Mathematics – Early Stage 1

Early Stage 1	*Number – key ideas*	Limited Understanding	Basic Understanding	Sound Understanding	High Understanding	Outstanding Understanding
Whole Number NES1.1 – Counts to 30, & orders, reads & represents numbers in the range of 0 to 20.	Count Forwards to 30, from a given number	can count forwards to 10 from a given number	Count Forwards to 20, from a given number	Count Forwards to 30, from a given number	Count Forwards to 50, from a given number	Count Forwards to 100, from a given number
	Counts backwards from a given number range 0 to 20	Counts backwards from a given number range 0 to 5	Counts backwards from a given number range 0 to 10	Counts backwards from a given number range 0 to 20	Counts backwards from a given number range 0 to 40	Counts backwards from a given number range 0 to 100
	Compare, order, read and represent numbers to at least 20	Compares, orders, reads and represents numbers to 5	Compare, order, read and represent numbers to at least 10	Compare, order, read and represent numbers to at least 20	Compare, order, read and represent numbers to at least 50	Compare, order, read and represent numbers to at least 100
	Read & use ordinal names to at least tenth	Reads and uses ordinal numbers to at least 3rd.	Reads and uses ordinal numbers to at least 5th .	Reads and uses ordinal numbers to at least 10th .	Reads and uses ordinal numbers to at least 20th .	Reads and uses ordinal numbers to at least 50th .
	Use the language of money	Does not use the language of money at all.	Use the language of money with teacher assistance	Use the language of money	Knows the value of Australian coins. 5c 10c 20c 50c $1 $2	Makes combinations of coins to a given value. Eg 2 x 5c = 10c
Addition & Subtraction NES1.2 – Combines, separates & compares collections of objects, describes using everyday language & records using informal methods.	Combine groups to model addition	Combines groups to model addition to 5 with teacher assistance.	Combines groups to model addition up to 10 with teacher assistance	Combines groups to model addition up to 10	Combines groups to model addition up to 20	Combines groups to model addition beyond 20
	Take part of a group away to model subtraction	Takes part of a group away to model subtraction to 5 with teacher assistance.	Takes part of a group away to model subtraction to 10 with teacher assistance.	Takes part of a group away to model subtraction to 10	Takes part of a group away to model subtraction to 20	Takes part of a group away to model subtraction beyond 20
	Compare groups to determine 'how many more'	Can not compare groups to determine how many more.	Compares groups to determine how many more up to 5 with concrete materials.	Compares groups to determine how many more up to 10 with concrete materials	Compares groups to determine how many more up to 10 with no concrete materials	Compares groups to determine how many more up to 20 with no concrete materials
	Record addt'n & Subt'n informally	Can record addition and subtraction informally up to 5 with teacher assistance.	Can record addition and subtraction informally up to 10 with teacher assistance	Can record addition and subtraction informally up to 10	Can record addition and subtraction informally up to 20	Can record addition and subtraction informally beyond 20

Multiplication & Division NES1.3 Groups, shares & counts collections of objects, describes using everyday language & records using informal methods.	Model equal groups or rows	Can not model equal groups or rows.	Can model equal groups or rows .with teacher assistance	Can model equal groups or rows	Can recognize equal numbers even when arranged differently.	Can Answer maths problems using concrete materials
	Group & share collections of groups equally	Can not group and share collections of groups equally.	Can group and share collections of groups equally with teacher assistance	Can group and share collections of groups equally	Knows that the grouping of 2 x 3 is the same as 3 x 2.	Can make patterns of 2's 5's and 10's.
	Record grouping & sharing informally	Can not record grouping and sharing informally.	Can record grouping and sharing informally with teacher assistance	Can record grouping and sharing informally	Can explain and demonstrate how an answer was obtained.	Can recognize the symbols x -:- =
Fractions & Decimals NES1.4 – Describes halves, encountered in everyday contexts, as 2 equal parts of an object.	Divide an object into 2 equal parts	Can not divide an object into 2 equal parts.	Can divide an object into 2 equal parts. with teacher assistance	Can divide an object into 2 equal parts.	Can recognize halves and beginning to recognize quarters.	Can divide into halves and quarters.
	Recognise & describe halves	Can not recognize and describe halves.	Can recognize and describe halves.with teacher assistance	Can recognize and describe halves.	Can describe a collection as about a half, more than a half or less than a half.	Can describe a collection as about a half, more than a half or less than a half. Uses the fractions 1/2 and 1/4.

Early Stage 1	***Patterns and Algebra – key ideas***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
PAES1.1 – Recognises, describes, creates & continues repeating patterns & number patterns that increase or decrease.	Recognize, describe, create and continue repeating patterns	Can rarely, describe, create and continue repeating patterns	Can usually recognize, describe, create and continue repeating patterns	Can recognize, describe, create and continue repeating patterns	Can recognize, describe, create and continue more intricate repeating patterns	Can recognize, describe, create and continue patterns that increase or decrease in size
	Continue simple number patterns that increase or decrease	Can rarely continue simple number patterns that increase or decrease	Can usually continue simple number patterns that increase or decrease	Can continue simple number patterns that increase or decrease	Begins to use a number line for simple number patterns	Can represent number patterns on a number line.

	Use the term 'is the same as' to describe equality of groups	Uses the term 'is the same as' to describe equality of 2 simple groups with teacher assistance	Uses the term 'is the same as' to describe equality of 2 groups with teacher assistance	Uses the term 'is the same as' to describe equality of 2 groups	Can make 2 equal groups and record.	Uses the = sign to record the equality of number relationships

Data – key ideas

DES1.1 Represents & interprets data displays made from objects & pictures.	Collect Data about students and their environment	Collects Data about students and their environment. Can sort objects into groups according to very easy to see characteristics.	Collects Data about students and their environment. Can sort objects into groups according to characteristics with teacher assistance.	Collects Data about students and their environment. Can sort objects into groups according to characteristics.	Gathers data about concrete materials and begins to use tally marks to represent them.	Gathers and records data using tally marks.
	Organise actual objects or pictures of objects into data displays	Organises actual objects or pictures of objects into rows or columns when working in groups with teacher assistance	Organises actual objects or pictures of objects into rows or columns with teacher assistance	Organises actual objects or pictures of objects into rows or columns	Organises rows or columns using information from a tally sheet with teacher assistance.	Organises rows or columns using information from a tally sheet.
	Interpret data displays made from objects and pictures	Can not answer simple questions about data displays made from objects and pictures with teacher assistance.	Interprets data displays made from objects and pictures with teacher assistance.	Interprets data displays made from objects and pictures.	Interprets bar graphs without objects and pictures with teacher assistance.	Interprets bar graphs without objects and pictures.

