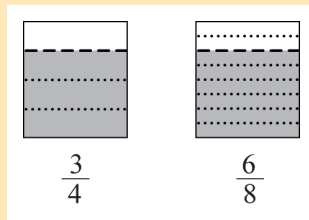






		<p style="text-align: center;"><b>Angles (2)</b></p>	<p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-16MG - Measures and constructs angles, and applies angle relationships to find unknown angles</b></p> <ul style="list-style-type: none"> <li>• <b>Investigate, with and without the use of technologies, angles on a straight line, angles at a point, and vertically opposite angles; use the results to find unknown angles</b> <ul style="list-style-type: none"> <li>- identify and name angle types formed by the intersection of straight lines, including right angles, 'angles on a straight line', 'angles at a point' that form an angle of revolution, and 'vertically opposite angles'</li> <li>- recognise right angles, angles on a straight line, and angles of revolution embedded in diagrams (Reasoning)</li> <li>- identify the vertex and arms of angles formed by intersecting lines (Communicating)</li> <li>- recognise vertically opposite angles in different orientations and embedded in diagrams (Reasoning)</li> <li>- investigate, with and without the use of digital technologies, adjacent angles that form a right angle and establish that they add to <math>90^\circ</math></li> <li>- investigate, with and without the use of digital technologies, adjacent angles on a straight line and establish that they form a straight angle and add to <math>180^\circ</math></li> <li>- investigate, with and without the use of digital technologies, angles at a point and establish that they form an angle of revolution and add to <math>360^\circ</math></li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p>																												
	<p><b>9 and 10</b></p>	<p><b>Fractions &amp; Decimals (2)</b></p>	<ul style="list-style-type: none"> <li>• MA3-7NA - Compares, orders and calculates with fractions, decimals and percentages</li> <li>• Compare fractions with related denominators and locate and represent them on a number line <ul style="list-style-type: none"> <li>- model, compare and represent fractions with denominator of 2, 3, 4, 5, 6, 8, 10, 12 and 100 of a whole object, a whole shape and a collection of objects</li> <li>- compare the relative size of fractions drawn on the same diagram, eg</li> </ul> </li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <table style="border-collapse: collapse;"> <tr><td style="width: 100px; height: 15px;"></td><td style="width: 100px; height: 15px;"></td></tr> <tr><td style="width: 50px; height: 15px;"></td><td style="width: 50px; height: 15px;"></td></tr> <tr><td style="width: 33.33%; height: 15px;"></td><td style="width: 33.33%; height: 15px;"></td><td style="width: 33.33%; height: 15px;"></td></tr> <tr><td style="width: 25%; height: 15px;"></td><td style="width: 25%; height: 15px;"></td><td style="width: 25%; height: 15px;"></td><td style="width: 25%; height: 15px;"></td></tr> <tr><td style="width: 16.67%; height: 15px;"></td><td style="width: 16.67%; height: 15px;"></td><td style="width: 16.67%; height: 15px;"></td><td style="width: 16.67%; height: 15px;"></td><td style="width: 16.67%; height: 15px;"></td><td style="width: 16.67%; height: 15px;"></td></tr> <tr><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td><td style="width: 10%; height: 15px;"></td></tr> </table> <p style="margin-left: 10px;">twelfths eighths sixths quarters thirds halves whole</p> </div>																												<p><b>Pre-Test Week 9 and 10</b></p> <p><b>Post-Test Week 3-10</b></p>

- compare and order simple fractions with related denominators using strategies such as diagrams, the number line, or equivalent fractions, eg write  $\frac{3}{5}$ ,  $\frac{3}{10}$ ,  $1\frac{1}{10}$ ,  $\frac{4}{5}$  and  $\frac{7}{10}$  in ascending order
- find equivalent fractions by re-dividing the whole, using diagrams and number lines, eg



- record equivalent fractions using diagrams and numerals
- develop mental strategies for generating equivalent fractions, such as multiplying or dividing the numerator and the denominator by the same number,

eg  $\frac{1}{4} = \frac{1 \times 2}{4 \times 2} = \frac{1 \times 3}{4 \times 3} = \frac{1 \times 4}{4 \times 4} = \dots$ , ie  $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16} = \dots$

