

KEY INSTANT RECALL FACTS

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. KIRFs are a crucial part of a child's learning journey. They underpin a learner's mental development and ensure that they're able to answer maths questions with confidence.

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 us regularly.



Year 1 – Autumn 1

I know number bonds for each number to 5

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

| | | 4 0 4 | 0 + 1 - 1 | 0 . 1 - 1 |
|---------------------------------|-----------|-----------|-----------|-----------|
| Kay Vaaabulany | 4 - 0 = 4 | 1 - 0 = 1 | 0 + 4 = 4 | 0 + 1 = 1 |
| Key Vocabulary | 4 – 1 = 3 | 1 – 1 = 0 | 1 + 3 = 4 | 1 + 0 = 1 |
| First we have 3, then we | 4 – 2 = 2 | | 2 + 2 = 4 | |
| add 2, now we have 5. | | | 2 + 2 - 4 | |
| | 4 – 3 = 1 | 2-0=2 | 3 + 1 = 4 | 0 + 2 = 2 |
| First we have 5, then we | 4 - 4 = 0 | 2 – 1 = 1 | 4 + 0 = 4 | 1 + 1 = 2 |
| take away 1, now we have | | 2-1=1 | 4 + 0 - 4 | 1 + 1 - 2 |
| 4. | | 2 - 2 = 0 | | 2 + 0 = 2 |
| | 5–0=5 | | 0 + 5 = 5 | |
| What is 3 add 2? | 5 - 0 = 5 | | 010-0 | |
| What is 2 plus 2? | 5 – 1 = 4 | 3-0=3 | 1 + 4 = 5 | 0 + 3 = 3 |
| | 5 – 2 = 3 | 3 – 1 = 2 | 2 + 3 = 5 | 1 + 2 = 3 |
| What is 5 take away 2? | | • • – | | |
| What is 1 less than 4? | 5 – 3 = 2 | 3 – 2 = 1 | 3 + 2 = 5 | 2 + 1 = 3 |
| vinatis i less than 4? | 5 – 4 = 1 | 3-3=0 | 4 + 1 = 5 | 3 + 0 = 3 |
| | 5 – 5 = 0 | | | • |
| | | | 5 + 0 = 5 | |

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 – your child could make a poster showing the different ways of making 5.



Year 1 – Autumn 2

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.

| | - | | |
|--|--------------------|------------|-------------------------|
| Key Vocabulary | 4 + 6 = 1 0 | 2 + 8 = 10 | 0 + 10 = 10 |
| | 6 + 4 = 1 0 | 8 + 2 = 10 | 10 + 0 = 10 |
| First we have 9, then we add | 10 – 6 = 4 | 10 – 8 = 2 | 10 – 10 = 0 |
| 1, now we have 10. | 10 - 4 = 6 | 10 – 2 = 8 | 10 – 0 = 10 |
| First we have 7, then we | | 10 2 0 | |
| take away 2, now we have 5 . | | | |
| | 5 + 5 = 10 | 3 + 7 = 10 | 1 + 9 = 10 |
| What is 8 add 2? | 10 – 5 = 5 | 7 + 3 = 10 | 9 + 1 = 10 |
| What is 2 plus 5? | | 10 – 7 = 3 | 10 – <mark>9</mark> = 1 |
| What is 10 take away 2? | | 10 – 3 = 7 | 10 – 1 = 9 |
| What is 3 less than 8? | | | |
| | | | |
| | | | |

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

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Use practical resources - Your child has six potatoes 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 10.



Year 1 – Spring 1

I know number bonds for each number 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.

| | | | Key Vocabulary |
|------------|------------|-------------------|---------------------------------|
| 2 + 9 = 11 | 5 + 9 = 14 | Example of a fact | |
| 3 + 8 = 11 | 6 + 8 = 14 | family | What do I add to 5 to |
| 4 + 7 = 11 | 7 + 7 = 14 | 6 + 9 = 15 | make 19? |
| 5 + 6 = 11 | 6 + 9 = 15 | 9 + 6 = 15 | IIIake 19? |
| • • • • • | | • • • | |
| 3 + 9 = 12 | 7 + 8 = 15 | 15 – 9 = 6 | What is 17 take away 6? |
| 4 + 8 = 12 | 7 + 9 = 16 | 15 – 6 = 9 | |
| 5 + 7 = 12 | 8 + 8 = 16 | | What is 13 less than 15? |
| 6 + 6 = 12 | 8 + 9 = 17 | Example of other | |
| 4 + 9 = 13 | 9 + 9 = 18 | facts | How many more than 8 |
| 5 + 8 = 13 | | 4 + 5 = 9 | is 11? |
| 6 + 7 = 13 | | 13 + 5 = 18 | |
| | | 19 – 7 = 12 | What is the difference |
| | | | between 9 and 13? |
| | | | |

This list includes the most challenging facts but children will need to learn all number bonds for each number to 20 (e.g. 15 + 2 = 17). This includes related subtraction facts (e.g. 17 - 2 = 15).

Top Tips

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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?

Use doubles and near doubles – If you know that 6 + 6 = 12, how can you work out

6 + 7? What about 5 + 7?



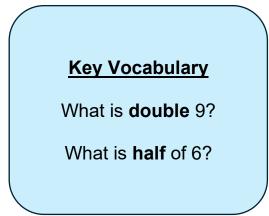


Year 1 – Spring 2

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 | half of $0 = 0$ |
|--------------|-----------------|
| 1 + 1 = 2 | half of $2 = 1$ |
| 2 + 2 = 4 | half of $4 = 2$ |
| 3 + 3 = 6 | half of $6 = 3$ |
| 4 + 4 = 8 | half of $8 = 4$ |
| 5 + 5 = 10 | half of 10 = 5 |
| 6 + 6 = 12 | |
| 7 + 7 = 14 | |
| 8 + 8 = 16 | |
| 9 + 9 = 18 | |
| 10 + 10 = 20 | |



<u>Top Tips</u>

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<u>Ping Pong</u> – 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.



Year 1 – Summer 1

I can sequence multiples of numbers

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

2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

<u>Top Tips</u>

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A multiple is the result of when you multiply a number by a whole number (an integer) i.e. multiples of 5 are 5, 10, 15 etc (1 x 5, 2 x 5, 3 x 5 etc).

Key Vocabulary

When I am counting in 2's, which number **lies between** 2 and 6?

When I am counting in 5's, which number **lies between** 15 and 25?

Which number is missing from my **sequence**: 35, 30, 25, ...?

Which **multiple** of 10 comes **before** 100 when I am counting in 10's?

Which **multiple** of 5 comes **after** 45? How do you know?



Year 1 – Summer 2

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

and I know the days of the week in order.

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

Twelve o'clock

Half past two

Which days are at the **weekend**?

Which day is the **first day** of the school week?

Children need to be able to tell the days of the week in order:

Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.

<u>Top Tips</u>

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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.