

YEAR 5 and 6 CONCEPT SCOPE AND SEQUENCE – COMPOSITE

	TERM 1	TERM 2	TERM 3	TERM 4
ADDITION SUBTRACTION	Addition and Subtraction 3 – 27 Add / subtract single-digit to 5-digit numbers (weekly) ACMNA099, ACMNA291, MA3-5NA	Addition Subtraction 29, Fractions Decimals 32, Place Value 32 Add and subtract decimals using place value ACMNA128, NSW MA3-7NA	Addition and Subtraction 32, Patterns and Algebra 30 Negative numbers ACMNA124, NSW MA3-4NA	Addition and Subtraction 33, Multiplication and Division 29, Patterns and Algebra 31 Order of operations / grouping symbols ACMNA134, NSW MA3-6NA Patterns and Algebra 32, Multiplication and Division 28 Prime / composite, products of prime factors Prime factors simplify calculations ACMNA122, NSW MA3-4NA
PATT ALGEBRA				
MULTIPLICATION DIVISION	Multiplication and Division 20, 21, 23, Patterns and Algebra 26 Highest common factor Equivalent division calculations, same factor Divisibility Tests ACMNA098, ACMNA100, ACMNA101 ACMNA121 NSW MA3-4NA MA3-6NA Fractions and Decimals 20, Multiplication and Division 22 Division with remainders divided to create fractions ACMNA098, ACMNA101, NSW MA3-6NA Multiplication Division 25, Fractions Decimals 26, Place Value 29 Multiply / divide powers of 10, fractions / decimals ACMNA129, ACMNA130 NSW MA3-6NA, MA3-7NA Multiplication and Division 26, Fractions and Decimals 28 Division is multiplication by a fraction ACMNA127, NSW MA3-6NA	Multiplication and Division 27, Patterns and Algebra 29 Identify and explain square and triangular numbers ACMNA122, NSW MA3-4NA Fractions and Decimals 21, 22, Place Value 25, 26 Multiplicative, standard / non-standard thousandths ACMNA104, ACMNA105, NSW MA3-7NA Fractions and Decimals 23, 24, Place Value 27, Patterns and Algebra 27		Multiplication and Division 24, Multiply 2-digit numbers ACMNA098, ACMNA100, ACMNA101 NSW MA3-6NA
PLACE VALUE	Place Value 28, 29, Fractions and Decimals 25, 26, Mult Div 25 Place value, hundredths, any size, Multiply / divide decimals by powers of 10 ACMNA104, ACMNA105, ACMNA131 NSW MA3-7NA Multiplication and Division 26, Fractions and Decimals 19, 27 Role of vinculum as meaning divided by ACMNA102, NSW MA3-7NA Fractions and Decimals 28 Simplest form divide numerator / denominator HCF ACMNA127, NSW MA3-7NA	Fractions Decimals 29, 30, Money Financial 13 Percentages as hundredths, percentage discount ACMNA131, ACMNA132 NSW MA3-7NA Statistics Probability 17 18 Fractions Decimals 31 Place Value 30 Probabilities, fractions, decimals, percentages ACMSP144, NSW MA3-7NA	Fractions and Decimals 22, Place Value 26 Order fractions and decimals on number line ACMNA104 NSW MA3-7NA Addition and Subtraction 29, 30, 31 Fractions Decimals 23, 24, 33, 34, Place Value 27, 31, Patterns and Algebra 27, 28 Add / subtract fractions same/related denominator Number patterns fractions, decimals, whole numbers ACMNA102, ACMNA103, ACMNA107, ACMNA125, ACMNA126, ACMNA133 NSW MA3-7NA, MA3-8NA	
