Reception (Foundation Year)	**Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)**									**Proficiency Strands**
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.									• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**					**Measurement & Geometry**				**Statistics & Probability**
Sub Strands	**Number & Place Value**				**Patterns & Algebra**	**Using units of Measurement**			**Shape**	**Location & Transformation**	**Data Representation & Interpretation**
Big Idea / Concept/ Key Understanding	Trusting the count				-A pattern requires an element of repetition that can be described with a pattern rule -Patterns can be represented in many ways, including using numbers, objects and symbols -Patterns are all around us	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-Duration of time tells us how much time has elapsed -The language of time tells us how to read and interpret time	-Events can be ordered in different ways *(i.e. according to the sequence of time and/or significance of the event)*	-Shapes and objects have characteristics on which they can be grouped and sorted	-Language describes position and movement	-Data can be sorted into meaningful categories -Useful data collection is deliberately planned -Data displays reveal information that can be analysed and discussed
	-Numbers are said in a particular order and there are patterns in the way we say them	-The last number counted tells us how many or how much -A collection tells us how many no matter what it looks like *(i.e. 5 apples, 5 pencils, 5 counters)* -We can recognise small collections without counting (*subitising)*	-Collections can be measured, compared and classified *(i.e. as more of, less than, equal to… or how are 5 and 10 similar, different?)* -There are many ways to represent numbers	-Numbers can be named in terms of their parts *(part-part whole, 7 is 5 and 2, 6 and 1, 4 and 3…)* -There are many different ways to represent , add, subtract , divide and multiply numbers							
Australian Curriculum Content Descriptor	Establish understanding of the language and processes of counting by naming numbers in sequences, initially to & from 20, moving from any starting point	Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond Subitise small collections of objects	Compare, order and make correspondences between collections, initially to 20, and explain reasoning	Represent practical situations to model addition and sharing	Sort & classify familiar objects & explain the basis for these classifications. Copy, continue & create patterns with objects & drawings	Use direct & indirect comparisons to decide which is longer, heavier or holds more, & explain reasoning in everyday language	Compare & order the duration of events using the everyday language of time	Connect days of the week to familiar events & actions	Sort, describe & name familiar 2D shapes & 3D objects in the environment	Describe position & movement	Answer yes/no questions to collect information
Achievement Standard	Students **count to and from 20** and **order small collections**.	Make **connections between number names, numerals & quantities up to 10.**				Students **compare objects** using mass, length and capacity.	Students **explain** the order and **duration** of events.	Students **connect events** and the days of the week.	Students **group objects** based on common characteristics & **sort shapes and objects**.	Students **use** appropriate **language** to describe location.	Students **answer** simple **questions** to **collect information**.
Summative Assessment Task	**R1**	**R2 & R3**		**R4**		**R5**			**R6**		

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Year 1	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)						Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.						• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**						
Sub Strands	**Number & Place Value**				**Fractions and Decimals**	**Money and Financial Mathematics**	**Patterns & Algebra**
Big Idea / Concept/ Key Understanding	Trusting the Count		Place Value	Additive to Multiplicative Thinking	Partitioning	-Currency has determined values and can be recognised and sorted according to appearance and value -The size of Australian coins and notes do not determine its value -Each country has its own currency -Currency provides access to food and services	-A pattern requires an element of repetition that can be described and generalised with a pattern rule -Patterns can be represented in many ways including using combinations of numbers, objects and symbols -Patterns are all around us
	-Numbers are said in a particular order and there are patterns in the way we say them	-The last number counted tells us how many or how much -A collection tells us how many no matter what it looks like *(i.e. 5 apples, 5 pencils, 5 counters)* -We can recognise small collections without counting (*subitising)* -Collections can be measured, compared and classified *(i.e. as more of, less than, equal to… or how are 5 and 10 similar, different?)*	-In place value a new unit is introduced *(i.e. 10 ones is 1 ten, 10 tens is 1 hundred, …)* -In place value there are names for these new units (multiples of 10) *(i.e. tens, hundreds, thousands)*	-Numbers can be named in terms of their parts *(part-part whole, 7 is 5 and 2, 6 and 1, 4 and 3…)* -Numbers have properties that help us work flexibly with them *(e.g. 7 is 5 and 2, 5 and 2 is 7, 7 take 2 is 5)* -Visualisation and partitioning numbers is essential for mental and written computation	-The number of parts names the part *(i.e. 2 parts-halves, 1 part-whole)* -True fractions have equal parts -Language is important *(i.e. "I have 1 out of 2 apples, I have half" – how many out of how much)*		
Australian Curriculum Content Descriptor	Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by 2's, 5's and 10's starting from zero	Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line	Count collections to 100 by partitioning numbers using place value	Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts	Recognise and describe one-half as one of two equal parts of a whole.	Recognise, describe and order Australian coins according to their value	Investigate and describe number patterns formed by skip counting and counting with objects
Achievement Standard	Students **describe number sequences** resulting from skip counting by 2s, 5s and 10s.	Students **count to and from 100** and **locate numbers on a number line.**	Students **partition numbers** using place value	Students **carry out simple additions and subtractions** using counting strategies	Students **identify representations** of one half.	Students **recognise Australian coins** according to their value	Students **continue simple patterns** involving numbers and objects
Summative Assessment Task	**1.1**		**1.2**	**1.3**			**1.4**

