Holy Trinity CE Primary School

Let's Grow Together

Progression in Arithmetic

	Place Value / Counting	Addition & Subtraction	Multiplication & Division	Fractions, Decimals & Percentages
Reception	• Count to 10 with 1:1 correspondence • Verbally count beyond 20 • Subitise up to 5 • Compare quantities up to 10 (greater than, less than, equal to) • Recognise evens and odds to 10 • 1 more and 1 less up to 10	• Recall number bonds to 10	• Doubles to 10 • Distribute quantities evenly up to 10	
Year 1	• 1 more and 1 less up to 100 • Count forwards & backwards to and across 100 • Count in 2s, 5s & 10s up to 100	• Recall number bonds & related subtraction facts within 20 • Read, write & interpret calculations using + - = symbols • Add & subtract 1 and 2 digit numbers from 0 to 20 • Use inverse to solve missing number problems	• Double numbers up to 20 • Sharing equally up to 20	• $\frac{1}{2}$ & $\frac{1}{4}$ of an object, shape or quantity
Year 2	• Count in 2s, 3s, 5s & 10s from any given number • Compare & order to 100 using < > = symbols • 10 more and 10 less	• Related facts to 100 • TO + O • TO + T • TO + TO • O + O + O	• x2 tables (& division facts) • x5 tables (& division facts)	• $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{2}{4}$, $\frac{3}{4}$ of a length, shape, set of objects or quantity

		- TO – O - TO – T - TO – TO - Inverse / missing number problems - Balance equation using + & -	- x10 tables (& division facts) - Commutative law (multiplication) - Biggest number first (division)	
Year 3	- Count in 4s, 8s, 50s and 100s from any given number 10 and 100 more or less - Compare and order numbers up to 1,000	- Mentally: HTO + O - Mentally: HTO + T - Mentally: HTO + H - Mentally: HTO – O - Mentally: HTO – T - Mentally: HTO – H - Add up to 3 digits - Subtract up to 3 digits - Use inverse	- x3 tables (& division facts) - x4 tables (& division facts) - x8 tables (& division facts) - TO x O - TO ÷ O - Use inverse	- Count up and down in tenths - Add & subtract fractions with same denominator within one whole - Compare and order fractions - Partition the whole of a fraction
Year 4	- Count in multiples of 6, 7, 9, 11, 12, 25 & 1,000 1,000 more or less - Count back through zero - Compare and order numbers beyond 1,000 - Round to nearest 10, 100 and 1,000 - Read Roman numerals to 100 (C)	- Add up to 4 digits - Subtract up to 4 digits - Use inverse	- Recall multiplication and division facts up to 12 x 12 - Multiply by 0 and by 1 - Divide by 1 - Multiply 3 one digit numbers (O x O x O) - Factor pairs - Commutativity - x and ÷ for known facts (eg. 40 x 40) - x and ÷ by 10 and 100 - Formal written method TO x O and HTO x O	- Count up and down in hundredths - Add & subtract fractions with same denominator (including improper) - Fractions of amounts - Decimal equivalents (tenths, hundredths, ¼, ½, ¾) - Round decimals with 1dp to nearest whole - Compare decimals up to 2dp

			• Formal written method HTO ÷ O (no remainder) • Use inverse	
Year 5	• Order & compare numbers to at least 1,000,000 • Count forward or back in steps of powers of 10 to 1,000,000 • Count forwards and backwards with negative numbers • Round numbers up to 1,000,000 by 10, 100, 1,000, 10,000 & 100,000 • Read Roman numerals to 1,000, including years	• Column addition with numbers beyond 4 digits • Column subtraction with numbers beyond 4 digits	• Factor pairs • Common factors of two numbers • Establish whether a number is prime up to 100 and know prime numbers up to 19 • Square & cube numbers • Multiply up to ThHTO by O using short multiplication • Multiply up to ThHTO by TO using long multiplication • x and ÷ for known facts • Divide up to ThHTO by O using short division (including remainders) • x and ÷ whole numbers and decimals by 10, 100 & 1,000	• Compare & order fractions (denominators are multiples) • Equivalent fractions • Convert between mixed numbers and improper fractions • Add & subtract fractions (same denominator & where denominators are multiples) • Whole number x fraction or mixed number fraction • Convert between decimals and fractions (eg. 71/100 = 0.71) • Round 2dp to 1dp or whole • Order & compare up to 3dp •
Year 6	• Order & compare numbers to 10,000,000 • Round any whole number • Use negative numbers and calculate across 0	• BIDMAS	• Common factors • Common multiples • Prime numbers to 100 • Divide up to ThHTO by TO using long division (including remainders) • BIDMAS	• use common fractions to simplify and common multiples to express fractions with same denomination

			• Compare & order fractions (including beyond 1) • Add & subtract fractions (different denominators & mixed numbers) using equivalence • Multiply proper fractions • Divide proper fractions by whole numbers • Equivalence between fractions, decimals & % • X & ÷ by 10, 100 & 1,000 up to 3dp • Whole number x O.TH • Division method with up to 2dp • Solve problems involving rounding with decimals