FRACTIONS DECIMALS				
MEASUREMENT GEOMETRY	Measurement and Geometry 48, 49 Angles in degrees with a protractor Angle / side properties 2D shapes, enlarge, similar ACMMG112, ACMMG115, NSW MA3-16MG Measurement and Geometry 58 Diagonals, axes of symmetry NSW MA3-15MG Measurement and Geometry 51, 59 Kilometres, multiplicative place value, convert Compare metric system / imperial system length Convert length units, multiplicative place value ACMMG108, ACMMG109, ACMMG135, ACMMG136, ACMMG137 NSW MA3-9MG	Measurement and Geometry 55, 52 Hectares, square kilometres. Compare metric system / imperial system area ACMMG108, ACMMG109 NSW MA3-10MG Measurement and Geometry 53 Use legend / key, compass, scale, alpha-numeric grid references to locate features and describe routes ACMMG113, NSW MA3-17MG Measurement and Geometry 61 Different perimeters / same area, same perimeter / different areas NSW MA3-9MG, MA3-10MG	Measurement and Geometry 54, 63 Properties prisms pyramids, nets, skeletal, drawings Sections / cross-sections uniform / non-uniform ACMMG111, ACMMG140, NSW MA3-14MG Measurement and Geometry 50, 60 Combine translate, reflect, rotate, Rotational symm ACMMG142, ACMMG114 NSW MA3-15MG Measurement and Geometry 62 Cartesian plane, describe location / construct shapes ACMMG143, NSW MA3-8NA Measurement and Geometry 55, 64 Cubic metres, metric/imperial, Convert liquid units Relate cubic / liquid units millilitre / cubic centimetre ACMMG108, ACMMG135, ACMMG136, ACMMG137, ACMMG138, MA3-11MG	Measurement and Geometry 56 Draw prisms / pyramids, nets ACMMG111, NSW MA3-14MG Measurement and Geometry 65 Parts of circles NSW MA3-15MG Measurement and Geometry 66 Angles straight line / point, Vertically opposite angles, equal size, Use to find unknown angles ACMMG141, NSW MA3-16MG Measurement and Geometry 57, 67 Mass tonnes, convert, metric / imperial, Gross / net Relate liquid units / mass units - litre / kilogram ACMMG108, ACMMG135, ACMMG136, ACMMG137, NSW MA3-12MG
STATISTICS PROBABILITY		Statistics and Probability 16, 17 Fractions and Decimals 31, Place Value 30 Chance experiments, probabilities fractions, sum = 1 Trials, frequencies, games, benefits, Probabilities, ACMSP118, ACMSP119, ACMSP120, ACMSP116, ACMSP117, ACMSP144, ACMSP145, ACMSP146, NSW MA3-18SP, MA3-19SP	Statistics and Probability 15 Column / line graphs, dot plots, tables, decisions Statistics and Probability 19 Two-way tables, side-by-side graphs, misleading ACMSP147, ACMSP148, NSW MA3-18SP	
TIME			Time 16, 17, 18 Duration, Convert between 12 and 24 hour time Timelines using scale ACMMG110, ACMMG139, NSW MA3-13MG	Time 19 Timetables, plan trips and daily activities ACMMG139, NSW MA1-13MG
MONEY		Money Financial Mathematics 12, 13, Fractions Decimals 30 31 Place Value Financial plans, budgets, GST, invoices, receipts Percentage discount ACMNA106, ACMNA132, NSW MA3-5NA, MA3-7NA		