- explain or demonstrate why two fractions are or are not equivalent (Communicating, Reasoning) ⚙️
- write fractions in their 'simplest form' by dividing the numerator and the denominator by a common factor, eg  $\frac{4}{16} = \frac{4 \div 4}{16 \div 4} = \frac{1}{4}$
- recognise that a fraction in its simplest form represents the same value as the original fraction (Reasoning)
- apply knowledge of equivalent fractions to convert between units of time, eg 15 minutes

is the same as  $\frac{15}{60}$  of an hour, which is the same as  $\frac{1}{4}$  of an hour

**MA3-1WM** - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions

**MA3-2WM** - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations

**MA3-3WM** - Gives a valid reason for supporting one possible solution over another

## Length (2)

**MA3-9MG** - Selects and uses the appropriate unit and device to measure lengths and distances, calculates perimeters, and converts between units of length

- **Convert between common units of length**
- **Connect decimal representation to the metric system**
  - recognise the equivalence of whole-number and decimal representations of measurements of length, eg 165 cm is the same as 1.65 m

			<ul style="list-style-type: none"> <li>- interpret decimal notation for lengths and distances, eg 13.5 cm is 13 centimetres and 5 millimetres</li> <li>- record lengths and distances using decimal notation to three decimal places, eg 2.753 km</li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	
	11	<p><b>Revisions of Key Concepts</b></p> <p><b>Assessment</b></p>	<p><b>Base this on your class needs</b></p>	

Term	Week	Content Area / Units	Outcomes	Assessment
2	1 and 2	Whole Number (2)	<p><b>MA3-4NA – Orders, reads and represents integers of any size and describes properties of whole numbers</b></p> <ul style="list-style-type: none"> <li>Identify and describe properties of prime, composite, square and triangular numbers               <ul style="list-style-type: none"> <li>Determine whether a number is prime, composite or neither. Justify why.</li> <li>Model, explain, explore square and triangular numbers and record each number group in numerical and diagrammatic form</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	Pre-Test Week 1 and 2
		Time (2)	<p><b>MA3-31MG – uses 24-hour time and am and pm notation in real-life situations, and constructs timelines</b></p> <ul style="list-style-type: none"> <li>Compare 12-and 24-hour time systems and convert between them</li> <li>Interpret and use timetables</li> <li>Draw and interpret timelines using a given scale</li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	
	3 and 4	Fractions and Decimals (2)	<p><b>MA3-7NA</b> - Compares, orders and calculates with fractions, decimals and percentages</p> <ul style="list-style-type: none"> <li>Solve problems involving addition and subtraction of fractions with the same or related denominators               <ul style="list-style-type: none"> <li>add and subtract fractions, including mixed numerals, where one denominator is the same as, or a multiple of, the other, eg <math>\frac{2}{3} + \frac{1}{6}</math>, <math>2\frac{3}{8} - 1\frac{1}{2}</math>, <math>2\frac{3}{8} - \frac{3}{4}</math></li> <li>convert an answer that is an improper fraction to a mixed numeral (Communicating)</li> <li>use knowledge of equivalence to simplify answers when adding and subtracting fractions (Communicating, Reasoning)</li> <li>recognise that improper fractions may sometimes make calculations involving mixed numerals easier (Communicating)</li> </ul> </li> </ul>	Pre-Test Week 3 and 4

