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 Purbrook 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. 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 Purbrook 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.

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

A prime number is a number with no factors other than one and itself.

The following numbers are prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43 and 47

A composite number is divisible by a number other than one and itself.

The following numbers are composite numbers:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 22, 24, 25, 26, 27, 28, 30, 32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 49 and 50.

Children should be able to explain how they know that a number is composite. E.g. 39 is a composite because it is a multiple of 3 and 13

 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. It is very important that your child uses mathematical vocabulary accurately.

Choose a number between 2 and 50. How many correct statements can your child make about this number using the key vocabulary above.

Make a set of cards for the numbers from 2 to 50. How quickly can your child sort these into prime and composite numbers?

How many even prime numbers can they find?

How many odd composite numbers can they find?

Please note that 1 is not a prime or   composite number.

Key Vocabulary

Prime number

Composite number

factor

multiple