkermaths.org and then see how many questions you can answer in just one minute.

Key Instant Recall Facts

Year 1 – Summer 1

I know number bonds for each number to 10.

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

0 + 7 = 7	0 + 8 = 8	0 + 9 = 9	0 + 10 = 10
1 + 6 = 7	1 + 7 = 8	1 + 8 = 9	1 + 9 = 10
2 + 5 = 7	2 + 6 = 8	2 + 7 = 9	2 + 8 = 10
3 + 4 = 7	3 + 5 = 8	3 + 6 = 9	3 + 7 = 10
4 + 3 = 7	4 + 4 = 8	4 + 5 = 9	4 + 6 = 10
5 + 2 = 7	5 + 3 = 8	5 + 4 = 9	5 + 5 = 10
6 + 2 = 8	6 + 2 = 8	6 + 3 = 9	6 + 4 = 10
7 + 1 = 8	7 + 1 = 8	7 + 2 = 9	7 + 3 = 10
8 + 0 = 8	8 + 0 = 8	8 + 1 = 9	8 + 2 = 10
		9 + 0 = 9	9 + 1 = 10
			10 + 0 = 10

Key Vocabulary

What do I **add** to 5 to make 10?

What is 10 **take away** 6?

What is 3 **less than** 10?

How many more than 2 is 10?

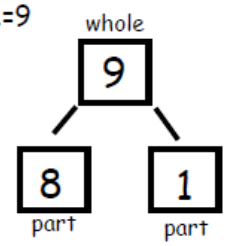
What is the **whole**?

What are the **parts**?

Key Imagery:

Prove using whole/part model:

Eg- 8+1=9



They should be able to answer these questions in any order, including missing number questions e.g. 1 + ◯ = 10 or 9 – ◯ = 8.

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.

Key Instant Recall Facts

Year 1 – Summer 2

I can tell an o'clock or half past time.

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

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

- I can tell the time to the nearest hour.
- I can tell the time to the nearest half hour.

Key Vocabulary

Twelve **o'clock**

Half past two

Minute hand

Hour hand

Top Tips

The secret to success is practising **little** and **often**. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands and discuss what they notice as the hands move.

Play "What's the time Mr Wolf?"– You could also give your child some responsibility for watching the clock :

Read books about time - It's about time by J.Murphy, Telling time by J.Older and What's the time, Mr Wolf? By D.Gliori.

Making times on a clock face- Why not have a go at making your own clocks and then practice making an o'clock or half past time or make times using the program at http://mathsframe.co.uk/en/resources/resource/90/itp_clock