		<p style="text-align: center;">2D Space (2)</p>	<ul style="list-style-type: none"> <li>- solve word problems involving the addition and subtraction of fractions where one denominator is the same as, or a multiple of, the other, eg 'I ate <math>\frac{1}{8}</math> of a cake and my friend ate <math>\frac{1}{4}</math> of the cake. What fraction of the cake remains?'</li> <li>- multiply simple fractions by whole numbers using repeated addition, leading to a rule, eg <math>\frac{2}{5} \times 3 = \frac{2}{5} + \frac{2}{5} + \frac{2}{5} = \frac{6}{5} = 1\frac{1}{5}</math> leading to <math>\frac{2}{5} \times 3 = \frac{2 \times 3}{5} = \frac{6}{5} = 1\frac{1}{5}</math></li> </ul> <ul style="list-style-type: none"> <li>• <b>Find a simple fraction of a quantity where the result is a whole number, with and without the use of digital technologies</b> <ul style="list-style-type: none"> <li>- calculate unit fractions of collections, with and without the use of digital technologies, eg calculate <math>\frac{1}{5}</math> of 30</li> <li>- describe the connection between finding a unit fraction of a collection and the operation of division (Communicating, Problem Solving)</li> <li>- calculate a simple fraction of a collection/quantity, with and without the use of digital technologies, eg calculate <math>\frac{2}{5}</math> of 30</li> <li>- explain how unit fractions can be used in the calculation of simple fractions of collections/quantities, eg 'To calculate <math>\frac{3}{8}</math> of a quantity, I found <math>\frac{1}{8}</math> of the collection first and then multiplied by 3'</li> <li>- solve word problems involving a fraction of a collection/quantity</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-15MG - Manipulates, classifies and draws two-dimensional shapes, including equilateral, isosceles and scalene triangles, and describes their properties</b></p> <ul style="list-style-type: none"> <li>• <b>Investigate the diagonals of two-dimensional shapes</b> <ul style="list-style-type: none"> <li>- Identify and name 'diagonals' of convex two-dimensional shapes</li> <li>- Determine and draw all the diagonals of convex two-dimensional shapes</li> <li>- Compare and describe diagonals of different convex two-dimensional shapes</li> </ul> </li> <li>• <b>Identify, create and name parts of circles</b></li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	
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	<p>5 and 6</p>	<p><b>Addition and Subtraction (2) (Subtraction Focus)</b></p> <p>Area (2)</p>	<p><b>MA3-5NA – Selects and applies appropriate strategies for addition and subtraction with counting numbers of any size</b> <b>SUBTRACTION FOCUS</b></p> <ul style="list-style-type: none"> <li>• <b>Select and apply efficient mental, written strategies and appropriate technologies to solve problems involving subtraction with whole numbers</b> <ul style="list-style-type: none"> <li>- Revise subtraction mental strategies for subtracting numbers of any size (Addition and subtraction 1)</li> <li>- Select and apply different/appropriate mental and written strategies to solve unfamiliar problems</li> <li>- compare and discuss/justify advantages of each strategy for efficiency</li> <li>- record the strategy used to solve word problems</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-10MG – Selects and uses the appropriate unit to calculate areas, including areas of squares, rectangles and triangles</b></p> <ul style="list-style-type: none"> <li>• Solve problems involving the comparison of areas using appropriate units <ul style="list-style-type: none"> <li>- Investigate the area of a triangle by comparing the area of a given triangle to the area of the rectangle of the same length and perpendicular height</li> <li>- Establish the relationship between the base length, perpendicular height and area of a triangle</li> <li>- Record, using words, the method for finding the area of any triangle</li> <li>- Solve a variety of problems involving the areas of rectangles and triangles</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	<p>Post-Test Week 1-4 (reporting)</p> <p>Pre-Test Week 5 and 6</p>
	<p>7 and 8</p>	<p><b>Multiplication and Division (2) (Focus on Division)</b></p>	<p><b>MA3-6NA - Selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation</b></p> <ul style="list-style-type: none"> <li>• <b>Select and apply efficient mental and written strategies, and appropriate digital technologies, to solve problems involving division with whole numbers</b> <ul style="list-style-type: none"> <li>- select and use efficient mental and written strategies, and digital technologies, to divide whole numbers of up to four digits by one- and two-digit numbers</li> <li>- estimate solutions to problems and check to justify solutions</li> <li>- use mental strategies to divide numbers by 10, 100, 1000 and their multiples</li> <li>- solve word problems involving division</li> <li>- compare and discuss methods used to solve problems</li> </ul> </li> </ul>	<p>Pre-Test Week 7 and 8</p>