Measurement – key ideas

Length MES1.1 – Describes length & distance using everyday language & compares lengths using direct comparison.	Identify & describe the attribute of length	Identifies & an obvious difference of length with teacher assistance	Identifies & describes an obvious difference of length	Identifies & describes longer and shorter.	Identifies and describes the length of an object using formal units	Identifies and describes the length of an object using formal units
	Compare lengths directly by placing objects side by side and aligning ends	Compares lengths directly by placing objects side by side and aligning ends of obviously different objects with teacher assistance.	Compares lengths directly by placing objects side by side and aligning ends of obviously different objects.	Compares lengths directly by placing objects side by side and aligning ends	Compares and orders 2 or more lengths or distances using informal units of measurement.	Compares and orders 2 lengths or distances using formal units of measurement.
	Record comparisons informally	Records comparisons informally by drawing, tracing or cutting and pasting in small groups with teacher assistance.	Records comparisons informally by drawing, tracing or cutting and pasting with teacher assistance.	Records comparisons informally by drawing, tracing or cutting and pasting.	Records lengths and distances using informal units of measurement	Records lengths and distances using the abbreviation m for metre.
Area MES1.2 – Describes area using everyday language & compares areas using direct comparison.	Identify and describe the attribute of area	Can answer simple questions about which area is bigger or smaller with teacher assistance. With obviously different sizes.	Can answer simple questions about which area is bigger or smaller. With obviously different sizes.	Identifies and describe the attribute of area by covering the surface completely with smaller shapes.	Compares the surfaces of 2 areas and answers questions on which is bigger or smaller.	Uses informal units to measure and record the area of a surface.

	Estimate the larger of 2 areas & compare using direct comparison	Can order 2 areas into bigger and smaller with teacher assistance.	Can order 2 areas into bigger and smaller.	Estimates the larger of 2 areas & compares using direct comparison .	Demonstrates understanding by using comparative language to describe the difference between 2 areas.	Estimates, compares and orders 2 or more areas using informal units of measurement.
	Record comparisons informally	Records comparisons informally as bigger or smaller with teacher assistance.	Records comparisons informally as bigger or smaller	Records comparisons informally as small, bigger, biggest.	Records areas informally and makes their own drawing or cutting and pasting an area that is bigger or smaller.	Records the area of a surface by referring to the number or type of units used Eg – the area of the surface is 20 tiles.
Volume & Capacity MES1.3 – Compares capacities of containers and the volumes of objects or substances using direct comparison.	Identify and describe the attributes of volume & capacity	Begins to identify that V is the amount of space an object occupies and that C is the amount that an object can hold with teacher assistance and while working with concrete materials	Can identify that V is the amount of space an object occupies and that C is the amount that an object can hold with teacher assistance and while working with concrete materials	Can identify that V is the amount of space an object occupies and that C is the amount that an object can hold . Uses appropriate language eg full, half full, empty.	Estimates V or C using appropriate informal units.	Knows the formal units that are used for V and C

	Compare the capacities of 2 containers using direct comparison	Compares the capacities of 2 containers using direct comparison and uses simple comparative language. Eg lots, little with teacher assistance.	Compares the capacities of 2 containers using direct comparison and uses simple comparative language. Eg lots, little	Compares the capacities of 2 containers using direct comparison and uses comparative language.	Compares the capacities of more than 2 containers using direct comparison and uses comparative language	Uses informal units to measure and compare the capacities of 2 containers.
	Compare the volumes of 2 objects using direct comparison	Compares the volumes of 2 containers using direct comparison and uses simple comparative language. Eg big, small with teacher assistance	Compares the volumes of 2 containers using direct comparison and uses simple comparative language. Eg big, small	Compares the volumes of 2 objects using direct comparison and uses comparative language.	Compares and orders the volumes of 2 or more objects by packing and stacking.	Uses informal units to measure and compare the volume of 2 containers.
	Record comparisons informally	Uses simple drawings, to compare V & C with teacher assistance.	Uses simple drawings, to compare V & C	Uses drawings, numbers and or words to compare V & C	Records comparisons of 2 or more objects using simple informal units.	Records measurements of 2 or more objects by referring to the type and number of informal units.

Mass MES1.4 Compares the masses of 2 objects and describes mass using everyday language.	Identify and describe the attribute of mass	Begins to use informal language such as heavy, light.	Understands and uses informal language such as heavy, light.	Identifies and describe the attribute of mass as the amount of matter in an object	Begins to use terms such as kilo and gram	Uses terms such as kilo and gram
	Compare the masses of 2 objects by pushing, pulling, or hefting or using an equal arm balance	Identifies simple masses by pushing, pulling, or hefting or using an equal arm balance while working in groups with teacher assistance.	Identifies simple masses by pushing, pulling, or hefting or using an equal arm balance	Compares the masses of 2 objects by pushing, pulling, or hefting or using an equal arm balance	Balances an equal arm balance.	Comparing and ordering masses then checking using a balance.
	Record comparisons informally	Records comparisons informally using drawings to record mass comparisons informally in groups with teacher assistance.	Records comparisons informally using drawings to record mass comparisons informally.	Records comparisons informally using drawings and words to record mass comparisons informally.	Begins to use formal units such as kilo and gram.	Records mass measurements using formal units such as kilo and gram.
Time MES1.5 Sequences events & uses everyday language to describe the duration of activities.	Describe the duration of events using everyday language	Uses s terms to describe day / night/	Uses simple terms to describe day / night/ Lunch / dinner	Describes the duration of events using everyday language	Estimates and measures the duration of an event – long time Short time.	Uses informal units to measure and compare the duration of an event.
	Sequence events in time	Sequences 2 events in time Day Night with teacher assistance	Sequences 2 events in time Day night	Sequences 2 events in time First next	Sequences 3 events in time First Next After that	Uses a time line to record 3 events in a day.