Key:  concept continues, essential prerequisite for further concept  essential related concept

YEAR 5 and 6 COMPOSITE CONCEPT SCOPE AND SEQUENCE – TERM 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
TEACH AT LEAST ONCE A WEEK	Essential prior and related concepts - Addition Subtraction 1 - 9, 12 - 17, 21, 24, 25, 28, Place Value 6 - 21, 24 - 27, Multiplication Division 1, 2, 5, 7, 9 - 17, 23 -25, Fractions Decimals 7-14, 19-23 Children who have demonstrated understanding of these concepts may move onto investigate further concepts, while continuing to deepen and extend understanding of these concepts. Children who have not demonstrated understanding of these concepts, continue to investigate these, while being exposed to further concepts. All children should add and subtract, multiply and divide, and explain standard, non-standard and multiplicative place value at least once a week.									
	TEACH TOGETHER	Place Value 24 (Year 5) 28 (Year 6) Fractions and Decimals 18 (Year 5) 25 (Year 6) Multiplicative place value of whole numbers and decimals to hundredths (Year 5) and of any size (Year 6) by multiplying and dividing by 10, 100 and 1000 Express decimals as both fractions and decimals Multiplication and Division 25, Fractions and Decimals 26, Place Value 29 (Year 6) Multiply and divide decimals to thousandths by whole numbers and powers of 10, Record remainders as fractions and decimals when dividing by 10 Measurement and Geometry 51 (Year 5), 59 (Year 6) Metric system to (decametres, hectometres) kilometres, multiplicative place value, Convert lengths / perimeters by multiplying / dividing by 10, 100, 1000, metric / imperial Convert lengths / perimeters between all length units								
CONTINUE TEACHING		Measurement and Geometry 48, 49 (Year 5) Measure, construct angles in degrees with a protractor, Measure sides / angles to identify the side and angle properties of shapes, Classify from description, Enlarge, comparing side proportions and angles and identifying only the area has changed Fractions and Decimals 19 (Year 5) Explain the role of the vinculum as meaning divided by Multiplication and Division 22 (Year 5) 26 (Year 6), Fractions and Decimals 20 (Year 5), 27 (Year 6) Divide by single-digit numbers, dividing the remainder to create a fraction, Explain division is multiplication by a fraction Fractions and Decimals 28 (Year 6) Fractions in their simplest form by dividing numerator and denominator by highest common factor, equivalent fraction through calculation Multiplication and Division 20, 21, 23 Patterns and Algebra 26 (Year 5) Highest common factor Explain that equivalent division calculations result if both numbers are divided by the same factor Create and solve equivalent number sentences involving multiplication and division Divisibility Tests Measurement and Geometry 58 (Year 6) Identify diagonals on convex two-dimensional shapes, recognising the endpoints as the vertices of the shape Draw all the diagonals of convex two-dimensional shapes, comparing the diagonals on different shapes Identify which of the special quadrilaterals (parallelograms (squares, rectangles and kites), rhombuses and trapeziums) have diagonals that are equal in length Identify whether any of the diagonals are also lines (axes) of symmetry of the shape								

YEAR 5 and 6 COMPOSITE CONCEPT SCOPE AND SEQUENCE – TERM 2

 TEACH AT LEAST
 ONCE A WEEK

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
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Essential prior and related concepts - Add Sub 1 - 9, 12 – 17, 21, 24, 25, 28, Place Value 6 – 21, 24 - 29, Mult Div 1, 2, 5, 7, 9 – 17, 23 - 25, 27 – 29, Fract Dec 7 – 14, 19, 20 – 23, 25 - 29

Children who have demonstrated understanding of these concepts may move onto investigate further concepts, while continuing to deepen and extend understanding of these concepts.

Children who have not demonstrated understanding of these concepts, continue to investigate these, while being exposed to further concepts.

All children should add and subtract, multiply and divide, and explain standard, non-standard and multiplicative place value at least once a week.

TEACH TOGETHER

Fractions and Decimals 21, 22 (Year 5) 29, 30 (Year 6), Place Value 25, 26 (Year 5) Money and Financial Mathematics 12 (Year 5), 13 (Year 6)

Place value of decimals to thousandths as both fractions and decimals, Order fractions and decimals on a number line

Explain percentages as hundredths, related to fractions and decimals, Calculate percentage discounts

Financial plans using a spreadsheet program, creating simple budgets and identifying GST component of invoices and receipts

Statistics and Probability 16 (Year 5) 17 18 (Year 6) Fractions and Decimals 31 (Year 6), Place Value 30 (Year 6)