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Year 1	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)							Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.							• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**					**Statistics & Probability**		
Sub Strands	**Using units of Measurement**			**Shape**	**Location & Transformation**	**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements -In order to make a direct comparison the unit of measurement must be the same	-The language of time tells us how to read and interpret time	-Events can be ordered in different ways *(i.e. according to the sequence of time and/or significance of the event)* -Duration of time tells us how much time has elapsed	-Shapes and objects have characteristics and geometric features in which they can be grouped and sorted	-The language of position and movement tells us how to move and the direction to move in	-In probability situations you can never be sure what will happen next -Prior knowledge and prior experiences are important when predicting, classifying and justifying outcomes -We can justify on a continuum whether events will be impossible or certain	-Useful data collection is deliberately planned, identifying 'what am I collecting?' and 'how will I collect my information and display it?' -Data can be sorted into meaningful categories	-Data displays reveal information that can be analysed and discussed -Graphs are powerful data displays as they reveal a great deal of information
Australian Curriculum Content Descriptor	Measure and compare the lengths and capacities of pairs of objects using uniform informal units	Tell time to the half-hour	Describe duration using months, weeks, days and hours	Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features	Give and follow directions to familiar locations	Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'	Choose simple questions and gather responses	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays
Achievement Standard	Students **order objects** based on lengths and capacities using informal units	Students **tell time to the half hour**	Students **explain time** durations	Students **describe two-dimensional shapes and three-dimensional objects**	Students **use the language of direction** to move from place to place	Students **classify outcomes** of simple familiar events	Students **collect data** by asking questions and **draw simple data displays**	Students **describe data displays**
Summative Assessment Task								

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Year 2	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)					Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.					• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**					
Sub Strands	**Number & Place Value**				**Fractions and Decimals**	**Money and Financial Mathematics** / **Patterns & Algebra**
Big Idea / Concept/ Key Understanding	Trusting the Count	Place Value	Additive to Multiplicative Thinking		Partitioning	-Currency has determined values and can be recognised according to appearance and value -The size of Australian coins and notes does not determine its value -Money values can be represented in a variety of combinations -Each country has its own currency -Currency provides access to food and services
	-Numbers are said in a particular order and there are patterns in the way we say them -There are many ways to represent numbers -Numbers tell how much or how many	-Place value has a logical, repeating pattern that extends to the thousands and beyond -Numbers can be renamed in various ways *(i.e. 254 can be renamed as 25 tens and 4 ones, or 254 ones)* -In place value there are names for each new unit (multiples of 10) *(i.e. tens, hundreds, thousands)*	-There are many different ways to represent numbers, and to add, subtract , divide and multiply numbers -There are strategies that help with addition and subtraction *(e.g. commutative properties)* -Fluency with number facts is essential for developing and applying efficient mental strategies	-Multiplication can be equated to repeated addition and repeating patterns -Division is the inverse operation of multiplication. It also means to make groups of -It is important to recognise each operation and its appropriate use -Exploring generalisations develops number knowledge *(e.g. for 3 fours "I know that 4 doubled is 8, so 1 more 4 is 12")*	-The number of parts names the part *(i.e. 3 parts- thirds, 5 parts- fifths)* -As the number of parts increases, the size of the parts decreases *(i.e. although in number we know 5 is larger than 3, in fractions fifths are smaller than thirds)* -Fractions have equal parts -Language is important *(i.e. "I have 1 out of 2 apples, I have half" – how many out of how much; the time is half past 1)*	-A pattern requires an element of repetition that can be described with a pattern rule -Patterns can be represented in many ways, including using combinations of numbers, objects and symbols -Patterns are all around us
Australian Curriculum Content Descriptor	Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences	Recognise, model, represent and order numbers to at least 1000 Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting	Explore the connection between addition and subtraction Solve simple addition and subtraction problems using a range of efficient mental and written strategies	Recognise and represent multiplication as repeated addition, groups and arrays Recognise and represent division as grouping into equal sets and solve simple problems using these representations	Recognise and interpret common uses of halves, quarters and eighths of shapes and collections	Count and order small collections of Australian coins and notes according to their value	Describe patterns with numbers and identify missing elements Solve problems by using number sentences for addition or subtraction
Achievement Standard	Students **recognise increasing and decreasing number sequences** involving 2s, 3s and 5s.	Students **count to and from 1000**	Students **perform simple addition and subtraction calculations** using a range of strategies	Students **represent multiplication and division** by grouping into sets	Students **divide collections and shapes into halves, quarters and eighths**	Students **associate collections of Australian coins with their value**	Students **identify the missing element in a number sequence**
Summative Assessment Task	**2.1**	**2.2**	**2.3**	**2.4**			

