



# Glenthorne Community Primary School

## Maths KIRFs



KIRFs (Key Instant Recall Facts) are designed to support the development of the mental fluency skills that underpin much of the mathematics curriculum. They are particularly useful when calculating, be it adding, subtracting, multiplying or dividing.

- Each year group is allocated up to six facts to focus on throughout the year, in line with the National Curriculum and age-related expectations.
- Time is to be dedicated at least 3 times each week, possibly in smaller, regular bursts, as well as at home, to ensure that the KIRF is practiced and learnt so that children grow in confidence to recall their facts instantly.
- Instant recall of facts helps enormously with mental agility in mathematics; when children move onto written calculations and abstract methods, knowing these key facts is crucial. For children to become more efficient in recalling them easily, they need to be practised frequently and in short bursts.
- Each half term, children will be assessed on their year group's KIRF. Teachers will track when pupils achieve their KIRF and pupils who do not achieve will continue to develop the skill in intervention time.



# Glenthorne Community Primary School

## Maths KIRFs



Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Can say the numbers from 0 to 5 and back from 5 to 0.	Can say the numbers from 0 to 10 and back from 10 to 0.	Partition numbers, to 5, into different groups.	Can count, read and order numbers to 20.	Say which number is one more/ one less than numbers to 20.	Know number bonds for each number to 10.
Year 1	Read and write numbers 1-10 in numerals and words.	Recall addition and subtraction facts within 10.	Know doubles and halves of numbers to 10.	To count on and back in steps of 10.	Read and write numbers 1-20 in numerals and words.	Know some number bonds to 20.
Year 2	Can count, read and write numbers to 100 in numerals.	Know all number bonds for each number to 20.	Know the multiplication and division facts for the 2 times table.	Know doubles and halves of numbers to 20.	Know multiplication and division facts for the 10 times table.	Add and subtract ones and tens to two-digit numbers.
Year 3	Know all number bonds to 100.	Find 10 or 100 more or less than a given number.	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Know fractions that add to 1 (e.g. $\frac{1}{4} + \frac{3}{4} = 1$ ).	Count up and down in tenths.	Recognise, find and write fractions of objects.
Year 4	Read, write and recognise place value of numbers up to 4 digits.	Know multiplication and division facts for 7x and 9x tables.	Multiply and divide single-digit numbers by 10 and 100.	Recall multiplication and division facts for multiplication tables up to $12 \times 12$ .	Recognise and show families of common equivalent fractions.	Recognise and write decimal equivalents of any number of tenths or hundreds.
Year 5	Find 10, 100, 1,000, 10,000 and 100,000 more or less than any given number.	Find factor pairs of a number.	Recall square numbers to 12 squared.	Multiply and divide any given number by 10, 100 and 1,000.	Find equivalent fractions, decimals and percentages.	Convert between metric measurements (mm, cm, m, km, g, kg, ml, l).
Year 6	Multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.	Identify common factors, common multiples and prime numbers.	Derive multiplication and division facts using decimal numbers (e.g. $8 \times 0.7 = 5.6$ ).	To convert between decimals, fractions and percentages.	Know the formulae for finding the area of different shapes.	Use mental strategies to complete calculations for the four operations.