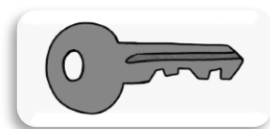# Progression of Key Instant Recall Facts

'Key facts' – these keys can help us to unlock the mathematics

This document contains the **progression of instant recall facts** in mathematics for our school setting. The document maps the essential factual building blocks of mathematical knowledge from Year R to Year 6. It has been devised using the National Curriculum (2014), supplemented by non-statutory guidance. It was produced collaboratively by Luke Dix (SL) and Liz White (PDET) during May 2020.

The content coherently maps out the key facts to each half term for each year group in school. In EYFS and KS1, the focus in predominantly on number facts (bonds and times tables) whereas in KS2, additional elements are included.

'Key Facts' – many targets in the document detail the specific number facts involved: these 'new' facts are contained – it is assumed that the older ones have been transferred to the long term memory and therefore do not need to be practiced and so do not reappear in the document. The document is used by teachers in our school to support progression through the year groups.

Each half term, teachers…

…deliver short recall sessions in class (two times per week) – *once targets have been shared, this is time for children to practice as they will have already learned about the key ideas in lessons in previous terms*
…display the key facts and expectations in the classroom on their mathematics working wall - *recognisable by the 'key' image at the top of this document*
…share the relevant targets with parents - *the ideas will be exemplified for parents with the expectation that children spend time at home as part of their homework provision*

If a child does not recall the facts by the end of the half term, intervention is provided during the next half term to ensure they do not fall behind.

The following must be assumed to ensure precision across our school:

Recall *– to instantly know a fact as opposed to being able to derive or calculate it; it should be instant (the child demonstrating automaticity rather than thinking)*
Know *– similar to 'recall': an important piece of factual knowledge which children simply need to know*
Revise *– the content has already been covered previously and so should already be recalled with automaticity*
Recite *– implies there is an order to what is being learned*
Derive *– facts are used to work out those which are not recalled instantly*

Revised and updated February 2024
EYFS aligned to the new framework.

Progression of Key Instant Recall Facts – Years R

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YR	Count to 5 Subitise to 5	Subitise to 5	Count to 10	Recall number bonds up to 5 and related subtraction facts	Recall all the doubles to 10.	Say the numbers to 20 in order Forwards and backwards.

Revised and updated February 2024
EYFS aligned to the new framework.

Progression of Key Instant Recall Facts – Years 1/2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1	Recall all number bonds to 10 1 + 9 2 + 8 3 + 7 4 + 6 5 + 5	Recall all number bonds within 10 *1 + 5* *1 + 6* *1 + 7* *1 + 8* *1 + 9* *2 + 4* *2 + 5* *2 + 6* *2 + 7* *3 + 3* *3 + 4* *3 + 5* *3 + 6* *4 + 4* *4 + 5*	Recall all number bonds within 20 2 + 9 3 + 8 3 + 9 4 + 7 4 + 8 4 + 9 5 + 6 5 + 7 5 + 8 5 + 9 6 + 7 6 + 8 6 + 9 7 + 8 7 + 9 8 + 9	Recite 10s from 0 to 100 *0, 10, 20, 30…100* Recite in 5s from 0 to 50 *0, 5, 10, 15, 20, 25…50*	Recite 2s from 0 to 20 Recall all new doubles up to 20 *6 + 6 9 + 9* *7 + 7 10 + 10* *8 + 8* Recall all doubles and halves to to 10	Recall all number bonds to 20 *2 + 18* *3 + 17* *4 + 16* *5 + 15* *6 + 14* *7 + 13* *8 + 12* *9 + 11*
Y2	Recall all pairs of multiples of 10 which bond to 100 *10 + 90* *20 + 80* *30 + 70* *40 + 60* *50 + 50*	Recall all new pairs of multiples of 5 which bond to 100 *5 + 95* *15 + 85* *25 + 75* *35 + 65* *45 + 55*	Recall 2 x table – multiplication and division facts 0 x 2 1 x 2 2 x 2 3 x 2 4 x 2 5 x 2	Recall 10 x table - Multiplication and division facts 0 x 10 1 x 10 3 x 10 4 x 10 5 x10 6 x 10 7 x 10 8 x 10 9 x 10 10 x 10	Recall 5, 10 x table - Multiplication and division facts 0 x 5 1 x 5 3 x 5 4 x 5 5 x 5 6 x 5 7 x 5 8 x 5 9 x 5	Recall doubles and halves of numbers to 20 eg 0 + 0 = 0 ½ of 0 = 0 1 + 1 = 2 ½ of 2 = 1 2 + 2 = 4 ½ of 4 = 2 3 + 3 = 6 ½ of 6 = 3 4 + 4 = 8 ½ of 8 = 4 5 + 5 = 10 ½ of 10 = 15 + 15 = 30 20+20= 40