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Year 2	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)									Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.									• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**							**Statistics & Probability**		
Sub Strands	**Using units of Measurement**			**Shape**		**Location & Transformation**		**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-The language of time tells us how to read and interpret time	-Events can be ordered in different ways *(i.e. according to the sequence of time and/or significance of the event)* -Duration of time tells us how much time has elapsed	-Shapes and objects have characteristics on which they can be grouped and sorted -Two-dimensional shapes can be represented using photographs, sketches and images created by digital technologies		-Language describes position and movement -Objects can be described using a grid reference system -Using a range of views assists when describing position	-Objects can be moved but changing position does not alter an object's size or features -Half and quarter turns of a shape and sketching the next element in the pattern can be predicted	-In probability situations you can never be sure what will happen next -Prior knowledge and prior experiences are important when predicting, classifying and justifying outcomes	-Useful data collection is deliberately planned, identifying 'what am I collecting?' and 'how will I collect my information and display it?'	-Data displays reveal information that can be analysed and discussed -Graphs are powerful data displays as they reveal a great deal of information -Data can be sorted into meaningful categories
Australian Curriculum Content Descriptor	Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units Compare masses of objects using balance scales	Tell time to the quarter-hour, using the language of 'past' and 'to'	Name and order months and seasons Use a calendar to identify the date and determine the number of days in each month	Describe and draw two-dimensional shapes, with and without digital technologies	Describe the features of three-dimensional objects	Interpret simple maps of familiar locations and identify the relative positions of key features	Investigate the effect of one-step slides and flips with and without digital technologies Identify and describe half and quarter turns	Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'	Identify a question of interest based on one categorical variable. Gather data relevant to the question Collect, check and classify data	Create displays of data using lists, table and picture graphs and interpret them
Achievement Standard	Students **order shapes and objects** using informal units	Students **tell time to the quarter hour**	Students **use a calendar** to identify the date and the months included in seasons	Students **recognise the features of three-dimensional objects**	Students **order shapes and objects using informal units**	Students **interpret simple maps** of familiar locations	Students **explain the effects of one-step transformations**	Students **describe outcomes for everyday events**	Students **collect data from relevant questions** to **create lists, tables and picture graphs**	Students **make sense of collected information**
Summative Assessment Task										

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Year 3	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)						Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.						• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**						
Sub Strands	**Number & Place Value**				**Fractions and Decimals**	**Money and Financial Mathematics**	**Patterns & Algebra**
Big Idea / Concept/ Key Understanding	-All numbers ending with the digit 0, 2, 4, 6 or 8 are even and those ending in 1, 3, 5, 7 or 9 are odd -Numbers with more than 1 digit are also classified as odd or even	Place Value -Place value has a logical, repeating pattern that extends to the thousands and beyond -Numbers can be renamed in various ways *(i.e. 254 can be renamed as 25 tens and 4 ones, or 254 ones)* -In place value there are names for each new unit (multiples of 10) *(i.e. tens, hundreds, thousands)*	Additive to Multiplicative Thinking -There are many different ways to represent numbers, and to add, subtract , divide and multiply numbers -There are strategies that help with addition and subtraction (e.g. commutative properties) -Fluency with number facts is essential for developing and applying efficient mental strategies	-Multiplication can be equated to repeated addition and repeating patterns -Division is the inverse operation of multiplication. It also means to make groups of -It is important to recognise each operation and its appropriate use -Exploring generalisations develops number knowledge *(e.g. for 3 fours "I know that 4 doubled is 8, so 1 more 4 is 12")*	Partitioning -The number of parts names the part *(i.e. 3 parts- thirds, 5 parts- fifths)* -As the number of parts increases, the size of the parts decreases *(this is different to working with numbers)* -Fractions have equal parts -Developing the language of fractions is important *(i.e. "I have 1 out of 2 apples, I have half" – how many out of how much; it is quarter past 5)* -A unit fraction is a fraction whose numerator is 1 *(e.g. 1/3: in 2/3 the unit is 1/3 and we have 2 of them)*	-Currency has determined values and can be recognised according to appearance and value -The size of Australian coins and notes does not determine its value -Money values can be represented in a variety of combinations -Each country has its own currency -Currency provides access to food and services	-A pattern requires an element of repetition that can be described with a pattern rule -Patterns can be represented in many ways, including using combinations of numbers, objects and symbols -Patterns are all around us
Australian Curriculum Content Descriptor	Investigate the conditions required for a number to be odd or even and identify odd and even numbers	Recognise, model, represent and order numbers to at least 10 000 Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems	Recognise and explain the connection between addition and subtraction Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation	Recall multiplication facts of two, three, five and ten and related division facts Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies	Model and represent unit fractions including 1/2, 1/4, 1/3, 1/5 and their multiples to a complete whole	Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents	Describe, continue, and create number patterns resulting from performing addition or subtraction
Achievement Standard	Students **classify numbers as either odd or even**	Students **count to and from 10 000**	Students **recognise the connection between addition and subtraction** and **solve problems using efficient strategies** for multiplication	Students **recall addition and multiplication facts** for single digit numbers	Students **model and represent unit fractions**	Students **represent money values** in various ways Students **correctly count out change** from financial transactions	Students **continue number patterns** involving addition and subtraction
Summative Assessment Task		**3.1**	**3.2**		**3.3**	**3.4**	

