Whole- School- Number Fact Fluency (Ready to Progress)

Using the National Curriculum (and professional Judgement), these skills have been compiled to highlight the expectations in Number fact fluency at Birkwood Primary.

Fluency development features in every lesson through mental arithmetic starters, and we consistently provide opportunities for our children to apply within maths lessons. We believe that by working to secure fluency, we are reducing cognitive overload, therefore providing the best possible opportunity for our children to progress quickly (and in depth) in all strands of maths and build competent mathematicians of the future.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place Value	•Say the number names in order to 5 •Say the number names in order to 10 •Partition numbers to 5 into two groups (i.e 5= 3 + 2) •Count forward and backwards in ones from any number up to 10 •Count forwards and backwards in ones from any number up to 20 •To recall number symbols with cardinal value (up to 10)	• Count to and across 100, forwards and backwards (starting from 0, 1, or any given number) • Count in multiples of 2, 5 and 10 • Find one more or less than a given number • Read and write numbers 1-20 in numerals and words	• Count in steps of 2, 3 and 5 from any given number, forwards and backwards • Count in 10s from any given number, forwards and backwards • Read and write numbers to at least 100 in numerals and words • Know all addition and subtraction facts within 20 e.g. 7 + 8 = 15 •	• Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • Read and write numbers to a 1000 in numerals and words	• Count in multiples of 6, 7, 9, 25 and 1000 • Find 1000 more or less than a given number • Count backwards through zero to include negative numbers • Round any number to the nearest 10, 100 or 1000 • Read Roman numerals to 100 (I to C)	• Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 • Count forwards and backwards with positive and negative whole numbers, including through zero • Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000 • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. •Know all decimals that total 1 and 10. (1dp)	• Round any whole numbers to a required degree of accuracy •Know all decimals that total 1 and 10. (1dp)

Addition and Subtraction	•Recall number bonds to 5 and then 10	• Add and subtract 1 within 10. • Add and subtract 2 within 10 • Know all the addition facts within 10. • Represent and use number bonds and related subtraction facts within 20 (13 + 7 = 20 7 + 13 = 20 20 – 13 = 7 20- 7= 13) *Fact Families	• Recall and use addition and subtraction facts to 20 fluently • Add and subtract numbers mentally including: ○ a two-digit number and ones ○ a two-digit number and tens ○ two two-digit numbers ○ adding three one-digit numbers	• Add and subtract numbers mentally, including: ○ a three-digit number and ones ○ a three-digit number and tens ○ a three-digit number and hundreds	• Add and subtract numbers mentally, including: ○ a three-digit number and ones ○ a three-digit number and tens ○ a three-digit number and hundreds	• Add and subtract numbers mentally with increasingly large numbers •Know all decimals that total 1 and 10. (1dp)	• Perform mental calculations including mixed operations and large numbers
Multiplication and Division **(Whole School Calculation Policy)**	•Introduce concept of X1 (one group of 5 etc) •Solve problems with doubling and halving	• Doubling and halving within 10. • Count in 2s, 5s and 10s •1x table (1 group of)	•Count in steps of 2,3 and 5 from 0 and in 10s from any number forwards or backwards. •Recall and use multiplication and division facts for the 2, 3, 5 and 10 multiplication tables, including recognising odd and even numbers. •Begin to introduce concept of square numbers through arrays. •X1 table •Begin to introduce X0 table	•Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables •Recall x 6 x 12 •Revise X2, X5, X10 multiplication tables •X6 and X12 tables •Square number times tables	• Recall multiplication and division facts for multiplication tables up to 12×12 • Recognise and use factor pairs in mental calculations	• Identify multiples and factors including: ○ finding all factor pairs of a number, ○ common factors of two numbers •Know the decimal and percentage equivalents of the fractions ½, ¼, ¾ ● Establish whether a number up to 100 is prime and recall prime numbers up to 19 •Know square numbers and square roots to 12 x 12 •Know pairs of factors of numbers up to 100	•Perform mental calculations including mixed operations and large numbers •Identify common factors, common multiples and prime numbers •Use multiplication and division facts to multiply and divide decimals (e.g. 1.2 x 8) •Know the decimal and percentage equivalents of the fractions ⅓, ⅔, 1/10s and 1/5s •Know the prime numbers within 50 •Know the doubles and halves of all multiples of 100 to 10,000