	Name days of the week and seasons	Names, recalls and orders the days of the week with teacher assistance	Names, recalls and orders the days of the week	Names, recalls and orders the days of the week and seasons	Names, recalls and orders the days of the week, seasons and months	Names, recalls and orders the days of the week, seasons and months. Can identify day and date on a calendar
	Tell time on the hour on digital & analog clocks	Tells o clock time on analog clocks with teacher assistance	Tells o clock time on analog clocks	Tells o clock time on digital & analog clocks	Tells o clock time on digital & analog clocks and begins to tell 1/2 past	Tells and records o clock and 1/2 past time on digital & analog clocks

Space & Geometry – key ideas

Three Dimensional space SGES1.1 – Manipulates, sorts & represents 3D objects & describes them using everyday language.	Manipulate & sort 3D objects in the environment	Manipulates 3D objects in the environment	Manipulates & sorts 3D objects in the environment with teacher support	Manipulates & sorts 3D objects in the environment	Manipulates, sorts and classifies familiar 3D objects in the environment	Manipulates, sorts and classifies 3D objects in the environment
	Describe features of 3D objects using everyday language	Describes 1 feature of a 3D object using everyday language	Describes 1-2 features of a 3D object using everyday language	Describes 3 features of 3D objects using everyday language	Describes 4 features of 3D objects using everyday language	Describes 5 features of 3D objects using everyday language
	Use informal names for 3D objects			Yes/No		
Two dimensional space SGES1.2 – Manipulates, sorts describes representations of 2D shapes using everyday language.	Manipulate, sort & describe 2D shapes	Manipulates 2D shapes	Manipulates and sorts 2D shapes	Manipulates, sorts & describes 2D shapes	Manipulates, sorts, classifies & describes 2D shapes with teacher support	Manipulates, sorts, classifies & describes 2D shapes

	Identify & name circles, squares, triangles and rectangles in pictures & the environment, & presented in different orientations	Identifies and names one shape in pictures and the environment	Identifies & names circles, squares, triangles and rectangles in pictures & the environment, & presented in different orientations with teacher support	Identifies & names circles, squares, triangles and rectangles in pictures & the environment, & presented in different orientations	Identifies & names circles, squares, triangles, rectangles and hexagons in pictures & the environment, & presented in different orientations	Identifies & names circles, squares, triangles, rectangles, rhombuses and hexagons in pictures & the environment, & presented in different orientations
	Represent 2D shapes using a variety of materials			Yes/No		
	Identify & draw straight and curved lines			Yes/No		
Position SGES1.3 – Uses everyday language to describe position & give & follow simple directions.	Give & follow simple directions	Gives or follows simple directions with significant teacher support	Gives or follows simple directions with teacher support	Gives & follows simple directions	Represent the position of objects using models or with some teacher assistance	Represent the position of objects using models and drawings with teacher assistance
	Use everyday language to describe position			Yes/No		

Mathematics – Mid Stage 1 (Year 1)

Mid Stage 1	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number NS1.1 – Counts, orders reads & represents 2 and 3 digit numbers.	Count Forwards & backwards by ones, twos & fives	Count forwards by ones, twos and fives 0-20	Count forwards and backwards by ones twos and fives 0-20	Count forwards and backwards by ones, twos and fives beyond 20 using visual aides	Count forwards and backwards by ones, twos and fives independently	Count forwards and backwards by ones, twos and fives from any given number to 100
	Count forwards & backwards by tens, on and off the decade	Count forwards by tens on the decade	Count forwards and backwards by tens on the decade using visual aides	Count forwards and backwards by tens, on and off the decade using visual aides	Count forwards and backwards by tens, on and off the decade independently	Count forwards and backwards by tens on and off the decade from any given number to 100
	Read, order & represent two & three digit numbers	Read and represent two digit numbers with teacher assistance	Read, order and represent two digit numbers	Read, order and represent two and three digit numbers with some teacher assistance	Read, order and represent two and three digit numbers independently	Read and represent two, three and four digit numbers with some teacher assistance
	Read & use the ordinal names to at least 'thirty-first'	Read and use the ordinal names to tenth	Read and use the ordinal names to twentieth with some teacher assistance	Read and use the ordinal names to thirty-first with teacher assistance	Independently read and use the ordinal names to thirty-first	Read and use the ordinal names beyond thirty-first with teacher assistance
	Sort, order & count money using face value	Recognises some coin and note denominations	Begins to sort, order and count money using face value. Recognises some coin and note denominations	Sort, order and count money using face value with teacher assistance. Recognises most coin and note denominations	Independently sort, order and count money using face value. Recognises all coin and note denominations.	Sort, order and count money using face value. Determine whether there is enough money to buy a particular item

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Addition and Subtraction NS1.2 – Uses a range of mental strategies & informal recording methods for addition & subtraction involving 1 and 2 digit numbers.	Model addition and subtraction using concrete materials	Model addition and subtraction to 10 using concrete materials with teacher assistance	Model addition and subtraction to 10 using concrete materials	Independently model addition and subtraction to 20 using concrete materials	Independently model addition and subtraction beyond 20 using concrete materials	Model addition and subtraction to 100 using concrete materials
	Develop a range of mental strategies and informal recording methods for addition & subtraction	Uses one mental strategy and informal recording method for addition	Uses one mental strategy and informal recording method for addition and subtraction	Uses a limited range of mental strategies and informal recording methods for addition and subtraction	Develop a range of mental strategies and informal recording methods for addition and subtraction	Develop and describe a range of mental strategies and informal recording methods for addition and subtraction
	Record number sentences using drawings, numerals, symbols & words	Record number sentences using drawings	Record number sentences using drawings, numerals and symbols with teacher assistance	Independently record number sentences using drawings, numerals and symbols	Independently record number sentences using drawings, numerals, symbols and words	Record number sentences and algorithms using drawings, numerals, symbols and words
Multiplication & Division NS1.3 – Uses a range of mental strategies & concrete materials for multiplication & division.	Rhythmic & skip count by ones, twos, fives & tens	Rhythmic and skip count by ones, twos and tens using visual aides	Rhythmic and skip count by ones, twos and tens	Rhythmic and skip count by ones, twos, fives and tens using some visual aides	Independently rhythmic and skip count by ones, twos, fives and tens	Independently rhythmic and skip count by ones, twos, fives, tens and threes
	Model & use strategies for multiplication including arrays, equal groups & repeated addition	Model and use one strategy for multiplication with teacher assistance	Model and use one of the following strategies for multiplication – arrays, equal groups, repeated addition	Model and use a limited number of strategies for multiplication including arrays, equal groups and repeated addition	Independently model and use strategies for multiplication including arrays, equal groups and repeated addition	Begins to use informal written and mental strategies for multiplication of 2 digit by 1 digit numbers