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Year 3	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**						**Statistics & Probability**		
Sub Strands	**Using units of Measurement**		**Shape**	**Location & Transformation**		**Geometric Reasoning**	**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-The language of time tells us how to read and interpret time -Different cultures have ways of telling the time and seasons	-Shapes and objects have characteristics on which they can be grouped and sorted -Two-dimensional shapes can be represented using photographs, sketches and images created by digital technologies	-Language describes position and movement -Objects can be described using a grid reference system -Using a range of views, including aerial views assists when describing position	-Symmetry exists in natural and build environments	-Angles have arms and a vertex, and that size is the amount of turn required for one arm to coincide with the other	-In probability situations you can never be sure what will happen next -Prior knowledge and prior experiences are important when predicting, classifying and justifying outcomes	-Useful data collection is deliberately planned, identifying 'what am I collecting?' and 'how will I collect my information and display it?'	-Data displays reveal information that can be analysed and discussed -Graphs are powerful data displays as they reveal a great deal of information -Data can be sorted into meaningful categories
Australian Curriculum Content Descriptor	Measure, order and compare objects using familiar metric units of length, mass and capacity	Tell time to the minute and investigate the relationship between units of time	Make models of three-dimensional objects and describe key features	Create and interpret simple grid maps to show position and pathways	Identify symmetry in the environment	Identify angles as measures of turn and compare angle sizes in everyday situations	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results	Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording	Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies Interpret and compare data displays
Achievement Standard	Students **use metric units** for length, mass and capacity	Students **tell time to the nearest minute**	Students **make models of three-dimensional objects**	Students **match positions on maps** with given information	Students **identify symmetry** in the environment	Students **recognise angles** in real situations	Students **conduct chance experiments** and **list possible outcomes**	Students **carry out simple data investigations** for categorical variables	Students **interpret and compare data displays**
Summative Assessment Task									

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Year 4	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)						Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.						• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**						
Sub Strands	**Number & Place Value**			**Fractions and Decimals**		**Money and Financial Mathematics**	**Patterns & Algebra**
Big Idea / Concept/ Key Understanding	-All numbers ending with the digit 0, 2, 4, 6 or 8 are even and those ending in 1, 3, 5, 7 or 9 are odd -Numbers with more than 1 digit are also classified as odd or even	Place Value -Place value has a logical, repeating pattern that extends to the thousands and beyond -Numbers can be renamed in various ways *(i.e. 254 can be renamed as 25 tens and 4 ones, or 254 ones)* -In place value there are names for each new unit (multiples of 10) *(i.e. tens, hundreds, thousands)*	Additive to Multiplicative Thinking -It is important to work flexibly and efficiently with a range of numbers and explore generalisations *(e.g. for 7 sixes - "I know that 5 sixes are 30 and 2 sixes are 12, therefore 7 sixes is 42")* -Each operation has its appropriate use in solving a range of problems involving multiplication or division -Solutions to problems can be found and communicated in a variety of ways *(e.g. using words, diagrams, tables, symbols, explanations)* -Fluency with number facts is essential for developing and applying efficient mental strategies	Partitioning -Developing the language of fractions is important *(i.e. "I have ¾ of 12 marbles. I have 9 marbles; it is quarter past 5)* -The denominator of a fraction names the part. The numerator tells their number -- how many -A unit fraction is a fraction whose numerator is 1 *(e.g. 1/3: in 2/3 the unit is 1/3 and we have 2 of them)* -Representations of quantities can be larger than 1 whole and this is called a mixed number -The decimal numeral system has 10 as the base. A decimal is a tenth part *(e.g. 0.6 is 6 tenths of a part, the part being 1 whole)* -A decimal fraction is a fraction whose denominator is a power of ten *(e.g. 6 tenths, 6 hundredths, 6 thousandths, etc.)*		-Currency has determined values and can be recognised according to appearance and value -The size of Australian coins and notes do not determine its value -Each country has its own currency -Currency provides access to food and services	-A pattern requires an element of repetition that can be described and generalised with a pattern rule -Patterns can be represented in many ways using multiple and inverse operations -Patterns are all around us	
Australian Curriculum Content Descriptor	Investigate and use the properties of odd and even numbers	Recognise, represent and order numbers to at least tens of thousands Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems	Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 Recall multiplication facts up to 10 × 10 and related division facts Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder	Investigate equivalent fractions used in contexts Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation	Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line	Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies	Explore and describe number patterns resulting from performing multiplication Solve word problems by using number sentences involving multiplication or division where there is no remainder	Use equivalent number sentences involving addition and subtraction to find unknown quantities
Achievement Standard	Students **use the properties of odd and even numbers**		Students **choose appropriate strategies for calculations** involving multiplication and division Students **recall multiplication facts to 10 x 10 and related division facts**	Students **recognise common equivalent fractions** in familiar contexts and **make connections between fraction and decimal notations** up to two decimal places	Students **locate familiar fractions on a number line**	Students **solve simple purchasing problems**	Students **continue number sequences** involving multiples of single digit numbers	Students **identify unknown quantities** in number sentences Students **describe number patterns** resulting from multiplication
Summative Assessment Task			**4.1**	**4.2**		**4.3**		**4.4**

