

Curriculum Subject	Number and Algebra	Number and Algebra
Content Descriptor	Extend and apply the laws and properties of arithmetic to algebraic terms and expressions (ACMNA177)	Investigate and use square roots of perfect square numbers (ACMNA150)
Lessons	I can use order of operations to solve equations that include multiplication and addition. I can use order of operations to solve equations that include multiplication, addition and subtraction. I can use order of operations to solve equations that include multiplication, addition, subtraction and division. I can use order of operations to solve equations that include the four operations and indices. I can use order of operation to solve equations that include brackets, indices and the four operations.	I can define 'perfect square number' and 'square root' and calculate the square root of perfect square numbers. I can use factors to find square roots of perfect squares that are multiples of 100 and 10,000.
Curriculum Subject	Number and Algebra	Number and Algebra
Content Descriptor	Compare, order, add and subtract integers (ACMNA280)	Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line (ACMNA152)
Lessons	I can construct a number line from -10 to 10 and use it to compare and order integers. I can subtract a positive integers from positive integers where the result is a negative integer. I can add positive integers to negative integers. I can add negative integers to positive and negative integers.	I can write fractions and mixed numerals for shaded shapes and collections. I can locate and represent positive fractions and mixed numerals on a number line. I can locate and represent positive and negative fractions and mixed numerals on a number line. I can find equivalent fractions using a fraction wall then multiplication. I can find the highest common factor of pairs of numbers. I can simplify fractions using the highest common factor method.
Curriculum Subject	Measurement and Geometry	Number and Algebra
Content Descriptor	Establish the formulas for areas of rectangles, triangles and parallelograms, and use these in problem-solving (ACMMG159)	Apply the associative, commutative and distributive laws to aid mental and written computation (ACMNA151)
Lessons	I can calculate the area of rectangles. I can explain how two triangles can be used to make a rectangle (i.e. a triangle is 1/2 a rectangle) I can calculate the area of triangles. I can explain how a parallelogram can be used to make a rectangle. I can calculate the area of parallelograms. I can calculate the area of composite shapes made up of rectangles, triangles and parallelograms. I can calculate the perimeter of triangles, rectangles and parallelograms.	I can describe the commutative law and use it to solve equations. I can describe the associative law and use it to solve equations. I can describe the distributative law and use it to solve equations.
Curriculum Subject	Number and Algebra	
Content Descriptor	Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157)	
Lessons	I can write decimals to tenths as fractions and vice versa. I can write decimals to hundredths as fractions and vice versa. I can write decimals to thousandths as fractions and vice versa.	

Term 1					
	Daily Review	Lesson 1	Lesson 2	Lesson 3	Lesson 4
Week 1					
Week 2	Automaticity concepts: 1, 2 , 4, 5, 17, 18, 26, 35, 36 Taught concepts: 1 to 4	1. I can use order of operations to solve equations that include multiplication and addition.	2. I can list all of the factors of different numbers.	3. I can write fractions and mixed numerals for shaded shapes and collections.	4. I can construct a number line from -10 to 10 and use it to compare and order integers.
Week 3	Automaticity concepts: 1, 2 , 4, 5, 26, 36, 37, 38 Taught concepts: 1 to 7	5. I can define 'perfect square number' and 'square root' and calculate the square root of perfect square numbers.	6. I can define prime and composite and determine if numbers are prime or composite.	7. I can locate and represent positive and negative fractions and mixed numerals on a number line.	
Week 4	Automaticity concepts: 1, 2, 6, 26, 38, 39 Taught concepts: 5 to 11	8. I can use order of operations to solve equations that include multiplication, addition and subtraction.	9. I can determine the highest common factor for pairs of numbers.	10. I can find equivalent fractions using a fraction wall then multiplication.	11. I can subtract positive integers from positive integers where the result is a negative integer.
Week 5	Automaticity concepts: 1, 2, 10, 11, 12, 17, 19, 40, 41 Taught concepts: 8 to 14	12. I can describe the commutative law and use it to solve equations.	13. I can describe the associative law and use it to solve equations.	14. I can describe the distributive law and use it to solve equations.	
Week 6	Automaticity concepts: 1, 2, 10, 11, 12, 18, 19, 42, 43 Taught concepts: 12 to 15	15. I can use order of operations to solve equations that include multiplication, addition, subtraction and division.	16. I can calculate the perimeter of triangles, rectangles and parallelograms.	17. I can calculate the area of rectangles.	18. I can add positive integers to negative integers.
Week 7	Automaticity concepts: 1, 2 , 17, 18, 23, 50 Taught concepts: 15 to 22	19. I can use factors to find square roots of perfect squares that are multiples of 100 and 10,000.	20. I can simplify fractions using the highest common factor method.	21. I can explain how two triangles can be used to make a rectangle (i.e. a triangle is 1/2 a rectangle) 22. I can calculate the area of triangles.	
Week 8	Automaticity concepts: 1, 2 , 17, 18, 23, 25, 50 Taught concepts: 19 to 27	23. I can use order of operations to solve equations that include the four operations and indices.	24. I can add and subtract fractions with the same denominators.	25. I can explain how a parallelogram can be used to make a rectangle. 26. I can calculate the area of parallelograms.	27. I can add negative integers to positive and negative integers.
Week 9	Automaticity concepts: 1, 2, 3, 15, 16, 25, 55 Taught concepts: 23 to 30	28. I can write decimals to tenths as fractions and vice versa.	29. I can write decimals to hundredths as fractions and vice versa.	30. I can write decimals to thousandths as fractions and vice versa.	
Week 10	Automaticity concepts: 1, 2, 3, 15, 16, 25, 55 Taught concepts: 28 to 32	31. I can use order of operation to solve equations that include brackets, indices and the four operations.	32. I can calculate the area of composite shapes made up of rectangles, triangles and parallelograms.		

