

MULTIPLICATION AND DIVISION CONCEPT SEQUENCE

YEAR 1	1	Divide by making 'groups of' and 'equal groups'.	
	2	Divide by 2 by making 2 equal groups, determine how many in each group, and describe part left over, describe halves. Divide by 2 by making groups of 2, determine the number of groups, and describe part left over.	Essential related concept is Fractions and Decimals 2.
	3	Rhythmic / skip count forwards and backwards by 2s, 5s and 10s naming multiples.	Essential related concept is Patterns and Algebra 8.
	4	Divide into groups of 2, 5 and 10, and find total using skip and rhythmic counting.	
YEAR 2	5	Divide into equal rows (array) with no remainder, then describe formally using division explaining even numbers as counters divided into an array of 2 equal rows. Divide into equal rows (array) with no remainder, then describe using 2 division and 2 multiplication number sentences. Find total using skip and rhythmic counting recording as repeated addition on a number line.	Essential related concept is Measurement and Geometry 23.
	6	Multiplication of coins and notes to make equivalent values, 20 cents = 2 x 10 cents, 5 x 20 cents = \$1, 4 x \$5 = \$20.	Essential related concept is Money and Financial Mathematics 8.
	7	Divide by making 'groups of ...' and count groups, and making '... equal groups' and count counters in each group. Divide into 'groups of ...' and '... equal groups' and describe part left over.	Essential related concept is Fractions and Decimals 4.
	8	Divide into 'groups of 4' and '4 equal groups' and describe part left over. Divide by 4 by grouping into 4 equal groups, determine how many in each group, describe part left over, quarters.	

YEAR 3	9	Multiplication and division by 10 using multiplicative place value.	Essential related concept are Place Value 18, Measurement and Geometry 30.
	10	Multiplication and division by 2 using properties and relationships.	Essential related concepts are Place Value 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, Patterns and Algebra 15, 18, Fractions and Decimals 7, Measurement and Geometry 42.
	11	Multiplication and division by 4 using properties and relationships.	
	12	Multiplication and division by 3 using properties and relationships.	
	13	Multiplication and division by 5 using properties and relationships.	
14	Multiplication and division by 9 using properties and relationships.		
YEAR 4	15	Multiplication and division by 6 using properties and relationships.	Essential related concept is Patterns and Algebra 23.
	16	Multiplication and division by 8 using properties and relationships.	
	17	Multiplication and division by 7 using properties and relationships.	
	18	Describe patterns formed by skip and rhythmic counting forwards and backwards by 3, 4, 6, 7, 8, 9, 10 identifying the terms as multiples of 3, 4, 6, 7, 8, 9, 10 identifying the rule and terms through multiplication Describe patterns formed by skip and rhythmic counting forwards and backwards by 3, 4, 6, 7, 8, 9, 10 from any point on number line identifying the rule.	
	19	Solve problems involving multiplication and division, representing a word problem as a number sentence and creating a word problem to represent a number sentence.	Essential related concept is Patterns and Algebra 25.

YEAR 5	20	Highest common factor.	
	21	Explain equivalent division calculations result if both numbers are divided by the same factor. Create and solve equivalent number sentences involving multiplication and division.	Essential related concept is Patterns and Algebra 26.
	22	Divisibility Tests.	
	23	Divide by single-digit numbers, dividing the remainder to create a fraction.	Essential related concept is Fractions and Decimals 19.
	24	Multiplication of 2 two-digit numbers using properties and relationships, including place value and the distributive property.	
		Exposure to formal algorithms for Multiplication and Division (NSW Syllabus).	
YEAR 6	25	Multiply and divide decimals to thousandths by whole numbers and powers of 10. Record remainders as fractions and decimals when dividing by 10.	Essential related concepts are Fractions and Decimals 26, Place Value 29 Measurement and Geometry 59, 64.
	26	Division is multiplication by a fraction.	Essential related concept is Fractions and Decimals 27.
	27	Identify and explain square numbers.	Essential related concept is Patterns and Algebra 29.
	28	Prime and composite numbers. Explain composite numbers as the product of prime factors. Use prime factors to simplify calculations.	Essential related concept is Patterns and Algebra 32.
	29	Missing and equivalent number sentences using order of operations and grouping symbols.	Essential related concepts are Addition and Subtraction 33, Patterns and Algebra 31.

 To differentiate, use these levels to guide children to investigate just above their current level of understanding.