		<p style="text-align: center;"><b>Angles (2)</b></p>	<p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-16MG - Measures and constructs angles, and applies angle relationships to find unknown angles</b></p> <ul style="list-style-type: none"> <li>• <b>Investigate, with and without the use of technologies, angles on a straight line, angles at a point, and vertically opposite angles; use the results to find unknown angles</b> <ul style="list-style-type: none"> <li>- identify and name angle</li> <li>- identify the vertex and arms of angles</li> <li>- investigate, with and without the use of digital technologies, adjacent angles that form a right angle and establish that they add to 90°</li> <li>- investigate, with and without the use of digital technologies, adjacent angles on a straight line and establish that they form a straight angle and add to 180°</li> <li>- investigate, with and without the use of digital technologies, angles at a point and establish that they form an angle of revolution and add to 360°</li> <li>- Find unknown angles using the results known</li> <li>- Investigate vertically opposite angles</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p>	
9 and 10		<p style="text-align: center;"><b>Patterns and Algebra (2)</b></p>	<p><b>MA3-8NA - Analyses and creates geometric and number patterns, constructs and completes number sentences, and locates points on the Cartesian plane</b></p> <ul style="list-style-type: none"> <li>• <b>Continue and create sequences involving whole numbers, fractions and decimals; describe the rule used to create the sequence</b> <ul style="list-style-type: none"> <li>- Continue and create number patterns, with and without the use of digital technologies, using whole numbers, fractions and decimals</li> <li>- Create simple geometric patterns using concrete materials</li> <li>- Complete a table of values for a geometric pattern and describe the pattern in words</li> <li>- Complete a table of values for number patterns involving one operation and describe the pattern in words</li> <li>- Make generalisations about numbers and number relationships</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	<p style="text-align: center;"><b>Pre- Test Week 9</b></p> <p style="text-align: center;"><b>Post-Test Week 5-10</b></p>

Term	Week	Content Area / Units	Outcomes	Assessment
3	1 and 2	Fractions and Decimals (2) (Addition and Subtraction)	<p><b>MA3-7NA - Compares, orders and calculates with fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• <b>Add and subtract decimals, with and without the use of digital technologies, and use estimation and rounding to check the reasonableness of answers</b> <ul style="list-style-type: none"> <li>- Add and subtract decimals with the same and different number of decimals</li> <li>- Round a number up to three decimal places to the nearest whole number</li> <li>- Solve word problems involving fractions and decimals, including money problems</li> <li>- Make connections between equivalent percentages, fractions and decimals</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	Pre-Test Week 1 and 2
		Mass (2)	<p><b>MA3-12MG - Selects and uses the appropriate unit and device to measure the masses of objects, and converts between units of mass</b></p> <ul style="list-style-type: none"> <li>• <b>Connect decimal representation to the metric system</b> <ul style="list-style-type: none"> <li>- Recognise the equivalence of whole-number and decimal representation of measurement of mass</li> <li>- Interpret decimal notation for masses</li> <li>- Measure mass using scales and record using decimal notation of up to three decimal places</li> </ul> </li> <li>• <b>Convert between kilograms and grams and between kilograms and tonnes</b> <ul style="list-style-type: none"> <li>- Solve problems involving different units of mass</li> <li>- Relate the mass of one litre of water to one kilogram</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	
	3 and 4	Fractions and Decimals (2) (Multiplication and Division)	<p><b>MA3-7NA - Compares, orders and calculates with fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• <b>Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals.</b> <ul style="list-style-type: none"> <li>- Use mental strategies to multiply simple decimals by single digit number, eg <math>3.5 \times 2</math></li> <li>- Multiply decimals of up to three decimal places by whole numbers of up to two digits</li> <li>- Divide decimals by one-digit whole number where the result is a terminating decimal, eg <math>5.25 \text{ divided } 5 = 1.05</math></li> </ul> </li> </ul>	Pre-Test Week 3 and 4