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	Model & use strategies for division including sharing, arrays & repeated subtraction	Model and use one of the following strategies for division – sharing, arrays with teacher assistance	Model and use one of the following strategies for division – sharing, arrays	Model and use a limited number of strategies for division including sharing, arrays and repeated subtraction	Model and use strategies for division including sharing, arrays and repeated subtraction	Begins to use informal written and mental strategies for division including sharing, arrays and repeated subtraction
	Record using drawings, numerals, symbols & words	Record using either drawings or numerals and symbols with teacher assistance	Record using drawings, numerals and symbols	Record using drawings, numerals, symbols and words with teacher assistance	Independently record using drawings, numerals, symbols and words	Independently record using drawings, numerals, symbols, words. Begin to use formal algorithm
Fractions & Decimals NS1.4 – Describes & models halves & quarters, of objects & collections, occurring in everyday situations.	Model & describe a half or a quarter of a whole object	Model a half of an object using concrete materials with teacher assistance	Model and describe a half or a quarter of a whole object using concrete materials with teacher assistance	Model and describe a half or a quarter of a whole object using concrete materials	Independently model and describe a half or a quarter of a whole object	Model and describe a half, quarter and eighth of a whole object with some teacher assistance
	Model & describe a half or a quarter of a collection of objects	Model a half of a collection of objects using concrete materials with teacher assistance	Model and describe a half or a quarter of a collection of objects using concrete materials with teacher assistance	Model and describe a half or a quarter of a collection of objects using concrete materials	Independently model and describe a half or a quarter of a collection of objects	Model and describe a half, quarter and eighth of a collection of objects with some teacher assistance
	Use fraction notation ½ and ¼	Uses fraction notation ½ with teacher assistance	Uses fraction notation ½ and ¼ with significant teacher assistance	Uses fraction notation ½ and ¼ with some teacher assistance	Uses fraction notation ½ and ¼ independently	Uses fraction notation with denominators 2, 4 and 8
	Money concepts are developed in Whole Numbers					

Mathematics - Mid Stage 1 (Year 1)

Mid Stage 1	*Number – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Chance NS1.5 – Recognises & describes the element of chance in everyday events.	Recognise the element of chance in familiar daily activities	Unable to recognise the element of chance in familiar daily activities	Requires teacher assistance to recognise the element of chance in familiar daily activities	Sometimes recognises the element of chance in familiar daily activities	Consistently recognise the element of chance in familiar daily activities	Recognise the element of chance in familiar and unfamiliar situations
	Use familiar language to describe the element of chance			Yes/No		
	Patterns & Algebra – key ideas					
PAS1.1 – Recognises, describes, creates & continues repeating patterns & number patterns that increase or decrease.	Create, represent & continue a variety of number patterns & supply missing elements	Recognise describe and continue repeating patterns and a limited range of number patterns that increase by 1's or 2's using visual aides	Recognise, describe and continue repeating patterns and number patterns that increase or decrease by 1's or 2's using visual aides	Recognise, describe,create and continue repeating patterns and number patterns that increase or decrease by 1's, 2's, or 10's	Create, represent and continue a variety of number patterns and supply missing elements. Increasing or decreasing by 1's, 2's, 5's or 10's	Create, represent and continue a variety of number patterns and supply missing elements. Increasing or decreasing by 1's, 2's, 3's, 4's 5's, 10's and beyond
	Build number relationships by relating addition & subtraction facts to at least 20	Build addition facts to 10 and begin to make whole number combinations with teacher assistance.	Build addition facts to 10. Relate addition and subtraction facts to 10 with teacher assistance. Begin to make whole number combinations	Build addition facts to 20. Relate addition and subtraction facts to 10. Make whole number combinations for individual numbers	Build addition facts to 20 and relate addition and subtraction facts to 20. Make all possible whole number combinations to 20	Build addition facts to 20 and beyond. Relate addition and subtraction facts for numbers beyond 20.
	Make generalizations about number relationships	Use concrete materials to make some number combinations to 10 with teacher assistance	Use concrete materials to make some number combinations to 10	Make some whole number combinations for individual numbers to 20 and begin to make generalizations: Eg-adding zero doesn't change the number	Independentlymake all possible whole number combinations for individual numbers to 20 and make generalizations: Eg- adding zero doesn't change the number	Make all possible whole number combinations for individual numbers beyond 20 and make generalizations: Eg-adding zero doesn't change the number
	Use the equals sign to record equivalent number relationships			Yes/No Eg (5+2 = 4+3)		

Data – key ideas

DS1.1 Gathers & organizes data, displays data using columns & picture graphs, & interprets the results.	Gather & record data using tally marks, words or symbols			Yes/No		
	Display the data using concrete materials & pictorial representations	Display data using concrete materials with teacher assistance	Display data using concrete materials and pictorial representations with significant teacher assistance	Display data using concrete materials and pictorial representations with some teacher assistance	Independently display data using concrete materials and pictorial representations	Independently display data in pictorial form
	Use objects or pictures as symbols to represent other objects, using one-to-one correspondence			Yes/No		
	Interpret information presented in picture graphs & column graphs	Interpret information presented in picture graphs with teacher assistance	Interpret information presented in picture graphs	Interpret information presented in picture graphs and column graphs with some teacher assistance	Independently interpret information presented in picture graphs and column graphs	Independently interpret information presented in column graphs. Begin to interpret data presented in a simple table

Measurement – key ideas

Length MS1.1 – Estimates, measures, compares & records lengths & distances using informal units, metres & centimetres.	Use informal units to estimate & measure length & distance by placing informal units end-to-end without gaps or overlaps	Needs significant teacher assistance to select appropriate informal units to estimate and measure length/distancean d to place them for accurate measuring.	Sometimes selects appropriate informal units to estimate and measure length and distance. Needs teacher assistance to correctly place units to measure length and distance	Consistently selects appropriate informal units to estimate and measure length and distances. Needs some teacher assistance to correctly place units to measure length and distance accurately	Consistently selects appropriate informal units to estimate and measure lengths and distances. Correctly places units to measure length and distance Accurately.	Consistently gives reasonable estimates of distance and length. Consistently selects appropriate informal units to measure length and distance and correctly places them.

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	Recognise the need for metres & centimeters, & use them to estimate & measure length & distance	Needs significant teacher assistance to estimate and measure length and distance using metres and cm	Needs teacher assistance to estimate and measure length and distance using metres and cm	Describes the need for metres and cm. Needs some teacher assistance to accurately estimate and measure length and distance	Describes the need for metres and cm. Accurately uses metres and cm to estimate and measure length and distance	Describes the need for metres and cm and recognises the need for a smaller unit. Accurately measures distance using metres and cm
	Record measurements by referring to the number & type of informal or formal units used			Yes/No		

Mid Stage 1	***Measurement – key ideas continued***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Area MS1.2 – Estimates, measures, compares & records areas using informal units.	Use appropriate informal units to estimate & measure area			Yes/No		
	Compare & order two or more areas	Compare the area of 2 similar shapes with teacher assistance	Compare and order the area of 2 similar shapes with some teacher assistance	Compare and order the area of 2-3 similar shapes with little teacher assistance	Independently compare and order the area of 2 or more similar shapes	Independently compare and order the area of a variety of different shapes
	Record measurements by referring to the number & type of informal units used			Yes/No		
Volume & Capacity MS1.3 - Estimates, measures, compares & records volumes & capacities using informal units.	Use appropriate informal units to estimate & measure volume & capacity			Yes/No		
	Compare & order the capacities of two or more containers & the volumes of two or more models or objects	Compare the capacities and volumes of 2 similar shaped containers	Compare and order the capacities and volumes of 2 similar shaped containers with some teacher assistance	Compare and order the capacities and volumes of 2-3 similar shaped containers with little teacher assistance	Independently compare and order the capacities and volumes of 2 or more similar shaped containers	Independently compare and order the capacities and volumes of a variety of different shaped containers.