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Year 4	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**						**Statistics & Probability**		
Sub Strands	**Using units of Measurement**		**Shape**	**Location & Transformation**		**Geometric Reasoning**	**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-The language of time tells us how to read and interpret time -Different cultures have ways of telling the time and seasons	-Shapes and objects have characteristics on which they can be grouped and sorted -Two-dimensional shapes can be represented using photographs, sketches and images created by digital technologies	-Language describes position and movement -Objects can be described using a grid reference system -Using a range of views, including aerial views assists when describing position		-Angles have arms and a vertex, and that size is the amount of turn required for one arm to coincide with the other -The size of an angle determines its name (e.g. acute, reflex, right angle, …)	-In probability situations you can never be sure what will happen next -Prior knowledge and prior experiences are important when predicting, classifying and justifying outcomes	-Useful data collection is deliberately planned, identifying 'what am I collecting?' and 'how will I collect my information and display it?'	-Data displays reveal information that can be analysed and discussed -Graphs are powerful data displays as they reveal a great deal of information -Data can be sorted into meaningful categories
Australian Curriculum Content Descriptor	Use scaled instruments to measure and compare lengths, masses, capacities and temperatures Compare objects using familiar metric units of area and volume	Convert between units of time Use am and pm notation and solve simple time problems	Compare the areas of regular and irregular shapes by informal means Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies	Use simple scales, legends and directions to interpret information contained in basic maps	Create symmetrical patterns, pictures and shapes with and without digital technologies	Compare angles and classify them as equal to, greater than or less than a right angle	Describe possible everyday events and order their chances of occurring Identify everyday events where one cannot happen if the other happens Identify events where the chance of one will not be affected by the occurrence of the other	Select and trial methods for data collection, including survey questions and recording sheets	Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values Evaluate the effectiveness of different displays in illustrating data features including variability
Achievement Standard	Students **compare areas of regular and irregular shapes** using informal units	Students **solve problems involving time duration** Students **convert between units of time**		Students **interpret information contained in maps**	Students **create symmetrical shapes and patterns**	Students **classify angles** in relation to a right angle	Students **list the probabilities of everyday events** Students **identify dependent and independent events**	Students **construct data displays from given or collected data** Students **describe different methods for data collection and representation**, and **evaluate their effectiveness**	
Summative Assessment Task									

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Year 5	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**								
Sub Strands	**Number & Place Value**			**Fractions and Decimals**		**Money and Financial Mathematics**	**Patterns & Algebra**		
Big Idea / Concept/ Key Understanding	Additive to Multiplicative Thinking			Partitioning		-Money values can be represented in a variety of combinations -Goods and services are paid for with cash, credit or bank cards and cheques -Currency provides access to food and services -Creating budgeting plans assists in achieving financial goals	-A pattern requires an element of repetition that can be described and generalised with a pattern rule -Patterns can be represented in many ways, including using combinations of numbers, objects and symbols -Patterns can consist of multiple operations and inverse operations -Patterns are all around us		
	-It is important to work flexibly and efficiently with a range of numbers and explore generalisations *(e.g. for 7 sixes - "I know that 5 sixes are 30 and 2 sixes are 12, therefore 7 sixes is 42")* -Each operation has its appropriate use in solving a range of problems involving multiplication or division -Solutions to problems can be found and communicated in a variety of ways *(e.g. using words, diagrams, tables, symbols, explanations)*		-Numbers have special properties that can be used to solve problems *(e.g. factor, multiple, prime)*	-The language of fractions is important -The denominator of a fraction names the part. The numerator tells their number -- how many -A unit fraction is a fraction whose numerator is 1 *(e.g. 1/3: in 2/3 the unit is 1/3 and we have 2 of them)* -Representations of quantities can be larger than 1 whole and this is called a mixed number -The decimal numeral system has 10 as the base. A decimal is a tenth part *(e.g. 0.6 is 6 tenths of a part, the part being 1 whole)* -A decimal fraction is a fraction whose denominator is a power of ten *(e.g. 6 tenths, 6 hundredths, 6 thousandths, etc.)*					
Australian Curriculum Content Descriptor	Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies Solve problems involving division by a one digit number, including those that result in a remainder Use efficient mental and written strategies and apply appropriate digital technologies to solve problems	Use estimation and rounding to check the reasonableness of answers to calculations	Identify and describe factors and multiples of whole numbers and use them to solve problems	Compare and order common unit fractions and locate and represent them on a number line Recognise that the place value system can be extended beyond hundredths Compare, order and represent decimals	Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator	Create simple financial plans	Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction	Use equivalent number sentences involving multiplication and division to find unknown quantities
Achievement Standard	Students **solve simple problems involving the four operations** using a range of strategies	Students check the reasonableness of answers **using estimation and rounding**	Students **identify and describe factors and multiples**	Students **order decimals and unit fractions** and **locate them on number lines**	Students **add and subtract fractions** with the same denominator.	Students **explain plans for simple budgets**	Students **continue patterns by adding and subtracting fractions and decimals**	Students **find unknown quantities in number sentences**
Summative Assessment Task	**5.1**		**5.2**	**5.3**			**5.4**	