		<p style="text-align: center;"><b>Volume and Capacity (2)</b></p>	<ul style="list-style-type: none"> <li>- Solve word problems involving multiplication and division of decimals, including those involving money</li> <li>• <b>Multiply and divide decimals by powers of 10</b> <ul style="list-style-type: none"> <li>- Recognise the number patterns formed when decimals are multiplied and divided by 10, 100 and 1000</li> <li>- Multiply and divide decimals by 10, 100 and 1000</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-11MG</b> - <b>Selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities, and converts between units of capacity</b></p> <ul style="list-style-type: none"> <li>• <b>Connect volume and capacity and their units of measurement</b> <ul style="list-style-type: none"> <li>- Select appropriate unit of measurement</li> <li>- Demonstrate that a cube of side 10cm will displace 1 litre of water</li> <li>- Find the volumes of irregular solids in cubic centimetres</li> </ul> </li> <li>• <b>Connect decimal representations to the metric system</b> <ul style="list-style-type: none"> <li>- Recognise the equivalence of whole-number and decimal representations of measurements of capacities</li> <li>- Record volume and capacity using decimal notation up to 3 decimal places</li> </ul> </li> <li>• <b>Convert between common metric units of capacity</b></li> <li>• <b>Calculate the volumes of rectangular prisms</b> <ul style="list-style-type: none"> <li>- Describe the lengths, width and height of a rectangular prism as the dimensions of the prism</li> <li>- Calculate the volumes of rectangular prisms in cubic centimetres</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	
	<p style="text-align: center;">5 and 6</p>	<p style="text-align: center;"><b>Patterns and Algebra (2)</b></p>	<p><b>MA3-8NA</b> - <b>Analyses and creates geometric and number patterns, constructs and completes number sentences, and locates points on the Cartesian plane</b></p> <ul style="list-style-type: none"> <li>• <b>Introduce the Cartesian coordinate system using all four quadrants</b> <ul style="list-style-type: none"> <li>- recognise that the number plane (Cartesian plane) is a visual way of describing location on a grid</li> <li>- recognise that the number plane consists of a horizontal axis (<b>x</b>-axis) and a vertical axis (<b>y</b>-axis), creating four quadrants</li> <li>- identify, read, record, plot and label points, given coordinates</li> </ul> </li> </ul>	<p style="text-align: center;"><b>Pre-Test Week 5 and 6</b></p>

		<p style="text-align: center;"><b>Chance (2)</b></p>	<p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-19SP - Conducts chance experiments and assigns probabilities as values between 0 and 1 to describe their outcomes</b></p> <ul style="list-style-type: none"> <li>• <b>Compare observed frequencies in chance experiments with expected frequencies</b> <ul style="list-style-type: none"> <li>- Distinguish between the 'frequency' of an outcome and the 'probability' of an outcome</li> </ul> </li> <li>• <b>Describe probabilities using fractions, decimals and percentages</b> <ul style="list-style-type: none"> <li>- use knowledge of equivalent fractions, decimals and percentages to assign probabilities to the likelihood of outcomes, eg there is a 'five in ten', <math>1/2</math>, 50%, 0.5 or 'one in two' chance of a particular event occurring</li> </ul> </li> <li>• <b>Conduct chance experiments with both small and large numbers of trials</b> <ul style="list-style-type: none"> <li>- Make predictions about a larger 'population' from which the sample comes</li> <li>- Assign, discuss and explain, expected probabilities to outcomes in chance experiments with random generators</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	
<p style="text-align: center;"><b>7 and 8</b></p>	<p style="text-align: center;"><b>Multiplication and Division (2)</b></p>		<p><b>MA3-6NA - Selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation</b></p> <ul style="list-style-type: none"> <li>• <b>Explore the use of brackets and the order of operations to write number sentences</b> <ul style="list-style-type: none"> <li>- Use the term 'operations' to describe collectively the process of addition, subtraction, multiplication and division</li> <li>- Investigate and establish order of operations using real life contexts</li> <li>- Recognise that the grouping symbols[] and () are used in number sentences to indicate operations that must be performed first</li> <li>- Apply the order of operations to perform calculations involving mixed operations and grouping symbols, without the use of digital technologies</li> <li>- Recognise when grouping symbols are not necessary, eg <math>32 + (2 \times 4)</math> has the same answer as <math>32 + 2 \times 4</math></li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	<p style="text-align: center;"><b>Pre-Test Week 7 and 8</b></p>

