



# Reception Mathematics

## Key Instant Recall Facts

### KIRFs

To develop your child's fluency and mental maths skills, we have introduced KIRFs (Key Instant Recall Facts) throughout school. KIRFs are a way of helping your child to learn by heart, key facts and information which they need to have instant recall of.

KIRFs are designed to support the development of mental maths skills that underpin much of the maths work in our school. They are particularly useful when calculating, adding, subtracting, multiplying or dividing. They contain number facts such as number bonds and times tables and measures that need constant practise and rehearsal, so children can recall them quickly and accurately.

Instant recall of facts helps enormously with mental agility in maths lessons. When children move onto written calculations, knowing these key facts is very beneficial.

For your child to become more efficient in recalling them easily, they need to be practised frequently and for short periods of time. Each half term, children will focus on a Key Instant Recall Fact (KIRF) to practise and learn at school and at home for the half term. They are available on our school website under the maths section and each child will receive a copy to keep at home.

The KIRFs include practical ideas to assist your child in grasping the key facts and contain helpful suggestions of ways in which you could make this learning interesting and relevant. They are not designed to be a time-consuming task and can be practised anywhere – in the car, walking to school, etc.

**Regular practice - little and often – helps children to retain these facts and keep their skills sharp.**

**Throughout the half term, the KIRFs will also be practised in school and your child's teacher will assess whether they have been retained.**

Over their time at primary school, we believe that - if the KIRFs are developed fully - children will be more confident with number work, understand its relevance, and be able to access the curriculum much more easily. They will be able to apply what they have learnt to a wide range of problems that confront us regularly.



# Key Instant Recall Facts

## Reception – Autumn 1

I can name numbers in order to 10.

I can compare two numbers by saying which is more or less.

Children should say the following number names in order:

0      1      2  
3      4      5  
6      7      8  
9      10

They should also know which number is larger/smaller out of 2 numbers given to them:

E.g.

3 and 7

6 and 1

The aim is to be able to recall these numbers **instantly** and know which number is larger / smaller **instantly**.

### 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?

Perhaps you could have number cards that you can show your child and they say which number is larger or smaller.

Use a numberline to help compare the size of the numbers.





# Key Instant Recall Facts

Reception – Autumn 2

I know number bonds to 5.

I can write the numerals 0-9 accurately in Kinetic Letters

By the end of this half term, children should know how to write all Kinetic Numerals 0-9 accurately, always starting at the top of the number. They should also be able to recall the number bonds to 5 facts instantly.

0 1 2 3 4 5 6 7 8 9

Zero and 5 make five

One and four make five

Two and three make five

## Key Vocabulary

\_\_\_\_\_ and \_\_\_\_\_ make five.

Zero, one, two, three, four five

Altogether

How many?

## 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:

- Use items around the house to find different ways of making 5, e.g. one blue button and four red buttons. One and four make five.
- Making up stories with items around the home, e.g. there are 2 cars in the car park and 3 more cars arrive, how many cars altogether? Two and three make five.
- Asking questions during daily routines, e.g. you have 1 sausage on your plate and I have 4 sausages on my plate, how many sausages altogether? One and four make five.



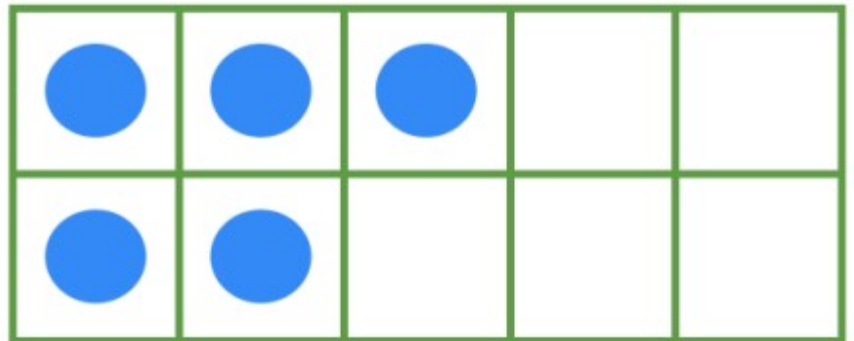
# Key Instant Recall Facts

## Reception – Spring 1

By the end of this half term, children should be able to recognise a small group of objects (up to 5) without the need to count them.

The ability to recognise the amount of objects instantly without needing to count is called subitising.

Children should be able to subitise a range of representations (up to 5).



### Top Tips

The secret to success is practising little and often.

Real-life objects - show your child a small group of objects. Ask them how many there are without counting, then get them to check.

Online games: (<https://www.topmarks.co.uk/learning-to-count/ladybird-spots>) Put dots on the ladybird. How many are there?



