

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 4– Autumn 1

**Know all 2 digit pairs of numbers which total
100**

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

Some examples:

$$60 + 40 = 100$$

$$40 + 60 = 100$$

$$100 - 40 = 60$$

$$100 - 60 = 40$$

$$75 + 25 = 100$$

$$25 + 75 = 100$$

$$100 - 25 = 75$$

$$100 - 75 = 25$$

$$37 + 63 = 100$$

$$63 + 37 = 100$$

$$100 - 63 = 37$$

$$100 - 37 = 63$$

$$48 + 52 = 100$$

$$52 + 48 = 100$$

$$100 - 52 = 48$$

$$100 - 48 = 52$$

Key Vocabulary

What do I **add** to 72 to make 100?

What is 100 **take away** 6?

What is 13 **less** than 100?

How many more than 98 is 100?

What is the **difference** between 89 and 100?

They should be able to answer these questions in any order, including missing number questions e.g. $49 + \square = 100$ or $100 - \square = 32$

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.

Games and Activities

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 number bonds to 10 - How can number bonds to 10 help you work out number bonds to 100?

Play games – There are missing number questions at www.conkermaths.com . See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.