Cottingham CofE Primary School progression in maths key instant recall facts (KIRFs)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	**Say the numbers in order to 5** Forwards and backwards	**Subitise up to 5**	**Say the numbers in order to 10** Forwards and backwards	**Recall number bonds up to 5 (and related subtraction facts)** 1 + 1 4 - 1 2 + 1 3 - 1 3 + 1 2 - 1 4 + 1 1 - 1 2 + 2 2- 2 2 + 3 3 - 2	**Say the numbers in order to 20** Forwards and backwards	**Recall all doubles to 10** 1 + 1 = 2 2 + 2 = 4 3 + 3 = 6 4 + 4 = 8 5 + 5 = 10
Y1	**Recall all number bonds of 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	**Count in 10s to 100** 0 to 100 **Count in 5s to 50** From 0 to 50	**Count in 2s to 20** From 0 to 20 **Recall all doubles and halves to 10** 1+1 2+2 Half of 10 is 5 Half of 6 is 3	**Recall number bonds to 20** 2 + 18 3 + 17 4 + 16 5 + 15 6 + 14 7 + 13 8 + 12 9 + 11

Y2	**Recall number bonds to 100 - multiples of 10** 10 + 90 20 + 80 30 + 70 40 + 60 50 + 50	**Recall number bonds to 100 - multiples of 5** 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 6 x 2 7 x 2 8 x 2 9 x 2 10 x 2 11 x 2 12 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 11 x 10 12 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 11 x 5 12 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 ½ of 20= 10
Y3	**Recall 3 x table multiplication and division facts** 3 x 3 4 x 3 6 x 3 7 x 3 8 x 3 9 x 3 11 x 3 12 x 3	**Recall of number bonds to 100 - any number** (E.g. 34 + __ = 100) by making 90 using the tens and 10 using the ones	**Recall 4 x table multiplication and division facts** 4 x 4 6 x 4 7 x 4 8 x 4 9 x 4 11 x 4 12 x 4	**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**	**Derive quickly decimal equivalents of any number of tenths or hundredths** *E.g.* $\frac{4}{10} = 0.4$ $0.72 = \frac{72}{100}$ **Recall these decimal equivalent** $\frac{1}{4} = 0.25$ $\frac{1}{2} = 0.5$ $\frac{3}{4} = 0.75$
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 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)	**Recall percentage and decimal equivalents of** $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{1}{5}, \frac{2}{5}$ 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 square numbers** up to 144 and know the notation for squared (²) **Recall cube numbers** up to 125 and recognise the notation for cubed (³)

Y6	**Recall pairs of numbers which total 1 up to three decimal places using and applying knowledge of previous number bond understanding** E.g. 0.343 + __ = 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 **Apply times table knowledge to decimals where both numbers are decimal numbers** E.g. knowing 4 x 3 = 12 can be applied to 0.4 x 0.3 = 0.12	**Recall percentage and decimal equivalents of** $\frac{3}{4}, \frac{3}{5}$, tenths up to $\frac{9}{10}, \frac{1}{3}$ ar $(approximate)$ To include all tenths and hundredths	**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: $\frac{1}{2}$ (base x height) Recall formula: area of parallelograms: base x height		