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	Record measurements by referring to the number & type of informal units used			Yes/No		
Mass MS1.4 - Estimates, measures, compares & records the masses of 2 or more objects using informal units.	Estimate & measure the mass of an object using an equal arm balance & appropriate informal units			Yes/No		
	Compare & order two or more objects according to mass	Needs significant teacher assistance to compare the mass of 2 similar sized objects where the difference in mass is obvious. Uses the words heavier, lighter	Needs some teacher assistance to compare the mass of 2 similar sized objects where the difference in mass is obvious. Uses the words heavier, lighter	Compares and orders the mass of 2-3 similar sized objects where the difference in mass is obvious with little teacher assistance. Use the words heavier, heaviest, lighter, lightest	Independently compares and orders the mass of 2-3 objects where the difference in mass is not obvious. Uses appropriate terminology	Independently compares and orders the mass of more than 3 objects which may vary in size and shape and where the difference in mass is not obvious. Uses appropriate terminology
	Record measurements by referring to the number and type of informal units used			Yes/No		
Time MS1.5 – Compares the duration of events using informal methods & reads clocks on the half hour.	Use informal units to measure and compare the duration of events	Describes familiar activities as taking a short time or a long time to be completed Eg- brushing teeth	Selects appropriate informal repeated units to estimate and measure the duration of an event with teacher assistance	Estimates and measures the duration of an event using repeated informal units with little teacher assistance	Independently uses repeated informal units to measure and compare the duration of events	Independently uses repeated informal units to measure and compare the duration of events. Recognises the need for formal units to measure time

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	Name and order the months and seasons of the year	Name some of the months and seasons of the year with teacher assistance	Name most of the months and seasons with teacher assistance	Name and order the months and seasons of the year with teacher assistance	Independently name and order the months and seasons of the year. Recall the number of days in each month using visual aides	Independently name and order the months and seasons. Name the months of each season. Recall the number of days in each month
	Identify the day and date on a calendar			Yes/No		
	Tell time on the hour and half-hour on digital and analog clocks	Tell time on the hour on an analog clock	Tell time on the hour and half hour on an analog clock	Tell time on the hour and half-hour on digital and analog clock with some teacher assistance. Use the terms hour, minute and second	Independently tell time on the hour and half-hour on digital and analog clock. Use the terms hour, minute and second	Independently tell time on the hour and half-hour on digital and analog clock. Begin to discuss relationship between seconds, minutes and hours
Mid Stage 1	***Space & Geometry – key ideas***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Three Dimensional Space SGS1.1 Sorts, describes & represents 3D objects including cones, cylinders, spheres & prisms, & recognizes them in pictures & in the environment.	Name, describe, sort & model cones, cubes, cylinders, spheres & prisms	Recognise 1-2 3D shapes and use everyday language to describe them	Name and sort two 3D shapes with teacher assistance. Use everyday language to describe 3D shapes	Name, sort and model at least three 3D shapes. Use terms – edges, faces and corners when describing 3D shapes	Independently name, sort and model cones, spheres, prisms and cylinders. Use the terms edges, faces and corners when describing 3D shapes	Independently name, sort and model cones, spheres, prisms, cylinders and pyramids. Describe 3D shapes using terms- edges, faces and corners. Begin to identify groups of 3D shapes

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	Recognise 3D objects in pictures & the environment, & presented in different orientations	Recognise 1-2 3D objects in pictures & the environment with teacher assistance	Recognises two 3D objects in pictures & the environment	Recognise at least three 3D objects in pictures & the environment & presented in different orientations with teacher assistance	Independently recognize four 3D objects in pictures & the environment & presented in different orientations	Independently recognize more than four 3D objects in pictures & the environment & presented in different orientations.
	Recognise that 3D objects look different from different views			Yes/No		
Two Dimensional Space SGS1.2 – Manipulates, sorts, represents, describes & explores various 2 D shapes.	Identify, name, compare & represent hexagons, rhombuses and trapeziums presented in different orientations	Identify and name some 2D shapes with teacher assistance	Identify and name some 2D shapes	Identify, name, compare and represent hexagons, rhombuses and trapeziums	Independently identify, name, compare & represent hexagons, rhombuses and trapeziums in different orientations	Independently identify, name, compare and represent hexagons, rhombuses and trapeziums in different orientations. Identify and name pentagons and octagons
	Make tessellating designs using flips, slides & turns	Identify tessellating shapes with teacher assistance	Identify tessellating shapes	Make tessellating shapes using flips, slides and turns with some teacher assistance	Make tessellating designs using flips, slides and turns	Independently make tessellating designs using flips, slides and turns. Experiment with reflecting, translating or rotating shapes to make tessellating designs.
	Identify a line of symmetry			Yes/No		

Mathematics – Mid Stage 1 (Year 1)

	Identify & name parallel, vertical & horizontal lines	Identify parallel, vertical or horizontal lines with teacher assistance	Identify parallel, vertical or horizontal lines	Identify & name parallel, vertical & horizontal lines with teacher assistance	Independently identify & name parallel, vertical & horizontal lines	
	Identify corners as angles			Yes/No		
	Compare angles by placing one angle on top of another			Yes/No		
Position SGS1.3 Represents the position of objects using models & drawings & describes using everyday language.	Represent the position of objects using models & drawings	Represent the position of objects using models or drawings with significant teacher assistance	Represent the position of objects using models or with some teacher assistance	Represent the position of objects using models and drawings with teacher assistance	Independently represent the position of objects using models and drawings	Independently represent the position of objects using models and drawings. Begin to use simple maps and grids to represent position with teacher assistance
	Describe the position of objects using everyday language, including 'left' & 'right'			Yes/No		

Mathematics – Later Stage 1 (Year 2)

