

Mathematics
Key Instant Recall Facts
KIRFs



To develop your child's fluency and mental maths skills, we are introducing KIRFs (Key Instant Recall Facts) throughout Mill Rythe Junior 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 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. Being able to recall these facts quickly, allows your child to focus on problem solving and reasoning which is a main focus for the mathematics curriculum. 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 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 – for example in the car and walking to school. 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 Mill Rythe Junior 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 and contexts that they will encounter as parts of their learning in maths.



Key Instant Recall Facts

Year 5– Autumn 1

I can double and half any number up to 100

By the end of this half term, children should be able to double and halve any 2 digit number. The aim is for them to recall these facts **instantly**.

What is $\frac{1}{2}$ of 38?

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

$$\frac{1}{2} \text{ of } 30 = 15$$

So $\frac{1}{2}$ of 38 must be 19!

Double

$$34 \rightarrow 68$$

$$35 \rightarrow 70$$

$$36 \rightarrow 72$$

Halves

$$84 \rightarrow 42$$

$$85 \rightarrow 42 \frac{1}{2}$$

or 42.5

$$86 \rightarrow 43$$

Play number ping pong!

Start of saying 'ping', child replies with 'pong'. Repeat and then convert to numbers i.e. say 39 and they reply '78'. Or say, '78' and they say '39'

Timed Challenges

How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?

Helpful Hints

- Create regular opportunities for rapid fire questions where an instant correct answer is required
- Encourage children to use what they already know, for example the 6x table is double the 3x table!
- When children are confident with doubles ask them to find the corresponding halves
- Practise halving at least as often as doubling.
- This will help children with subtraction at a later

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.

Key Vocabulary

Multiply/ product/ times by /lots of/ share/group /divide double/ near double/ twice/2 lots of 2/ times/ half halved /divided by 2/ shared between 2 group/ in pairs

What is double 37? *Explain how you know*

How do you double/halve a number?

Show me

Is double 62, 124 ? *Prove it!*