

KIRFs

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

	F1	F2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Name numbers to 5 in order through rote counting	Verbally to 20 and beyond and recognise the pattern of the counting system	- Read and write numbers from 1-10 in numerals and words. - Order numbers on a number line - Count forwards and backwards up to 100 from any number - Compare numbers stating which is greater, less or equal to - Identify one more and one less than a given number	- Addition and subtraction facts to 20 including 1 more and 1 less of a number - Know number bonds to 20 - Identify ten more and ten less than a given number - Tell time to o'clock - Recognise coins	- Place value - Name and compare 2D shapes - Add numbers mentally - Subtract number mentally - Written addition - Addition and subtraction facts to 50	- Addition and subtraction facts to 100 - Times tables up to 12X12 - Place value - Addition and subtraction - Name and compare 2D shapes	12 times tables (X and $\div$) fluently - Place value up to Hth - Place value of decimals - Label angles - Perimeter	12 times tables (X and $\div$) fluently - Round any whole number to nearest degree of accuracy - Identify common factors of a pair of numbers - Convert between mm/cm/m/km - Long multiplication
Autumn 2	Can name numbers to 10 in order through rote counting	Recall 1 more and 1 less to 5 and subitise to 5	- Add and subtract using numbers within 10 - Know numbers bonds within 10. - Know numbers bonds to 10. - Count to 100 forwards and backwards starting at any number - Split a number into part-part-whole	- Number bonds to 20 - Compare numbers up to 100 - Order numbers up to 100 - Add 2 1-digit numbers - Recognise half and quarters	- The 3 times tables (X and $\div$) - Place value - Read time to 0' clock 2 and 5 times table (X and $\div$) - Name 2D and 3D shapes 4 times table (X and $\div$)	- Times tables up to 12X12 - Read time on an analogue clock - Division - Rounding - Mental division	- Factor pairs for numbers to 100 - Identify common multiple of given pairs of numbers - Short division - Compare fractions using $< > =$ - Area	- Convert between decimals, fractions and percentages - Convert between g/kg and ml/l - Area and perimeter of shapes - Convert units of time - Long multiplication

	F1	F2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Spring 1	Recall amounts to 5 and represent using fingers	Partition numbers to 5	- Add and subtract using a number line. - Name and sort 2D shapes - Compare and order numbers to 20 - Partition numbers in 10s and Ones up to 50.	- Know doubles and halves for numbers to 20 10 more/less - Count vertices on 2D shapes - Subtract across 10	- Know doubles and halves for numbers to 50 2 and 4 times table 3 times table - Mental addition and subtraction	- Times tables up to 12X12 - Multiply or divide a single digit by 10 or 100 - Name and compare 2D and 3D shapes - Place value - Area	- Know all the 12 times tables (X and $\div$) fluently - Time (reading 24hr) - Convert units of measure - Label 2D and 3D shapes	- Doubles and halves of decimal numbers with up to 2 decimal places. - BIDMAS - Square and cube numbers - Long division - Label angles
Spring 2	Understand the concept of more / less	Recall 1 more and 1 less to 10	- Know halves and doubles to 10 - Number bonds to 20 - Number bonds up to 50 - Estimate numbers on a number line (up to 50) - Count in 10s	- Recognise coins - Add 2-digit numbers - Subtract 2-digit numbers 2 times table - Add and subtract across 10	- Know the 4 times tables (X and $\div$) - Perimeter - Measure in cm - Mental addition and subtraction - Multiply and divide by 2 4 and 8	- Times tables up to 12X12 - Area - Written multiplication - Addition and subtraction - Perimeter	- Count forwards and backwards in 25s from any number - Short division - Compare and label angles - Area - Reading line graphs.	- Percentage of amounts - Long division - Long multiplication - Convert units of measure - Label shapes

	F1	F2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Summer 1	• Subitise to 3	• Recall number bonds to 5 and 10 including double facts and subtraction	• Measure lengths in cm • Number bonds to 50 • Compare mass • Compare capacity • Describe the properties of 2D and 3D shapes	• 2's times tables (X and ÷) • Measure in cm • Measure in g • 5's times tables (X and ÷) • Identify place value and partition numbers	• Identify simple 2D and 3D shapes • Place value • Compare lengths • Perimeter • Read time on an analogue clock • Order fractions	• Times tables up to 12X12 • Place value of decimal numbers • Compare fractions • Order fractions • Divide by 10	• Know decimal number bonds to 1 and 10 (1dp and 2P) • Add/subtract fractions • Compare fractions • Long multiplication • Round numbers	• Long division • Percentage of amounts • Match fraction, decimal and percentages • Compare and order decimal numbers • Missing number problems (using 4 operations)
Summer 2	• Verbally count to 10 and beyond		• Solve simple X or ÷ with manipulatives or arrays • Recognise $\frac{1}{2}$ and $\frac{1}{4}$ of a shape or quantity • Count in 2s, 5s and 10s • Compare 2 digit numbers • Measure hours, minutes and seconds • Recognise coins	• Know the 5's times tables (X and ÷) • Measure in m • Measure in l • Read time to o'clock • Interpret pictograms and tables	• Know the 8 times tables (X and ÷) • Compare fractions • Add and subtract money • Tell time to minutes • Interpret bar charts	• Know all the 12 times tables (X and ÷) fluently • Rounding decimals to the nearest whole • Compare and order fractions • Area • Convert to 24 hour • Symmetry	• Tell the time to the nearest 5 minutes • 4 operations • Convert units of measure • Area and volume • Add/subtract fractions. • Symmetry	• Algebra • Long division • Percentage of amounts • Long multiplication • Label angles • Symmetry • Reading line graphs and tables