Later Stage 1	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number NS1.1 – Counts, orders reads & represents 2 and 3 digit numbers.	Count Forwards & backwards by ones, twos & fives	Counts forwards & backwards by ones & twos with teacher assistance.	Counts forwards & backwards by ones, twos & fives with visual aides.	Counts forwards & backwards by ones, twos & fives independently.	Counts forwards & backwards by ones, twos & fives from any given number to 100.	Counts forwards & backwards by ones, twos & fives from any given number up to 1000.
	Count forwards & backwards by tens, on and off the decade	Count forwards & backwards by tens on the decade with teacher assistance.	Count forwards & backwards by tens, on and off the decade with visual aides.	Count forwards & backwards by tens, on and off the decade independently.	Count forwards & backwards by tens, on and off the decade from any given number to 100.	Count forwards & backwards by tens, on and off the decade from any given number to 1000
	Read, order & represent two & three digit numbers	Read, order & represent two digit numbers.	Read, order & represent two & three digit numbers with teacher assistance.	Read, order & represent two & three digit numbers independently.	Read, order & represent two, & three digit numbers independently and 4 digit numbers with teacher assistance.	Read, order & represent two, three & four digit numbers independently.
	Read & use the ordinal names to at least 'thirty-first'	Read & use the ordinal names to at least 'twentieth' with teacher assistance.	Read & use the ordinal names to at least 'thirty-first' with teacher assistance.	Read & use the ordinal names to at least 'thirty-first' independently.	Read & use the ordinal names beyond 'thirty-first' with some assistance.	Read & use ordinal names 'beyond thirty-first' independently.
	Sort, order & count money using face value	Recognises most coin and note denominations, and is beginning to Sort, order & count money using face value	Sort, order & count money using face value with teacher assistance.	Sort, order & count money using face value independently.	Sort, order & count money using face value, and determine whether there is enough money to buy a particular item.	Sort, order & count money using face value, and find correct change when buying a particular item.

Mathematics – Later Stage 1 (Year 2)

Addition and Subtraction NS1.2 – Uses a range of mental strategies & informal recording methods for addition & subtraction involving 1 and 2 digit numbers.	Model addition and subtraction using concrete materials	Model addition and subtraction using concrete materials with numbers to 10.	Model addition and subtraction using concrete materials with numbers to 20.	Model addition and subtraction using concrete materials with numbers beyond 20.	Model addition and subtraction using concrete materials with numbers to 100.	Model addition and subtraction with trading, with numbers to 100.
	Develop a range of mental strategies and informal recording methods for addition & subtraction	Uses one mental strategy and informal recording method for addition & subtraction.	Uses a limited range of mental strategies and informal recording methods for addition & subtraction.	Develops a range of mental strategies and informal recording methods for addition & subtraction.	Develops and describes a range of mental strategies and informal recording methods for addition & subtraction	Develops a range of mental strategies and informal recording methods for addition & subtraction, and adapts them to other mathematical areas. Eg, fractions.
	Record number sentences using drawings, numerals, symbols & words	Record number sentences using drawings, numerals and symbols with teacher assistance.	Record number sentences using drawings, numerals and symbols independently.	Record number sentences using drawings, numerals, symbols & words independently.	Record number sentences and algorithms using drawings, numerals, symbols & words with some teacher assistance.	Record number sentences and algorithms using drawings, numerals, symbols & words independently.
Multiplication & Division NS1.3 – Uses a range of mental strategies & concrete materials for multiplication & division.	Rhythmic & skip count by ones, twos, fives & tens	Rhythmic & skip count by ones, twos & tens.	Rhythmic & skip count by ones, twos, fives & tens with some teacher assistance.	Rhythmic & skip count by ones, twos, fives & tens independently.	Rhythmic & skip count by ones, twos, fives, tens & threes independently.	Rhythmic & skip count by ones, twos, fives, tens and threes, and applies skip counting to multiplication and addition problems.

Mathematics – Later Stage 1 (Year 2)

	Model & use strategies for multiplication including arrays, equal groups & repeated addition	Model and use one of the following strategies for multiplication including arrays, equal groups & repeated addition.	Model & use a limited number of strategies for multiplication including arrays, equal groups & repeated addition.	Model & use strategies for multiplication including arrays, equal groups & repeated addition independently.	Begins to use informal written and mental strategies for multiplication of 2 digit by 1 digit numbers.	Uses informal written and mental strategies for multiplication of 2 digit by 1 digit numbers.
	Model & use strategies for division including sharing, arrays & repeated subtraction	Model & use one of the following strategies for division including sharing, arrays or repeated subtraction with teacher assistance.	Model & use a limited number of strategies for division including sharing, arrays & repeated subtraction.	Model & use strategies for division including sharing, arrays & repeated subtraction independently.	Begins to use informal written and mental strategies for division and models and uses sharing, arrays & repeated subtraction independently.	Uses informal written and mental strategies for division and models and uses sharing, arrays & repeated subtraction independently.
	Record using drawings, numerals, symbols & words	Record using either drawings, numerals, symbols or words with teacher assistance.	Record using drawings, numerals, symbols & words with teacher assistance.	Record using drawings, numerals, symbols & words independently.	Record using drawings, numerals, symbols & words and formal algorithm.	Record using formal algorithm.
Fractions & Decimals NS1.4 – Describes & models halves & quarters, of objects & collections, occurring in everyday situations.	Model & describe a half or a quarter of a whole object	Model & describe a half or a quarter of a whole object using concrete materials and/or teacher assistance.	Model & describe a half or a quarter of a whole object using concrete materials.	Model & describe a half or a quarter of a whole object independently.	Model & describe a half or, a quarter of and eighths of a whole object with some teacher assistance.	Model & describe a half or, a quarter of and eighths of a whole object independently.

Mathematics - Later Stage 1 (Year 2)

	Model & describe a half or a quarter of a collection of objects	Model & describe a half or a quarter of a collection of objects using concrete materials and/or teacher assistance.	Model & describe a half or a quarter of a collection of objects using concrete materials.	Model & describe a half or a quarter of a collection of objects independently.	Model & describe a half or a quarter or eighths of a collection of objects with some teacher assistance.	Model & describe a half or a quarter or eighths of a collection of objects independently
	Use fraction notation ½ and ¼	Use fraction notation ½ and ¼ with significant teacher assistance.	Use fraction notation ½ and ¼ with some teacher assistance.	Use fraction notation ½ and ¼ independently.	Uses fraction notation with denominators 2, 4 and 8.	Uses fraction notation with denominators 2, 4, 8 and 10.
	Money concepts are developed in Whole Numbers					