Revised and updated February 2024
EYFS aligned to the new framework.

			6 x 2 7 x 2 8 x 2 9 x 2 10 x 2 11 x 2 12 x 2	11 x 10 12 x 10	11 x 5 12 x 5	½ of 20= 10

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Progression of Key Instant Recall Facts – Years 3/4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y3	Recall of number bonds to 100. E.g. 42 + __ = 100 by making 90 using the tens and 10 using the ones	Recall x3 facts *3 x 3 8 x 3* *4 x 3 9 x 3* *6 x 3 11 x 3* *7 x 3 12 x 3* Recall ÷3 facts	Recall x4 facts *4 x 4 9 x 4* *6 x 4 11 x 4* *7 x 4 12 x 4* *8 x 4* Recall ÷4 facts	Recall facts about duration of time There are 60 seconds in a minute. There are 60 minutes in an hour. There are 24 hours in a day. There are 7 days in a week. There are 12 months in a year. There are 365 days in a year. There are 366 days in a leap year. Order of months Days in each month	Recall 8x table - Multiplication and division facts 6 x 8 7 x 8 8 x 8 9 x 9 11 x 8 12 x 8	To tell the time to the nearest 5 minutes
Y4	Recall 6 x table multiplication & division facts 6 x 6 7 x 6 9 x 6 11 x 6 12 x 6	Recall 7 x table multiplication & division facts 7 x 7 9 x 7 11 x 7 12 x 7	Recall 9 x table multiplication & division facts 8 x 9 8 x 11 8 x 12	Recall 11 & 12 x table multiplication & division facts	Recall all multiplication and division facts for the multiplication tables up to 12x12	Recall decimal equivalents of any number of tenths or hundredths E.g. 4/10=0.4 0.72=72/100 Recall these decimal equivalent 1/4=0.25 1/2=0.5 3/4=0.75

Revised and updated February 2024
EYFS aligned to the new framework.

Progression of Key Instant Recall Facts – Years 5/6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y5	Recall Roman Numerals up to M (I, V, X, L, C, D) *I One* *V Five* *X Ten* *L 50* *C 100* *D 500* *M 1000*	Recall all prime numbers up to 19	Recall square numbers up to 144 and recognise the notation for squared (^{2}) Recall cube numbers up to 125 and recognise the notation for cubed (^{3})	Recognise the percent symbol (%) Recall percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}$ and $\frac{4}{5}$	Metric conversions 1 kilogram = 1000 grams 2 kilograms = 2000 grams 1 kilometre = 1000 metres 1 metre = 100 centimetres 1 metre = 1000 millimetres 1 centimetre = 10 millimetres 1 litre = 1000 millilitres etc	Recall formula: perimeter of a rectangle: (2 x length) + (2 x width) area of rectangles: length x width (area is usually measured in square units cm² and m²)
Y6	Recall/derive pairs of numbers which total 1 up to three decimal places using knowledge of previous number bond understanding *E.g. 0.642 + __ = 1* *by making 0.9 using the tenth, 0.09 using the hundredths and 0.01 using the thousandths*	Recall order of operations (Brackets / Multiplication and Division / Addition and Subtraction)	Recall percentage and decimal equivalents of $\frac{3}{4}, \frac{3}{5},$ tenths up to $\frac{9}{10}, \frac{1}{3}$ and $\frac{2}{3}$ *(approximate)*	Recall formula: volume of cubes and cuboids (length x width x height) Know that volume is notated in cubic units (e.g. cm³ and mm³) Recall formula: area of a triangles: 12 (base x height) Recall formula: area of parallelograms: base x height		