		<b>Data (2)</b>	<p><b>MA3-18SP - Uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables</b></p> <ul style="list-style-type: none"> <li>• <b>Interpret and compare a range of date displays, including side-by-side column graphs for categorical variables</b></li> <li>• <b>Interpret secondary data presented in digital media and else where</b> <ul style="list-style-type: none"> <li>- Interpret tables and graphs found in digital media and in factual texts</li> <li>- Identify and describe conclusions</li> </ul> </li> <li>• <b>Critically evaluate data representations found in digital media and related claims</b> <ul style="list-style-type: none"> <li>- Identify sources of bias, misleading representations of data and discuss the message that those who created a particular data representation might have wanted to convey</li> </ul> </li> </ul> <p><b>MA3-1WM - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</b></p> <p><b>MA3-3WM - Gives a valid reason for supporting one possible solution over another</b></p>	
9	<b>Addition and Subtraction (2)</b>	<p><b>MA3-5NA – Selects and applies appropriate strategies for addition and subtraction with counting numbers of any size</b></p> <ul style="list-style-type: none"> <li>• <b>Select and apply efficient mental, written and calculator strategies to solve word problems and record the strategy used</b></li> </ul> <p><b>MA3-1WM - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</b></p> <p><b>MA3-2WM - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</b></p> <p><b>MA3-3WM - Gives a valid reason for supporting one possible solution over another</b></p> <p><b>MA3-17MG - Locates and describes position on maps using a grid-reference system</b></p> <ul style="list-style-type: none"> <li>• <b>Use grid-reference system to describe locations</b></li> <li>• <b>Describe routes using landmarks ad directional language (including compass directions)</b></li> </ul> <p><b>MA3-1WM - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</b></p>	<p><b>Pre-Test Week 9</b></p> <p><b>Post-Test Week 1-10</b></p>	
10	<b>Revisions of Key Concepts</b>	<b>Base this on your class needs</b>		
	<b>Assessment</b>			

Term	Week	Content Area / Units	Outcomes	Assessment
4	1 and 2	Fractions and Decimals (2)	<p><b>MA3-7NA - Compares, orders and calculates with fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>Revise completing calculations using fraction, addition, subtraction, multiplication and division as per term 3</li> <li>Make connections between equivalent fractions, decimals and percentages               <ul style="list-style-type: none"> <li>Recognise that the symbol % means 'percent'</li> <li>Represent common percentages as fractions and decimals</li> <li>Recognise fractions, decimals and percentages as different representations of the same value</li> <li>Represent simple fractions as decimals and percentages</li> <li>Represent decimals as fractions and percentages</li> </ul> </li> </ul> <p><b>MA3-1WM - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</b></p> <p><b>MA3-2WM - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</b></p> <p><b>MA3-3WM - Gives a valid reason for supporting one possible solution over another</b></p>	Pre-Test Week 1 and 2
		Angles (2)	<p><b>MA3-16MG - Measures and constructs angles, and applies angle relationships to find unknown angles</b></p> <ul style="list-style-type: none"> <li>Investigate, with and without the use of technologies, angles on a straight line, angles at a point, and vertically opposite angles; use the results to find unknown angles               <ul style="list-style-type: none"> <li>Investigate, identify and name angle</li> <li>Find unknown angles using the results known</li> </ul> </li> </ul> <p><b>MA3-1WM - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</b></p>	
	3 and 4	Whole Number (2)	<p><b>MA3-4NA – Orders, reads and represents integers of any size and describes properties of whole numbers</b></p> <ul style="list-style-type: none"> <li>Investigate everyday situations that use integers; locate and represent these numbers on a number line</li> <li>Identify and describe properties of prime, composite, square and triangular numbers               <ul style="list-style-type: none"> <li>Determine whether a number is prime, composite or neither. Justify why.</li> <li>Model, explain, explore square and triangular numbers and record each number group in numerical and diagrammatic form</li> </ul> </li> </ul>	Pre-Test Week 3 and 4

