



Key Instant Recall Facts – Know By hearts

Key Instant Recall Facts are what underpins much of the mental maths knowledge that children are required to know throughout their learning journey. They are particularly useful when calculating, adding, subtracting, multiplying and dividing but also underpin many other areas of mathematics. For example, in order to find equivalent fractions in year 6, children need to be able to rapidly recall their knowledge of common multiples (numbers in particular times tables). When children have quick access to a bank of facts, which incur little cost to working memory, they have more capacity to think about more complex problems that draw on these facts.

KIRFs are crucial for ensuring that a child is able to build confidence and fluency with a wide variety of mathematical topics. By being able to reference Key Instant Recall Facts on a regular basis, they'll also find the national curriculum to be significantly more accessible.

EYFS

Topic	Facts taught in this year group	
Number and Place Value	<ul style="list-style-type: none">• Read and write numbers from 1 to 20 in numerals• Identify one more and one less than any number (to 20) Ordinal numbers (1 st , 2 nd , 3 rd)	
Addition and Subtraction	<ul style="list-style-type: none">• Be able to work out number bonds in 5 (including subtraction facts)	
Measurement	<ul style="list-style-type: none">• Know the days of the week in order• Know the months of the year in order.	
Properties of Shapes	<ul style="list-style-type: none">• Recognise and name 2D shapes (rectangles, squares, circles and triangles).• Recognise and name 3D shapes (cubes, cuboids, pyramids and spheres).	

Year 1

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value	<ul style="list-style-type: none">• Count to and across 100, forwards and backwards, from 0, 1 or any number.• Count, read and write numbers to 100 in numerals.• Read and write numbers from 1 to 20 in words.• Identify one more and one less than any number (to 100).	<ul style="list-style-type: none">• Read and write numbers from 1 to 20 in numerals• Identify one more and one less than any number (to 20)• Ordinal numbers (1st, 2nd, 3rd)
Addition and Subtraction	<ul style="list-style-type: none">• Be able to work out number bonds to all numbers within 10.• Be able to work out number bonds in 10.	<ul style="list-style-type: none">• Be able to work out number bonds in 5 (including subtraction facts)
Multiplication and Division	<ul style="list-style-type: none">• Count in 2s to 20, 5s to 50 and 10s to 100.	
Measurement	<ul style="list-style-type: none">• Know how many days are in a week• Know how many months are in a year.• Know when key events happen (e.g. Christmas)	<ul style="list-style-type: none">• Know the days of the week in order• Know the months of the year in order.
Properties of Shapes		<ul style="list-style-type: none">• Recognise and name 2D shapes (rectangles, squares, circles and triangles).• Recognise and name 3D shapes (cubes, cuboids, pyramids and spheres).

Year 2

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value	<ul style="list-style-type: none">• Count forwards and backwards in 3s from 0.• Count forwards and backwards in 10s from any number.• Read and write numbers to 100 in words.• Recognise odd and even numbers to 100	<ul style="list-style-type: none">• Count forwards and backwards in 2s and 5s from 0.• Read and write numbers to 100 in numerals.
Addition and Subtraction		<ul style="list-style-type: none">• Know number bonds to all numbers within 10.• Know number bonds to 10.
Multiplication and Division	<ul style="list-style-type: none">• Know doubles and halves to 20.• Know multiplication and division facts for the 2, 5 and 10 times tables.	<ul style="list-style-type: none">• Count in 2s to 20, 5s to 50 and 10s to 100.
Measurement	<ul style="list-style-type: none">• Know the number of minutes in an hour.• Know the number of hours in a day.	<ul style="list-style-type: none">• Know the value of all coins and notes
Properties of Shapes		<ul style="list-style-type: none">• Recognise and name 2D shapes (rectangles, squares, circles and triangles).• Recognise and name 3D shapes (cubes, cuboids, pyramids and spheres).

Year 3

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value	<ul style="list-style-type: none"> • Count, from 0, in 3s to 36, 4s to 48 and 8s to 96. • Count in 50s and 100s. • Read and write numbers to 1,000 in numerals and words. • Know that there are 10 tens = 100. 	<ul style="list-style-type: none"> • Recognise odd and even numbers.
Addition and Subtraction		<ul style="list-style-type: none"> • Know number bonds to all numbers within 10. • Know number bonds to 10.
Multiplication and Division	<ul style="list-style-type: none"> • Know multiplication and division facts for the 3, 4 and 8 times tables. • Divide 10 by 2, 5 and 10 (to support reading scales). 	<ul style="list-style-type: none"> • Know multiplication and division facts for the 2, 5 and 10 times tables.
Fractions	<ul style="list-style-type: none"> • Count in 10ths. • Make a whole from fractions eg. $\frac{2}{2}, \frac{3}{3}$ etc. 	
Measurement	<ul style="list-style-type: none"> • Know the number of seconds in a minute. • Know the number of days in each month. • Know the number of days in a year and a leap year. 	
Properties of Shapes		<ul style="list-style-type: none"> • Recognise and name 2D shapes (rectangles, squares, circles and triangles). • Recognise and name 3D shapes (cubes, cuboids, pyramids and spheres).