Later Stage 1	***Number – key ideas continued***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Chance NS1.5 – Recognises & describes the element of chance in everyday events.	Recognise the element of chance in familiar daily activities	Is beginning to recognise the element of chance in familiar daily activities with teacher assistance.	Recognises the element of chance in familiar daily activities with teacher assistance.	Consistently recognises the element of chance in familiar daily activities.	***Recognises the element of chance in most familiar and unfamiliar situations.***	Consistently recognises the element of chance in familiar and unfamiliar situations.
	Use familiar language to describe the element of chance			Yes/No		
	Patterns & Algebra – key ideas					
PAS1.1 – Recognises, describes, creates & continues repeating patterns & number patterns that increase or decrease.	Create, represent & continue a variety of number patterns & supply missing elements	Recognise, describe, create and continue repeating patterns and number patterns that increase or decrease by 1's, 2's, or 10's with teacher assistance.	Recognise, describe, create and continue repeating patterns and number patterns that increase or decrease by 1's, 2's or 10's	Recognise, describe, create and continue repeating patterns and number patterns that increase or decrease by 1's, 2's, 5's or 10's.	Recognise, describe, create and continue repeating patterns and number patterns that increase or decrease by 1's, 2's, 3's, 5's or 10's.	Recognise, describe, create and continue repeating patterns and number patterns that increase or decrease by any number.

Mathematics – Later Stage 1 (Year 2)

	Build number relationships by relating addition & subtraction facts to at least 20	Build number relationships by relating addition & subtraction facts to at least 10.	Build number relationships by relating addition & subtraction facts to at least 20 with teacher assistance.	Independently Build number relationships by relating addition & subtraction facts to at least 20.	Build number relationships by relating addition & subtraction facts to at least 50.	Build number relationships by relating addition & subtraction facts to at least 100.
	Make generalizations about number relationships	Make some whole number combinations for individual numbers to 10 and begin to make generalisations: Eg-adding zero doesn't change the number with teacher assistance.	Make some whole number combinations for individual numbers to 20 and begin to make generalisations: Eg-adding zero doesn't change the number	Make some whole number combinations for individual numbers to 20 and make generalisations: Eg-adding zero doesn't change the number	Independently make all possible whole number combinations for individual number to 50 and make generalizations: Eg-adding zero doesn't change the number	Independently make all possible whole number combinations for individual number to 100 and make generalizations: Eg-adding zero doesn't change the number
	Use the equals sign to record equivalent number relationships			**Yes/No**		
	Data – key ideas					
DS1.1 Gathers & organizes data, displays data using columns & picture graphs, & interprets the results.	Gather & record data using tally marks	Gathers data using tally marks with teacher assistance.	Gathers and records data using tally marks with teacher assistance.	Independently gathers and records data using tally marks.	Independently gathers and records data using tally marks, and begins to analyse the data.	Independently gathers and records data using tally marks, analyses data and transfers information into graph form.
	Display the data using concrete materials & pictorial representations			**Yes/No**		

Mathematics - Later Stage 1 (Year 2)

	Use objects or pictures as symbols to represent other objects, using one-to-one correspondence			**Yes/No**		
	Interpret information presented in picture graphs & column graphs			**Yes/No**		
	Measurement – key ideas					
Length MS1.1 – Estimates, measures, compares & records lengths & distances using informal units, metres & centimetres.	Use informal units to estimate & measure length & distance by placing informal units end-to-end without gaps or overlaps			**Yes/No**	`	
	Recognise the need for metres & centimeters, & use them to estimate & measure length & distance	Uses cm or m to estimate & measure length & distance with teacher assistance.	Independently uses cm or m to estimate & measure length & distance.	Independently uses cm and m to estimate & measure length & distance.	Independently uses cm and m to estimate, measure and compare length & distance.	Independently uses cm and m to estimate, measure, sort, order and compare length & distance.
	Record measurements by referring to the number & type of informal or formal units used			**Yes/No**		

Later Stage 1	***Measurement – key ideas continued***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Area MS1.2 – Estimates, measures, compares & records areas using informal units.	Use appropriate informal units to estimate & measure area			Yes/No		
	Compare & order two or more areas	Compares and orders two areas with teacher assistance.	Compares and orders two areas.	Independently compare and order two or more areas.	Independently compare, order and sort two or more areas.	Independently compare, order and sort two or more areas using formal units.
	Record measurements by referring to the number & type of informal units used			**Yes/ No**		

Volume & Capacity MS1.3 - Estimates, measures, compares & records volumes & capacities using informal units.	Use appropriate informal units to estimate & measure volume & capacity			**Yes/ No**		
	Compare & order the capacities of two or more containers & the volumes of two or more models or objects	Compare & order the capacities of two containers & the volumes of two models or objects with teacher assistance.	Compare & order the capacities of two containers & the volumes of two models or objects.	Independently compare & order the capacities of three containers & the volumes of three models or objects	Independently compare & order the capacities of four containers & the volumes of four models or objects	Independently compare & order the capacities of five containers & the volumes of five models or objects
	Record measurements by referring to the number & type of informal units used			**Yes/No**		
Mass MS1.4 - Estimates, measures, compares & records the masses of 2 or more objects using informal units.	Estimate & measure the mass of an object using an equal arm balance & appropriate informal units			Yes/No		
	Compare & order two or more objects according to mass	Compare & order two objects according to mass with teacher assistance.	Compare & order two objects according to mass	Compare & order three objects according to mass	Compare & order four objects according to mass	Compare & order five objects according to mass
	Record measurements by referring to the number and type of informal units used			**Yes/No**		
Time MS1.5 – Compares the duration of events using informal methods & reads clocks on the half hour.	Use informal units to measure and compare the duration of events			**Yes/No**		
	Name and order the months and seasons of the year			**Yes/No**		
	Identify the day and date on a calendar			**Yes/No**		
	Tell time on the hour and half-hour on digital and analog clocks	Tell time on the hour on digital and analog clocks with teacher assistance.	Tell time on the hour on digital and analog clocks	Independently tell time on the hour and half-hour on digital and analog clocks	Tell time on the hour, half-hour, quarter to and quarter past on digital and analog clocks.	Tell time to the minute on digital and analog clocks.

