

# Lister Infant School

## YEAR 1 Maths Key Instant Recall Facts (KIRFs)

To develop your child's fluency and mental maths skills, we have decided to introduce 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 to support maths progression.**

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

Instant recall of facts helps enormously with mental agility within 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 home for the half term. They will also be available on our school website under the maths section. 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 practiced 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 practiced 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 learned to a wide range of problems that confront children daily.

If you have any questions, please do not hesitate to ask your child's class teacher or Mrs White (Maths Subject Leader).

# YEAR 1 – Autumn 1

## 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**.

$0 + 1 = 1$

$0 + 4 = 4$

$0 + 6 = 6$

$1 + 0 = 1$

$1 + 3 = 4$

$1 + 5 = 6$

$2 + 2 = 4$

$2 + 4 = 6$

$0 + 2 = 2$

$3 + 1 = 4$

$3 + 3 = 6$

$1 + 1 = 2$

$4 + 0 = 4$

$4 + 2 = 6$

$2 + 0 = 2$

$5 + 1 = 6$

$0 + 5 = 5$

$6 + 0 = 6$

$0 + 3 = 3$

$1 + 4 = 5$

$1 + 2 = 3$

$2 + 3 = 5$

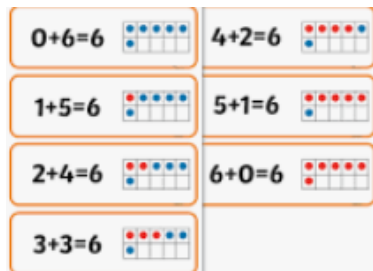
$2 + 1 = 3$

$3 + 2 = 5$

$3 + 0 = 3$

$4 + 1 = 5$

$5 + 0 = 5$



### Key Vocabulary

**First** we have 3, **then** we add 2, **now** we have 5.

**First** we have 5, **then** we take away 1, **now** we have 4.

What is 3 **add** 2?

What is 2 **plus** 2?

What is 5 **take away** 2?

What is 1 **less than** 4?

### 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 - 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](http://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 <https://ictgames.com/saveTheWhale/> and then see how many questions you can answer in just one minute.

# YEAR 1 – Autumn 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**.

$0 + 10 = 10$

$2 + 8 = 10$

$4 + 6 = 10$

$10 + 0 = 10$

$8 + 2 = 10$

$6 + 4 = 10$

$10 - 10 = 0$

$10 - 8 = 2$

$10 - 6 = 4$

$10 - 0 = 10$

$10 - 2 = 8$

$10 - 4 = 6$

$1 + 9 = 10$

$3 + 7 = 10$

$5 + 5 = 10$

$10 - 9 = 1$

$10 - 7 = 3$

$10 - 1 = 9$

$10 - 3 = 7$

$9 + 1 = 10$

$7 + 3 = 10$

$10 - 5 = 5$

### Key Vocabulary

What is 3 **add** 2?

What is 2 **plus** 2?

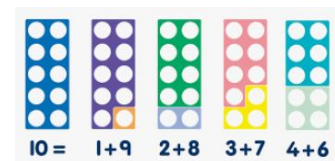
What is 5 **take away** 2?

What is 1 **less than** 4?

They should be able to answer these questions in any order, including missing number questions e.g.

$6 + \bigcirc = 10 \text{ or } 10 - \bigcirc = 3$

### Top Tips



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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](http://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 <https://ictgames.com/saveTheWhale/> and then see how many questions you can answer in just one minute.

# YEAR 1 – Spring 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**.

$0 + 7 = 7$      $0 + 8 = 8$      $0 + 9 = 9$      $0 + 10 = 10$

$1 + 6 = 7$      $1 + 7 = 8$      $1 + 8 = 9$      $1 + 9 = 10$

$2 + 5 = 7$      $2 + 6 = 8$      $2 + 7 = 9$      $2 + 8 = 10$

$3 + 4 = 7$      $3 + 5 = 8$      $3 + 6 = 9$      $3 + 7 = 10$

$4 + 3 = 7$      $4 + 4 = 8$      $4 + 5 = 9$      $4 + 6 = 10$

$5 + 2 = 7$      $5 + 3 = 8$      $5 + 4 = 9$      $5 + 5 = 10$

$6 + 1 = 7$      $6 + 2 = 8$      $6 + 3 = 9$      $6 + 4 = 10$

$7 + 0 = 7$      $7 + 1 = 8$      $7 + 2 = 9$      $7 + 3 = 10$

$8 + 0 = 8$      $8 + 1 = 9$      $8 + 2 = 10$

$9 + 0 = 9$      $9 + 1 = 10$

$9 + 0 = 10$

### Key Vocabulary

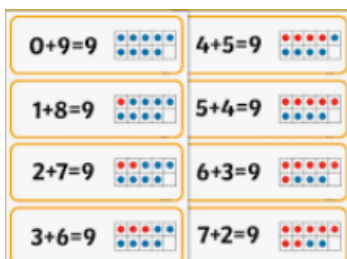
What do I **add** to 5 to make 10?

What is 10 **take away** 6?

What is 3 **less than** 10?

**How many more** than 2 is 10?

They should be able to answer these questions in any order, including missing number questions e.g.



$1 + \bigcirc = 10$     or     $9 - \bigcirc = 8$

### 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 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. Play <https://ictgames.com/saveTheWhale/>

# YEAR 1 – Spring 2

## I know one more and one less with 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**.

- One more than 1
- One more than 2
- One more than 3 (etc.)
  
- One less than 20
- One less than 19
- One less than 18 (etc.)

### Key Vocabulary

What is **one more** than 4?

What is **one less** than 12?

### 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 - Your child has ten pieces of carrot on their plate. What would one more / one less be?



# YEAR 1 – Summer 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**.

$0 + 0 = 0$

$\text{half of } 0 = 0$

$1 + 1 = 2$

$\text{half of } 2 = 1$

$2 + 2 = 4$

$\text{half of } 4 = 2$

$3 + 3 = 6$

$\text{half of } 6 = 3$

$4 + 4 = 8$

$\text{half of } 8 = 4$

$5 + 5 = 10$

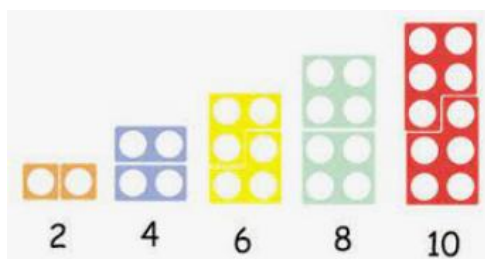
$\text{half of } 10 = 5 + 6 = 12$

$6 + 7 = 14$

$7 + 8 = 16$

$8 + 9 = 18$

$10 + 10 = 20$



### Key Vocabulary

What is **double** 4?

What **is half of** 12?

### 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.

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 the harder version, the adult can say 'Pong' and the child replies 'Ping' then halves the number.

Practise online – Go to [www.conkermaths.com](http://www.conkermaths.com) and then see how many questions you can answer in just 90 seconds.

# YEAR 1 – Summer 2

## I can tell the time using o'clock and half past.

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 smaller steps.

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



### Key Vocabulary

It is 5 **O'Clock**.

It is **half past 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 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.

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.

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

Read books about time. – Online book called 'The Bad Tempered Ladybird' – clock faces.