Year 4

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value	<ul style="list-style-type: none"> • Count in 25s and 1,000s. • Know 10 hundreds = 1,000. 	<ul style="list-style-type: none"> • Recognise odd and even numbers.
Addition and Subtraction		<ul style="list-style-type: none"> • Know number bonds to all numbers within 10. • Know number bonds to 10.
Multiplication and Division	<ul style="list-style-type: none"> • Know multiplication and division facts for all times tables to 12 x 12. • Divide 1,000 by 2, 4, 5, 10 (to support reading scales). 	<ul style="list-style-type: none"> • Know multiplication and division facts for 2, 5, 10, 3, 4 and 8 times tables.
Fractions	<ul style="list-style-type: none"> • Count in 100ths. • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$. 	
Measurement	<ul style="list-style-type: none"> • Know that: <ul style="list-style-type: none"> ➤ 1cm = 10mm ➤ 1m = 100cm ➤ 1km = 1000m ➤ 1kg = 1000g ➤ 1L = 1000ml • Know that: <ul style="list-style-type: none"> ➤ 1hr = 60 minutes ➤ 1 min = 60 seconds ➤ 1 year = 12 months ➤ 1 week = 7 days 	

Year 5

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value	<ul style="list-style-type: none"> •Recognise odd and even numbers. •Know that: <ul style="list-style-type: none"> ➤ 10 tenths = 1 ➤ 100 hundredths = 1 ➤ 10 hundredths = 1 tenth 	
Addition and Subtraction		<ul style="list-style-type: none"> •Know number bonds to all numbers within 10. •Know number bonds to 10.
Multiplication and Division	<ul style="list-style-type: none"> •Know prime number to 19. •Know square numbers to 12². •Divide 1 by 2, 4, 5 and 10 (to support reading scales). 	<ul style="list-style-type: none"> •Know multiplication and division facts for all times tables to 12 x 12.
Fractions	<ul style="list-style-type: none"> •Know percentage and decimal equivalents to $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and fractions with denominators that are multiples of 10 and 25. 	
Measurement		<ul style="list-style-type: none"> •Know that: <ul style="list-style-type: none"> ➤ 1cm = 10mm ➤ 1m = 100cm ➤ 1km = 1000m ➤ 1kg = 1000g ➤ 1L = 1000ml •Know that: <ul style="list-style-type: none"> ➤ 1hr = 60 minutes ➤ 1 min = 60 seconds ➤ 1 year = 12 months ➤ 1 week = 7 days

Year 6

Topic	Facts taught in this year group	Facts taught in previous year groups
Number and Place Value		<ul style="list-style-type: none"> • Recognise odd and even numbers.
Operations	<ul style="list-style-type: none"> • Know the order of operations (BIDMAS). • Divide 1, 10, 100 and 1,000 by 2, 4, 5 and 10 (to support reading scales). 	<ul style="list-style-type: none"> • Know number bonds to all numbers within 10. • Know number bonds to 10. • Know multiplication and division facts for all times tables to 12 x 12. • Know prime number to 19. • Know square numbers to 12².
Fractions	<ul style="list-style-type: none"> • Know percentage and decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and fractions with denominators that are multiples of 10 and 25. 	
Measurement	<ul style="list-style-type: none"> • Know that: <ul style="list-style-type: none"> ➤ 8km = 5 miles 	<ul style="list-style-type: none"> • Know that: <ul style="list-style-type: none"> ➤ 1cm = 10mm ➤ 1m = 100cm ➤ 1km = 1000m ➤ 1kg = 1000g ➤ 1L = 1000ml • Know that: <ul style="list-style-type: none"> ➤ 1hr = 60 minutes ➤ 1 min = 60 seconds ➤ 1 year = 12 months ➤ 1 week = 7 days
Properties of Shapes	<ul style="list-style-type: none"> • Know the names of all parts of a circle (radius, diameter, circumference). • Know that the diameter is double the radius. • Know that the radius is half the diameter. 	<ul style="list-style-type: none"> • Know that there are 360° in a full turn. • Know that there are 180° on a straight line.