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Year 5	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**						**Statistics & Probability**		
Sub Strands	**Using units of Measurement**		**Shape**	**Location & Transformation**		**Geometric Reasoning**	**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-The language of time tells us how to read and interpret time -Different cultures have ways of telling the time and seasons	-The features and relative position of each face of a solid determines the net of the solid, including that of prisms and pyramids -Two-dimensional shapes can be represented using photographs, sketches and images created by digital technologies	-Translations, rotations and reflections can change the position and orientation but not shape or size -Transformations can be made by manually flipping, sliding and turning two-dimensional shapes	-Objects can be described using a grid reference system -Using a range of views, including aerial views assists when describing position	-Angles have arms and a vertex, and that size is the amount of turn required for one arm to coincide with the other -The size of an angle determines its name (e.g. acute, reflex, right angle, …)	-In probability situations you can never be sure what will happen next -Prior knowledge and prior experiences are important when predicting, classifying and justifying outcomes	-Useful data collection is deliberately planned, identifying 'what am I collecting?' and 'how will I collect my information and display it?' -Graphs are powerful data displays as they reveal a great deal of information -Data can be sorted into meaningful categories	-Data displays reveal information that can be analysed and discussed
Australian Curriculum Content Descriptor	Choose appropriate units of measurement for length, area, volume, capacity and mass Calculate the perimeter and area of rectangles using familiar metric units	Compare 12- and 24-hour time systems and convert between them	Connect three-dimensional objects with their nets and other two-dimensional representations	Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetries Apply the enlargement transformation to familiar two dimensional shapes and explore the properties of the resulting image compared with the original	Use a grid reference system to describe locations. Describe routes using landmarks and directional language	Estimate, measure and compare angles using degrees. Construct angles using a protractor	List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions Recognise that probabilities range from 0 to 1	Pose questions and collect categorical or numerical data by observation or survey Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies	Describe and interpret different data sets in context
Achievement Standard	Students **use appropriate units of measurement** for length, area, volume, capacity and mass, and **calculate perimeter and area** of rectangles	Students **convert between 12 and 24 hour time**	Students **connect three-dimensional objects with their two-dimensional representations**	Students **describe transformations** of two-dimensional shapes and **identify line and rotational symmetry**	Students **use a grid reference system** to locate landmarks	Students **measure and construct different angles**	Students **list outcomes of chance experiments** with equally likely outcomes and **assign probabilities** between 0 and 1	Students **pose questions to gather data,** and **construct data displays** appropriate for the data	Students **compare and interpret different data sets**
Summative Assessment Task									

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Year 6	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)							Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.							• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**							
Sub Strands	**Number & Place Value**			**Fractions and Decimals**			**Money and Financial Mathematics**	**Patterns & Algebra**
Big Idea / Concept/ Key Understanding	Additive to Multiplicative Thinking			Partitioning			-Discounts can be efficiently and mentally calculated by drawing on knowledge of place value, fractions and decimals -Creating budgeting plans assists in achieving financial goals	-A pattern requires an element of repetition that can be described and generalised with a pattern rule -Patterns can be represented in many ways and can consist of multiple operations and inverse operations
	-Numbers have special properties that can be used to solve problems *(e.g. factor, multiple, prime)* -If a number is divisible by a composite number then it is also divisible by the prime factors of that number *(e.g. 216 is divisible by 8 because the number represented by the last 3 digits is divisible by 8, and therefore is also divisible by 2 and 4)* -An integer is any whole number that is positive, negative or zero			-The decimal numeral system has 10 as the base. A decimal is a tenth part. -Decimals are multiplied and divided using powers of 10 -A decimal fraction is a fraction whose denominator is a power of ten *(e.g. 6 tenths, 6 hundredths, 6 thousandths, etc.)*	-The denominator of a fraction names the part. The numerator tells their number -- how many -A unit fraction is a fraction whose numerator is 1 *(e.g. 1/3: in 2/3 the unit is 1/3 and we have 2 of them)* -Representations of quantities can be expressed as decimals, fractions and percentage -Drawing representations of fractions can assist when comparing fractions with like and unlike denominators -An integer is any whole number that is positive, negative or zero			
Australian Curriculum Content Descriptor	Identify and describe properties of prime, composite, square and triangular numbers	Investigate everyday situations that use integers. Locate and represent these numbers on a number line	Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers	Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without digital technologies Multiply and divide decimals by powers of 10	Make connections between equivalent fractions, decimals and percentages Solve problems involving addition and subtraction of fractions with the same or related denominators	Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies Compare fractions with related denominators and locate and represent them on a number line	Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without digital technologies	Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence Explore the use of brackets and order of operations to write number sentences
Achievement Standard	Students **recognise the properties of prime, composite, square and triangular numbers**	Students **describe the use of integers** in everyday contexts	Students **solve problems involving all four operations** with whole numbers	Students **make connections between the powers of 10 and the multiplication and division of decimals** Students **add, subtract and multiply decimals and divide decimals** where the result is rational	Students **connect fractions, decimals and percentages** as different representations of the same number. Students **solve problems involving the addition and subtraction of related fractions**	Students **calculate a simple fraction of a quantity** Students **locate fractions and integers on a number line**	Students **calculate common percentage** discounts on sale items	Students **describe rules used in sequences involving whole numbers, fractions and decimals** Students **write correct number sentences using brackets and order of operations**
Summative Assessment Task		**6.1**			**6.2**	**6.3**		**6.4**