# Key Instant Recall Facts

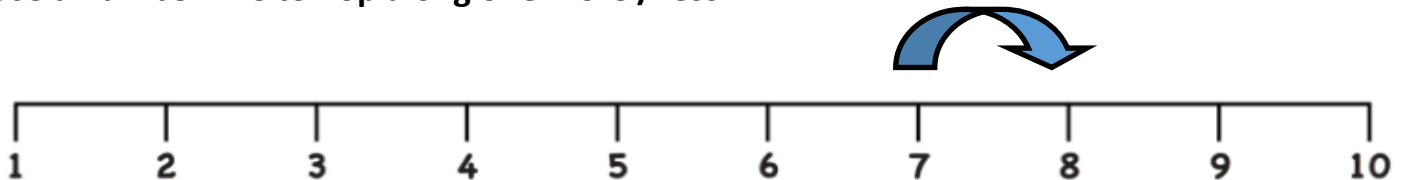
## Reception – Spring 2

I can say 1 more and 1 less than a given number up to 10.

By the end of this half term, children should be able to **say** one more and one less than any number up to 10.

1 more than...	They might be able to record it as an addition calculation	1 less than...	They might be able to record it as a subtraction calculation
1 is 2	$0 + 1 = 1$	1 is 0	$1 - 1 = 0$
2 is 3	$1 + 1 = 2$	2 is 1	$2 - 1 = 1$
3 is 4	$2 + 1 = 3$	3 is 2	$3 - 1 = 2$
4 is 5	$3 + 1 = 4$	4 is 3	$4 - 1 = 3$
5 is 6	$4 + 1 = 5$	5 is 4	$5 - 1 = 4$
6 is 7	$5 + 1 = 6$	6 is 5	$6 - 1 = 5$
7 is 8	$6 + 1 = 7$	7 is 6	$7 - 1 = 6$
8 is 9	$7 + 1 = 8$	8 is 7	$8 - 1 = 7$
9 is 10	$8 + 1 = 9$	9 is 8	$9 - 1 = 8$
	$9 + 1 = 10$	10 is 9	$10 - 1 = 9$

Use a number line to hop along one more / less.



### Top Tips

The secret to success is practising little and often. Perhaps you could have number cards that you can show your child and they say which number is one more or less than that number.

Game to support the concept of one more / less:

<https://www.topmarks.co.uk/learning-to-count/chopper-squad>



# Key Instant Recall Facts

## Reception – Summer 1

I can count, read, write and order numbers to 20.

I can write the numerals 0-9 accurately in Kinetic Letters

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	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

### Key Vocabulary

Eleven  
Twelve  
Thirteen  
Fourteen  
Fifteen  
Sixteen  
Seventeen  
Eighteen

### 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.

#### Use practical resources:

- Count objects around the home finding methods of counting accurately, e.g. moving each object as it is counted... use sweets, Lego, fruit, stones, leaves etc.
- Look for numbers up to 20 around the home and when you are out and about.
- Count objects around the home and then write the correct numeral to match the quantity counted. Repeat with other numbers. Discuss which number is the biggest/smallest or is more/less than the other. How do you know?
- Make cards with the numbers 1-20 on. Practise ordering the numbers largest to smallest and vice versa



# Key Instant Recall Facts

## Reception – Summer 2

I know doubles facts up to  $5 + 5$ .

I know halves of even 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**.

$$0 + 0 = 0$$

$$1/2 \text{ of } 0 = 0$$

$$1 + 1 = 2$$

$$1/2 \text{ of } 2 = 1$$

$$2 + 2 = 4$$

$$1/2 \text{ of } 4 = 2$$

$$3 + 3 = 6$$

$$1/2 \text{ of } 6 = 3$$

$$4 + 4 = 8$$

$$1/2 \text{ of } 8 = 4$$

$$5 + 5 = 10$$

$$1/2 \text{ of } 10 = 5$$

$$6 + 6 = 12$$

$$7 + 7 = 14$$

$$8 + 8 = 16$$

$$9 + 9 = 18$$

$$10 + 10 = 20$$

### Key Vocabulary

What is **double** 8?

What is **half** of 4?

#### Top Tips

- Do them little and often. See how many you can do over breakfast or on the way to school
- Create a poster and put it up somewhere you can see every day
- Doubling = adding two of the same number. Halving = dividing an amount into two equal groups
- Use games - Google doubling and halving games
- Do not try to learn them all at once

If you feel that your child has become confident with doubling and halving, then word problems or an open ended question or statement are great ways to apply their knowledge. Here are some examples:

If I have 6 cakes and give half away how many do I have left over?

Doubling an odd number will always give you an even number. True or false?