Identify the outcomes of chance experiments and list probabilities using fractions, verify their sum equals 1, Identify likelihood of winning game, given number of possible outcomes, likelihood of each outcome

Conduct chance experiments, with a small number of trials, using the results to predict likely outcomes of large numbers of trials, Compare frequencies, and predicted frequencies, identify surprising results, Use results to make predictions about a larger population, identifying prediction matches the results of larger numbers of trials

Evaluate relative benefits to organisers and participants in games of chance, describing probabilities using fractions, decimals and percentages, including on a number line

CONTINUE TEACHING

TEACH TOGETHER

Addition and Subtraction 29, Fractions and Decimals 32, Place Value 32 (Year 6)

Add and subtract decimals using mental strategies

Multiplication and Division 28, Patterns and Algebra 29 (Year 6)

Identify and explain square and triangular numbers

Measurement and Geometry 53 (Year 5)

Use a legend or a key, compass, scale and alpha-numeric grid reference to find locations and to describe routes using directional language on world, country or state maps, and on street directories

Measurement and Geometry 52 (Year 5)

Area in metric system to (square decametres) hectares (square hectometres) and square kilometres, units to measure length turned into squares by extending into another dimension, Estimate, measure and record area in square centimetres, square metres, hectares and square kilometres, recognising that square centimetres, square metres, hectares and square kilometres need not be a square

Compare metric / imperial

Measurement and Geometry 61 (Year 6)

Identify two-dimensional shapes, different perimeters / same area, same perimeter / different areas

YEAR 5 and 6 COMPOSITE CONCEPT AND SEQUENCE – TERM 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
TEACH AT LEAST ONCE A WEEK	<p>Essential prior and related concepts - Add Sub 1-9, 12–17, 21, 24, 25, 28–30, Place Value 6–21, 24-30, 32, Mult Div 1, 2, 5, 7, 9–17, 23-25, 27–29, Frac Dec 7–14, 19, 20–23, 25–29, 33, 34</p> <p>Children who have demonstrated understanding of these concepts may move onto investigate further concepts, while continuing to deepen and extend understanding of these concepts.</p> <p>Children who have not demonstrated understanding of these concepts, continue to investigate these, while being exposed to further concepts.</p> <p>All children should add and subtract, multiply and divide, and explain standard, non-standard and multiplicative place value at least once a week.</p>									
TEACH TOGETHER	<p>Addition and Subtraction 32, Patterns and Algebra 30 (Year 6) Measurement and Geometry 62 (Year 6)</p> <p>Negative numbers, Cartesian plane coordinate system using all 4 quadrants to describe location and to construct shapes</p> <p>Time 16, 17 (Year 5), 18 (Year 6)</p> <p>Measure and calculate duration of events using a stop watch, Calculate duration using start and finish time, Convert between 12 and 24 hour time</p> <p>Construct and interpret timelines using scale</p> <p>Fractions Decimals 23, 24 (Year 5) 33, 34 (Year 6), Addition Subtraction 28 (Year 5), 30, 31 (Year 6), Place Value 27 (Year 5), 31 (Year 6) Patterns Algebra 27 (Year 5), 28 (Year 6)</p> <p>Estimate, add, subtract fractions and mixed numerals with the same / related denominator</p> <p>Number patterns fractions, decimals, whole numbers, including on a number line, in a table, describing the rule</p>									
CONTINUE TEACHING	<p>Statistics and Probability 15 (Year 5), 19 (Year 6)</p> <p>Pose questions to collect categorical and numerical data by observation or survey</p> <p>Construct data displays, column graphs, line graphs, dot plots and tables identifying best Use data to make decisions</p> <p>Interpret and compare a range of data displays, secondary data, similarities, differences, usefulness intended message, misleading representations, before making a judgement</p> <p>Measurement and Geometry 50 (Year 5), 60 (Year 6)</p> <p>Determine ‘order’ of rotational symmetry, Transforming effects of single / multiple translations, reflections and rotations</p> <p>Transforming effects of combinations of translation, reflection and degree of rotation, combinations of rotation, translation, reflection do not change properties or area of shapes, and create, describe and identify patterns formed</p>									
CONTINUE TEACHING	<p>Measurement and Geometry 54 (Year 5), 63 (Year 6)</p> <p>Describe the properties of prisms and pyramids</p> <p>Identify sections and cross-sections on prisms and pyramids</p> <p>Construct prisms, pyramids, skeletal models, sketch different views</p> <p>Measurement and Geometry 55 (Year 5), 64 (Year 6)</p> <p>Volumes of models and objects in cubic metres</p> <p>Compare metric / imperial</p> <p>Relationship between cubic and liquid units of measurement of volume and capacity – the millilitre and the cubic centimetre - using displacement, and convert between millilitres and cubic centimetres</p> <p>Convert between liquid units of measurement of volume and capacity - millilitres and litres, litres and kilolitres, kilolitres and megalitres, relating to fractions and multiplicative place value</p>									
TEACH TOGETHER										