Year 6	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**						**Statistics & Probability**		
Sub Strands	**Using units of Measurement**		**Shape**	**Location & Transformation**		**Geometric Reasoning**	**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements	-Different cultures have ways of telling the time and seasons -Our daily lives are organised around using time	-The features and relative position of each face of a solid determines the net of the solid and assists with constructing , including that of prisms and pyramids	-Translations, rotations and reflections can change the position and orientation but not shape or size -Transformations can be made by manually flipping, sliding and turning two-dimensional shapes	-The Cartesian plane provides a graphical or visual way of describing location	-Angles have arms and a vertex, and that size is the amount of turn required for one arm to coincide with the other -The size of an angle determines its name (e.g. acute, reflex, right angle, …)	-The meaning of probability terminology is important *(e.g. sample space, favourable outcomes, trial, events and experiments)* -Outcomes can be distinguished as equally likely outcomes and not equally likely -Probabilities can be expressed as decimals, fractions and percentages -Variation can exist between repeated trials	-Understanding that data can be represented in different ways, sometimes with one symbol representing more than one piece of data, and that it is important to read all information about a representation before making judgments	-Secondary data can be obtained from newspapers, the Internet and the Australian Bureau of Statistics and can be used to explore world problems -Some data representations are more appropriate than others for particular data sets
Australian Curriculum Content Descriptor	Connect decimal representations to the metric system Convert between common metric units of length, mass and capacity Solve problems involving the comparison of lengths and areas using appropriate units Connect volume and capacity and their units of measurement	Interpret and use timetables	Construct simple prisms and pyramids	Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies	Introduce the Cartesian coordinate system using all four quadrants	Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. Use results to find unknown angles	Describe probabilities using fractions, decimals and percentages Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies Compare observed frequencies across experiments with expected frequencies	Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables	Interpret secondary data presented in digital media and elsewhere
Achievement Standard	Students **connect decimal representations to the metric system** and **choose appropriate units of measurement** to perform a calculation. They **make connections between capacity and volume**. They **solve problems** involving length and area	Students **interpret timetables**	Students **construct simple prisms and pyramids**	Students **describe combinations of transformations**	Students **locate an ordered pair** in any one of the four quadrants **on the Cartesian plane**	Students **solve problems using the properties of angles**	Students **list and communicate probabilities** using simple fractions, decimals and percentages	Students **compare observed and expected frequencies** Students **interpret and compare a variety of data displays** including those displays for two categorical variables	Students **evaluate secondary data displayed in the media**
Summative Assessment Task									

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Year 7	Western Adelaide Region - Maths Assessment Tasks Map (Draft – 06/06/13)								Proficiency Strands
Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.								• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Number & Algebra**								
Sub Strands	**Number & Place Value**		**Real Numbers**					**Money and Financial Mathematics**	**Patterns & Algebra**	**Linear and Non-linear Relationships**	
Big Idea / Concept/ Key Understanding	Additive to Multiplicative Thinking -Numbers have special properties that can be used to solve problems *(e.g. factor, multiple, prime)* -Arithmetic laws are powerful ways of describing and simplifying calculations -An integer is any whole number that is positive, negative or zero		Partitioning -The denominator of a fraction names the part. The numerator tells their number -- how many -A unit fraction is a fraction whose numerator is 1 *(e.g. 1/3: in 2/3 the unit is 1/3 and we have 2 of them)* -Representations of quantities can be expressed as decimals, fractions and percentage -The decimal numeral system has 10 as the base. A decimal is a tenth part *(e.g. 0.6 is 6 tenths of a part, the part being 1 whole)* -A decimal fraction is a fraction whose denominator is a power of ten *(e.g. 6 tenths, 6 hundredths, 6 thousandths, etc.)*					-Best buys can be determined by comparing the costs of items using metric units or by comparing monetary values	-Understanding arithmetic laws leads to the understanding of algebra -Patterns can be represented in many ways and can consist of multiple operations and inverse operations	-Concrete models will assist in the calculation and understanding of linear equations -There can be patterns that exist when plotting points of integer values	
Australian Curriculum Content Descriptor	Investigate index notation and represent whole numbers as products of powers of prime numbers Compare, order, add and subtract integers Investigate and use square roots of perfect square numbers	Apply the associative, commutative and distributive laws to aid mental and written computation	Compare fractions using equivalence Locate and represent positive and negative fractions and mixed numbers on a number line	Solve problems involving addition and subtraction of fractions, including those with unrelated denominators	Multiply and divide fractions and decimals using efficient written strategies and digital technologies Round decimals to a specified number of decimal places	Express one quantity as a fraction of another, with and without the use of digital technologies Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies Connect fractions, decimals and percentages and carry out simple conversions	Recognise and solve problems involving simple ratios	Investigate and calculate 'best buys', with and without digital technologies	Introduce the concept of variables as a way of representing numbers using letters Create algebraic expressions and evaluate them by substituting a given value for each variable Extend and apply the laws and properties of arithmetic to algebraic terms and expressions	Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point	Solve simple linear equations Investigate, interpret and analyse graphs from authentic data
Achievement Standard	Students **solve problems involving the comparison, addition and subtraction of integers** Students **make the connections between whole numbers and index notation** and the relationship between perfect squares and square roots		Students **use fractions, decimals and percentages**, and their equivalences	Students **solve problems involving percentages** and all four operations with fractions and decimals		Students **express one quantity as a fraction or percentage of another**		Students **compare the cost of items** to make financial decisions.	Students **represent numbers using variables** Students **connect the laws and properties for numbers to algebra**	Students **assign ordered pairs** to given points on the Cartesian plane	Students **interpret simple linear representations and model authentic information** Students **solve simple linear equations and evaluate algebraic expressions** after numerical substitution
Summative Assessment Task	**7.1**		**7.2**						**7.3**	**7.4**	

