

KIRFS Progression Overview

- 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 dedicated each week, possibly in smaller, regular bursts to ensure that these facts are practised and learnt so that they become embedded, allowing the children to grow in their mathematical confidence.
- Instant recall of facts also helps enormously with mental agility in mathematics; when children move onto written calculations and abstract methods, knowing these key facts is crucial to be able to complete calculations quickly and accurately.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number facts and skills to be learnt during the year	I can say the numbers from 0 to 5 and back from 5 to 0 in order	I can read and write numbers 1-10 in numerals and words	I know number bonds for each number to 20	I know number bonds to 100	I can count in multiples of 1000 and 25	I know one and two decimal place number bonds for numbers between 1 and 10	I can derive multiplication and division facts using decimal numbers (e.g. $8 \times 0.7 = 5.6$)
	I can say the numbers from 0 to 10 and back from 10 to 0 in order	I know number bonds for each number to 10	I know multiplication and division facts for the 5 times table	I know multiplication and division facts for the 4 times table	I can round any whole number up to 100,000 to the nearest 10, 100 or 1000	I know the multiplication and division facts for all times tables up to 12×12	I can identify common factors of a pair of numbers
	I can partition numbers to 5, into two groups	I know doubles and halves of numbers to 10	I know doubles and halves of numbers to 20	I know multiplication and division facts for the 6 times table	I know multiplication and division facts for the 7, 9, 11 and 12 times tables	I can find factor pairs of a number and multiples	I know the order of operations using BIDMAS
	I can say which number is one more or one less than a given number to 20	I know the multiplication and division facts for the 2 times table	I can count, read, write and order numbers to 100	I can count, read, write and order numbers to 1000	I can multiply and divide single-digit numbers by 10 and 100	I can identify prime numbers up to 100 and recall prime numbers up to 19	I know the first 5 cube numbers
	I can count, read and write numbers to 20	I know the multiplication and division facts for the 10 times table	I know multiplication and division facts for the 3 times table	I know multiplication and division facts for the 8 times table	I can recognise decimal equivalents of fractions for tenths, hundredths and for $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$	I can recall square numbers up to 12^2 and their square roots	I know doubles and halves of 2-digit decimals
	I can say the numbers from 0 to 20 and back from 20 to 0 in order	I can use the fraction $\frac{1}{2}$ for shape and quantity	I can recognise and find $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape or quantity	I can compare and order fractions with the same denominators	I can add and subtract fractions with the same denominator	I can read and write decimals as fractions	I know common fraction, decimal and percentage equivalences
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Facts relating to duration of time	I can name the days of the week in the right order.	I can name the months of the year in chronological order I can name the seasons of the year I can tell the time to the nearest hour and the nearest half hour	I know that there are 24 hours in a day I can tell the time to the nearest quarter of an hour and to the nearest five minutes	I know the number of days in each month I know that there are 365 days in a year and 366 days in a leap year I can tell the time to the nearest minute (including using Roman numerals from I to XII)	I know how to convert between digital and analogue time	I can solve problems which require converting between units of time	
Facts relating to		I know there are 60 seconds in one minute	I know that there are 100 cm in 1m,	I know that there are 10mm in 1 cm and	I know how to convert between different units of	I can recall metric conversions	I know how to convert between standard units of

KIRFS Progression Overview

different measures		and 60 minutes in one hour I know the different denomination of coins and notes	1000g in 1 kg and 1000ml in 1 litre	1000mm in 1 m I am able to measure perimeter of simple 2D shapes	metric measurement I can measure and calculate perimeter and area of rectilinear shapes	I can measure and calculate perimeter and area of composite rectilinear shapes I understand approx. equivalences between metric and some imperial measures (inches, pounds and pints) I can estimate volume and capacity	measure (including km to miles) I can use formulae to calculate the area and volume of shapes
Geometry facts		I can recognise and name common 2-D and 3D shapes	I can describe, compare and sort based on properties of 2D shapes and 3D shapes	I can draw 2D shapes I can make 3D shapes I can identify right angles I can identify different types of lines: horizontal, vertical, perpendicular and parallel	I can compare and classify shapes based on properties and sizes I can identify lines of symmetry I can identify acute and obtuse angles	I can distinguish between regular and irregular polygons I can use properties of rectangles to find missing lengths and angles I can compare acute, obtuse and reflex angles I can draw given angles I know that angles at a point and one whole turn = 360° I know that angles on a straight line and half turn = 180°	I can draw 2D shapes using given dimensions and angles I can illustrate and name the parts of a circle I can recognise and build simple 3D shapes using nets I can find unknown angles in any triangles, quadrilaterals and regular polygons I know that vertically opposite angles at a point on a straight are equal