YEAR 5 and 6 COMPOSITE CONCEPT SCOPE AND SEQUENCE – TERM 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	
TEACH AT LEAST ONCE A WEEK	Essential prior and related concepts - Add Sub 1-9, 12–17, 21, 24, 25, 28–30, Place Value 6–21, 24-30, 32, Mult Div 1, 2, 5, 7, 9–17, 23-25, 27–29, Frac Dec 7–14, 19, 20–23, 25–29, 33, 34 Children who have demonstrated understanding of these concepts may move onto investigate further concepts, while continuing to deepen and extend understanding of these concepts. Children who have not demonstrated understanding of these concepts, continue to investigate these, while being exposed to further concepts. All children should add and subtract, multiply and divide, and explain standard, non-standard and multiplicative place value at least once a week.										
	TEACH TOGETHER	<p>Multiplication and Division 24 (Year 5) Multiplication of 2 two-digit numbers</p> <p>Addition and Subtraction 33, Multiplication and Division 29, Patterns and Algebra 31 (Year 6) Create and solve missing and equivalent number sentences using order of operations and grouping symbols</p> <p>Patterns and Algebra 32, Multiplication and Division 28 (Year 6) Identify prime and composite numbers Explain composite numbers are the product of prime factors Using prime factors to simplify calculations</p>									
TEACH TOGETHER		<p>Measurement and Geometry 56 (Year 5) Draw prisms / pyramids using perspective, from their net, describing the placement of faces, Construct nets, identifying faces and bases</p> <p>Measurement and Geometry 66 (Year 6) Identify and classify angles as right (90°), acute, obtuse, straight, reflex, revolution, angles on a straight line and angles at a point, adjacent angles that form a right angle, a straight angle or an angle of revolution, vertically opposite angles, identifying that they are equal in size, Use the results to find unknown angles</p>									
		CONTINUE TEACHING	<p>Measurement and Geometry 65 (Year 6) Identify parts of circles</p>								
TEACH TOGETHER	<p>Time 19 (Year 6) Read and interpret simple timetables to plan trips and daily activities</p> <p>Measurement and Geometry 57 (Year 5), 67 (Year 6) Extend the investigation of the units used to measure mass in the metric system of measurement to 10 kilograms, 100 kilograms and tonnes Convert mass between kilograms and grams, tonnes and kilograms, using fractions Explain gross mass and net mass Compare the metric system and the imperial system of measurement, investigating their histories and uses, their units of measurement for mass, and their respective multiplicative systems Identify the relationship between liquid units of measurement of volume and capacity, and units of measurement of mass - the litre of water and the kilogram Convert between units of measurement of mass - milligrams, grams, kilograms and tonnes, relating to fractions and multiplicative place value</p>										