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Aims	**The Australian Curriculum Mathematics aims to ensure that students**……are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens; develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in *Number and Algebra, Measurement and Geometry, and Statistics and Probability*; recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.							• Understanding • Fluency • Problem Solving • Reasoning
Content Strands	**Measurement & Geometry**					**Statistics & Probability**		
Sub Strands	**Using units of Measurement**	**Shape**	**Location & Transformation**	**Geometric Reasoning**		**Chance**	**Data Representation & Interpretation**	
Big Idea / Concept/ Key Understanding	-There are formulas that exist to help determine the area and volumes of shapes and objects -The formulas assist in find half values of a shape or object -There is language used to describe area and volume *(e.g. metres squared, cubic metres)*	-Using a range of views, including aerial views assists when visualising structures	-Understanding that translations, rotations and reflections can change the position and orientation but not shape or size -The Cartesian plane provides a graphical or visual way of describing location	-Pairs of angles can be defined and classified as complementary, supplementary, adjacent and vertically opposite -There are relationships between altenate, corresponding and co-interior angles for a pair of parallel lines cut by a transversal -Parallel and perpendicular lines can be constructed using a pair of compasses and a ruler, and geometry software	-Concrete materials and digital technologies should be used to investigate the angle sum of a triangle and quadrilateral -Triangles can be identified and classified as scalene, isosceles, right-angled and obtuse-angled triangles using side and angle properties	-The meaning of probability terminology is important *(e.g. sample space, favourable outcomes, trial, events and experiments)* -Outcomes can be distinguished as equally likely outcomes and not equally likely -Probabilities can be expressed as decimals, fractions and percentages -Variation can exist between repeated trials	-Secondary data can be obtained from newspapers, the Internet and the Australian Bureau of Statistics and can be used to explore world problems -Some data representations are more appropriate than others for particular data sets -Stem-and-leaf plots can record and display numerical data collected in a class investigation	-Data can be understood that summarised by calculating measures of centre and spread -Mean and median is used to compare data sets and explain how outliers may affect the comparison -The mean, median and range on graphs can be used to connect to real life
Australian Curriculum Content Descriptor	Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving Calculate volumes of rectangular prisms	Draw different views of prisms and solids formed from combinations of prisms	Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetries	Identify corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning	Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral Classify triangles according to their side and angle properties and describe quadrilaterals	Construct sample spaces for single-step experiments with equally likely outcomes Assign probabilities to the outcomes of events and determine probabilities for events	Identify and investigate issues involving numerical data collected from primary and secondary sources Construct and compare a range of data displays including stem-and-leaf plots and dot plots	Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data Describe and interpret data displays using median, mean and range
Achievement Standard	Students **use formulas** for the area and perimeter of rectangles and **calculate volumes** of rectangular prisms. Students **classify** triangles and quadrilaterals	Students **describe different views** of three-dimensional objects	Students **represent transformations** in the Cartesian plane	Students **solve simple numerical problems involving angles** formed by a transversal crossing two parallel lines Students **name the types of angles formed** by a transversal crossing parallel line		Students **determine the sample space** for simple experiments with equally likely outcomes and **assign probabilities** to those outcomes	Students **identify issues involving the collection of continuous data**. Students **construct stem-and-leaf plots and dot-plots**	Students **calculate mean, mode, median and range for data sets** Students **describe the relationship between the median and mean in data displays**
Summative Assessment Task								

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