Term 1				
Week 1				
Week 2	I can use order of operations to solve equations that include multiplication and addition.	I can list all of the factors of different numbers.	I can write fractions and mixed numerals for shaded shapes and collections.	I can construct a number line from -10 to 10 and use it to compare and order integers.
Week 3	I can define 'perfect square number' and 'square root' and calculate the square root of perfect square numbers.	I can define prime and composite and determine if numbers are prime or composite.	I can locate and represent positive and negative fractions and mixed numerals on a number line.	
Week 4	I can use order of operations to solve equations that include multiplication, addition and subtraction.	I can determine the highest common factor for pairs of numbers.	I can find equivalent fractions using a fraction wall then multiplication.	I can subtract positive integers from positive integers where the result is a negative integer.
Week 5	I can describe the commutative law and use it to solve equations.	I can describe the associative law and use it to solve equations.	I can describe the distributive law and use it to solve equations.	
Week 6	I can use order of operations to solve equations that include multiplication, addition, subtraction and division.	I can calculate the perimeter of triangles, rectangles and parallelograms.	I can calculate the area of rectangles.	I can add positive integers to negative integers.
Week 7	I can use factors to find square roots of perfect squares that are multiples of 100 and 10,000.	I can simplify fractions using the highest common factor method.	I can explain how two triangles can be used to make a rectangle (i.e. a triangle is 1/2 a rectangle) I can calculate the area of triangles.	
Week 8	I can use order of operations to solve equations that include the four operations and indices.	I can add and subtract fractions with the same denominators.	I can explain how a parallelogram can be used to make a rectangle. I can calculate the area of parallelograms.	I can add negative integers to positive and negative integers.
Week 9	I can write decimals to tenths as fractions and vice versa.	I can write decimals to hundredths as fractions and vice versa.	I can write decimals to thousandths as fractions and vice versa.	
Week 10	I can use order of operation to solve equations that include brackets, indices and the four operations.	I can calculate the area of composite shapes made up of rectangles, triangles and parallelograms.		

Automaticity

Number Facts

1. Times Tables
2. Division Facts
3. Addition and subtraction of integers.
4. Multiplying by powers of 10
5. Dividing by powers of 10
6. Doubling numbers 1-100
7. Halving even and odd numbers to 100
8. Multiples of numbers 1 to 10
9. Factors of numbers to 100
10. Prime and composite.
11. Squared numbers to 225
12. Perfect square roots to 225
13. Converting between decimals and fractions to thousandths.
14. Converting between fractions, decimals and per cents to thousandths.
15. Decimal & percent equivalents for $\frac{1}{2}$, quarters, fifths, thirds, eights & tenths.
16. Denominator/numerator

Place Value and Counting

17. Reading numbers to and above 1 billion.
18. Writing numbers to and above billions.
19. Recognising the value of digits in numbers to and above 1 billion.
20. Counting on from numbers to and above 1 billion.
21. Counting back from numbers to and above 1 billion.
22. 1/10/100/etc. before/after numbers to and above 1 billion.
23. Rounding nearest 10, 100, 1000
24. Roman numerals to 100
25. Reading decimals to thousandths.
26. Identifying the value of numbers in decimals to and beyond thousandths.
27. Skip counting (e.g. by 0.3, 3, 30, 300...etc)
28. Skip counting unit fractions to and above 1 whole.

Automaticity- Other

34. Simple fractions of an hour.
35. am is morning., pm is afternoon and night
36. Telling time to the minute.
37. 24 hour conversions
38. 10mm=1cm, 100cm = 1m, 1000m = 1km
39. Conversions between units of length(e.g.1.7km=_m)
40. 1000mg = 1 g, 1000g = 1 kg, 1000kg= 1t
41. Conversions between units of mass (e.g. 1.7kg= __g)
42. 1000mL=1L
43. Conversions between units of mass (e.g.1.7L= __mL)
44. Half, quarter and three-quarter turns clockwise and anticlockwise.
45. Compass directions
46. 1min = 60sec, 1 hour = 60 minutes, 1 day = 24hr, 1 week = 7 days, 1 fortnight = 2 weeks, Days in each month, 1 decade = 10years, 1 Century = 100 years, 1 millennium = 1000years
47. Time conversions
48. Angle types
49. Triangle types
50. Recognising common 3D shapes and their nets.
51. Transformations
52. Quadrilateral types
53. Circumference, diameter, radius, centre, pi.
54. 10,000m² = 1 hectare and converting between square metres and hectares.
55. Lines- Vertical, horizontal, parallel, perpendicular.
56. Formulae: Area Rectangles, Triangles, Parallelograms