		<p style="text-align: center;"><b>Length (2) /Area (2)</b></p>	<p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-9MG</b> - <b>Selects and uses the appropriate unit and device to measure lengths and distances, calculates perimeters, and converts between units of length</b></p> <ul style="list-style-type: none"> <li>• <b>Convert between common units of length</b></li> <li>• <b>Connect decimal representation to the metric system</b></li> <li>• <b>Solve problems involving comparison of lengths using appropriate units</b> <ul style="list-style-type: none"> <li>- Investigate and compare perimeters of rectangles with the same area</li> <li>- Solve a variety of problems involving perimeter, including problems involving different units of length</li> </ul> </li> </ul> <p><b>MA3-10MG</b> <b>selects and uses the appropriate unit to calculate areas, including areas of squares, rectangles and triangles</b></p> <ul style="list-style-type: none"> <li>• <b>Solve problems involving the comparisons of areas</b> <ul style="list-style-type: none"> <li>- Investigate and compare the areas of rectangles with have the same perimeter</li> <li>- Find the areas of triangles</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p>	<p><b>Post-Test Week 1- 4 (reporting)</b></p>
	<p><b>5 and 6</b></p>	<p><b>Fractions and Decimals (2)</b></p>	<p><b>MA3-7NA</b> - <b>Compares, orders and calculates with fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without the use of digital technologies <ul style="list-style-type: none"> <li>- Revise completing calculations using fraction, addition, subtraction, multiplication and division as per term 3</li> <li>- Revise conversions between fractions, decimals and percentages</li> <li>- equate 10% to <math>\frac{1}{10}</math>, 25% to <math>\frac{1}{4}</math> and 50% to <math>\frac{1}{2}</math></li> <li>- calculate common percentages (10%, 25%, 50%) of quantities, with and without the use of digital technologies</li> <li>- choose the most appropriate equivalent form of a percentage to aid calculation,</li> </ul> </li> </ul> <p>eg <math>25\% \text{ of } \\$200 = \frac{1}{4} \text{ of } \\$200 = \\$200 \div 4 = \\$50</math></p>	<p><b>Pre-Test Week 5 and 6</b></p>

		<p style="text-align: center;">2D Space (2)</p>	<ul style="list-style-type: none"> <li>- use mental strategies to estimate discounts of 10%, 25% and 50%, eg '50% off the price of \$122.70: 50% is the same as <math>\frac{1}{2}</math>, so the discount is about \$60'</li> <li>- calculate the sale price of an item after a discount of 10%, 25% and 50%, with and without the use of digital technologies, recording the strategy and result</li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-15MG</b> - <b>Manipulates, classifies and draws two-dimensional shapes, including equilateral, isosceles and scalene triangles, and describes their properties</b></p> <ul style="list-style-type: none"> <li>• <b>Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies</b> <ul style="list-style-type: none"> <li>- Identify whether a two-dimensional shape has been translated, reflected or rotated, or has undergone a number of transformations</li> <li>- Construct patterns of two-dimensional shapes that involve translations, reflections and rotations using computer software</li> <li>- Predict the next translation, reflection or rotation in a pattern</li> </ul> </li> <li>• <b>Investigate the diagonals of two-dimensional shapes</b></li> <li>• <b>Identify, create and name parts of circles</b></li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	
7 and 8	Multiplication and Division (2)		<p><b>MA3-6NA</b> - <b>Selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation</b></p> <ul style="list-style-type: none"> <li>• <b>Select and apply efficient mental and written strategies, and appropriate digital technologies, to solve problems involving multiplication and division of whole number</b> <ul style="list-style-type: none"> <li>- Recognise symbols used to record speed in kilometres per hour, eg 80 km/h</li> <li>- Solve simple problems involving speed</li> <li>- Recognise and use grouping symbols</li> <li>- Apply the order of operations in calculations</li> <li>- Solve word problems involving multiplication and division</li> </ul> </li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p>	



		<p style="text-align: center;"><b>Time (2)</b></p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p> <p><b>MA3-3WM</b> - Gives a valid reason for supporting one possible solution over another</p> <p><b>MA3-31MG</b> – uses 24-hour time and am and pm notation in real-life situations, and constructs timelines</p> <ul style="list-style-type: none"> <li>• <b>Interpret and use timetables</b></li> <li>• <b>Draw and interpret timelines using a given scale</b></li> </ul> <p><b>MA3-1WM</b> - Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions</p> <p><b>MA3-2WM</b> - Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations</p>	
	<p><b>9 and 10</b></p>	<p><b>Revisions of Key Concepts</b></p>	<p><b>Base this on your class needs</b></p>