Freemans Reach Public School

Mathematics Basic Facts Scope and Sequence

Note: This is not a complete Mathematics program – just what we expect students to be able to mentally compute with ease at each grade level.

Outcomes	Whole Number	Addition and Subtraction	Multiplication and Division
	MAe-4NA counts to 30, and orders, reads and represents numbers in the range 0 to 20 **MA1-4NA** applies place value, informally, to count, order, read and represent two- and three-digit numbers **MA2-4NA** applies place value to order, read and represent numbers of up to five digits **MA3-4NA** orders, reads and represents integers of any size and describes properties of whole numbers	**MAe-5NA** combines, separates and compares collections of objects, describes using everyday language, and records using informal methods **MA1-5NA** uses a range of strategies and informal recording methods for addition and subtraction involving one- and two-digit numbers **MA2-5NA** uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers **MA3-5NA** selects and applies appropriate strategies for addition and subtraction with counting numbers of any size	**MAe-6NA** groups, shares and counts collections of objects, describes using everyday language, and records using informal methods **MA1-6NA** uses a range of mental strategies and concrete materials for multiplication and division **MA2-6NA** uses mental and informal written strategies for multiplication and division **MA3-6NA** selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation
	Communicating	**Problem Solving**	**Reasoning**
	MAe-1WM describes mathematical situations using everyday language, actions, materials and informal recordings **MA1-1WM** describes mathematical situations and methods using every day and some mathematical language, actions, materials, diagrams and symbols **MA2-1WM** uses appropriate terminology to describe, and symbols to represent, mathematical ideas **MA3-1WM** describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions	**MAe-2WM** uses objects, actions, technology and/or trial and error to explore mathematical problems **MA1-2WM** uses objects, diagrams and technology to explore mathematical problems **MA2-2WM** selects and uses appropriate mental or written strategies, or technology, to solve problems **MA3-2WM** selects and applies appropriate problem solving strategies, including the use of digital technologies, in undertaking investigations	**MAe-3WM** uses concrete materials and/or pictorial representations to support conclusions **MA1-3WM** supports conclusions by explaining or demonstrating how answers were obtained **MA2-3WM** checks the accuracy of a statement and explains the reasoning used **MA3-3WM** gives a valid reason for supporting one possible solution over another

GRADES	Content Expectations			
	Numeral Identification (Including Number before and after)	**Oral Counting** (Forward and Backward)	**Addition and Subtraction**	**Multiplication and Division**
Kindergarten	Reads numbers to 30	Oral Counting – 30 Counting by 10s	Friends of 10 (+ -) (eg. 6 and ? make 10)	Modelling equal groups and sharing groups of objects.
Year 1	Reads numbers to 100 Oral Counting x 10, 2, 5	Oral Counting to 120 Counting by 2s, 5s, Counting 10s and 100s from any number	Friends of 20 (+ -)	
Year 2	Reads numbers to 1,000	Counting by 2s and 5s from any number	Friends of 30 (+ -) Doubling and Halving to 30 +- 10 to any number	1x tables (x ÷) 2x tables (x ÷) 5x tables (x ÷) 10x tables (x ÷)
Year 3	Reads numbers to 10,000	Counting by 3s, 9s and 11s from any number	Friends of 100 (+ -) Patterns for adding 9	3x tables (x ÷) 6x tables (x ÷) 9x tables (x ÷) 11x tables (x ÷)
Year 4	Reads numbers to 100,000	Counting by 4s from any number	Friends of 1,000 (+ -) Patterns for adding 11	4x tables (x ÷) 7x tables (x ÷) 8x tables (x ÷) 12x tables (x ÷)
Year 5	Reads numbers to 1,000,000	Counting by 50 from any number Counting by 25	Extending Friends of Ten understanding to larger numbers	Know all tables in under 15 seconds (x ÷) Know tables out of order
Year 6	Reads numbers >1,000,000			½ of, ¼ of, 1/10 of, 1/3 of x ÷ any number by 10 or 100 by moving decimal point