Later Stage 1	*Space & Geometry – key ideas*	Limited	Basic	Sound	High	Outstanding
Three Dimensional Space SGS1.1 Sorts, describes & represents 3D objects including cones, cylinders, spheres & prisms, & recognizes them in pictures & in the environment.	Name, describe, sort & model cones, cubes, cylinders, spheres & prisms	Name, sort & model cones, cubes, cylinders, spheres & prisms with significant teacher assistance.	Independently name, sort & model cones, cubes, cylinders, spheres & prisms.	Independently name, describe, sort & model cones, cubes, cylinders, spheres & prisms.	Independently name, describe, sort, model & sketch cones, cubes, cylinders, spheres & prisms.	Independently name, describe, sort, sketch & model cones, cubes, cylinders, spheres, prisms & pyramids.
	Recognise 3D objects in pictures & the environment, & presented in different orientations			**Yes/No**		
	Recognise that 3D objects look different from different views			**Yes/No**		
Two Dimensional Space SGS1.2 – Manipulates, sorts, represents, describes & explores various 2 D shapes.	Identify, name, compare & represent hexagons, rhombuses and trapeziums presented in different orientations	Identify, name & compare hexagons, rhombuses and trapeziums presented in different orientations with teacher assistance.	Identify, name & compare hexagons, rhombuses and trapeziums presented in different orientations	Independently identify, name, compare & represent hexagons, rhombuses and trapeziums presented in different orientations	Independently identify, name, compare & represent hexagons, rhombuses, trapeziums & parallelograms presented in different orientations	Independently identify, name, compare & represent hexagons, rhombuses, trapeziums, parallelograms, pentagons & octagons presented in different orientations
	Make tessellating designs using flips, slides & turns			**Yes/No**		
	Identify a line of symmetry			**Yes/No**		
	Identify & name parallel, vertical & horizontal lines			**Yes/No**		

	Identify corners as angles			**Yes/No**		
	Compare angles by placing one angle on top of another			**Yes/No**		
Position SGS1.3 Represents the position of objects using models & drawings & describes using everyday language.	Represent the position of objects using models & drawings			**Yes/No**		
	Describe the position of objects using everyday language, including 'left' & 'right'			**Yes/No**		

Mathematics – Early Stage 2 (Year 3)

Early Stage 2	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number NS2.1 – Counts, orders, reads & records numbers up to 4 digits.	Count Forwards & backwards by tens or hundreds, on and off the decade	Counts forwards & backwards by tens and hundreds, on the decade, with assistance	Counts forwards & backwards by tens and hundreds, on and off the decade, to 100	Counts forwards & backwards by tens and hundreds, on and off the decade, to 1000	Counts forwards & backwards by tens or hundreds, on and off the decade, independently	Counts forwards & backwards by tens, hundreds and thousands, on and off the decade, independently
	Use place value to read, represent & order numbers up to four digits	Reads, orders and represents two and three digit numbers with teacher assistance	Reads, orders & represents two, three and four digit numbers with teacher assistance	Reads, orders and represents two & three digit numbers, and four digits with some assistance	Uses place value to read, represent & order number up to four digits independently	Uses place value to read, represent & order number up to five digits independently
	Money concepts are developed further in Fractions & Decimals					
Addition and Subtraction NS2.2 – Uses mental & written strategies for addition & subtraction involving 2, 3 & 4 digit numbers.	Use a range of mental strategies for addition & subtraction involving two, three & four digit numbers	Uses one mental strategy only for addition and subtraction of two digit numbers with concrete materials.	Uses one mental strategy for addition and subtraction with some assistance (or two strategies for either add or subtract only) for two digit number	Uses two or three mental strategies for addition & subtraction independently for two and three digit numbers	Uses a range of mental strategies for addition & subtraction involving two, three, and four digit numbers independently	⇐High + able to select the most appropriate strategy for a variety of problems
	Explain and record methods for adding & subtracting	Explains and records simple sums using concrete materials with assistance	Explains and records informal methods for adding and subtracting one & two digit numbers with some assistance	Explains and records informal methods for adding and subtracting two and three digit numbers independently	⇐Sound + explains and records one formal method for adding and subtracting independently	Explains and records 2 formal methods for addition and subtraction (equal addends, decomposition)
	Use a formal written algorithm for addition & subtraction	Relies wholly on teacher assistance to use written algorithm for two or more digits	Uses formal written algorithm for addition and subtraction without trading up to three digits	Uses written algorithm for addition with trading; teacher assistance for subtraction with trading to three digits	Uses a formal written algorithm for addition & subtraction independently with trading to three digits	Uses a formal written algorithm for addition & subtraction independently with trading to three or more digits

Multiplication & Division NS2.3 – Uses mental & written strategies for multiplication & division.	Develop mental facility for number facts up to 10 x 10	Recalls number facts for up to 0x, 1x and 10x tables	⇐Limited + 2x and 5x tables	⇐Basic + 3x, 4x and 6x tables	Demonstrates mental facility for all number facts up to 10 x 10 independently	Demonstrates mental facility for number facts beyond 10 x 10
	Find multiples & squares of numbers	YES / NO				
	Interpret remainders in division problems	YES / NO				
	Determine factors for a given number	YES / NO				
	Use mental and informal written strategies for multiplying or dividing a two digit number by a one digit operator	Models and uses most Stage 1 strategies for multiplying and dividing (arrays, equal groups, repeated addition, sharing, repeated subtraction)	Models and uses Stage 1 strategies for multiplying and dividing independently. Beginning to use mental and informal strategies.	Uses mental and informal written strategies for multiplication or division of a 2 digit number by a 1 digit number with some assistance	Uses mental and informal written strategies for multiplication or division of a 2 digit number by a one digit number independently	Uses formal written strategies for multiplying a 2 digit number by a 2 digit operator, and dividing a 2 digit number by a 1 digit operator independently
Fractions & Decimals NS2.4 – Models, compares & represents commonly used fractions & decimals, adds & subtracts decimals to 2 decimal places & interprets everyday percentages.	Model, compare & represent fractions with denominators 2, 4, & 8, followed by fractions with denominators 5, 10 & 100	Models & describes a half or, a quarter of and eighths of a whole object with some teacher assistance.	Models, compares and represents fractions with denominators 2, 4 & 8 with assistance	Models, compares and represents fractions with denominators 2, 4 & 8 independently	Models, compares and represents fractions with denominators 2, 4, 8 + 5, 10 & 100 independently	Models, compares and represents fractions with denominators 2, 4, 8 + 5, 10 & 100 + 3 & 6 independently
	Find equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths	Models & describes a half or a quarter or eighths of a collection of objects with some teacher assistance.	Finds equivalence between halves, quarters & eighths; fifths & tenths with teacher assistance	Finds equivalence between halves, quarters & eighths; fifths & tenths independently	Finds equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths independently	Finds equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths; thirds & sixths independently
	Model, compare & represent decimals to 2 decimal places	YES / NO				
	Add and subtract decimals with the same number of decimal places (to 2 decimal places)	YES / NO				

	Recognise percentages in everyday situations. Relate a common percentage to a fraction or decimal	Recognises percentages in everyday situations with teacher assistance	Recognises percentages in everyday situations. Beginning to relate common percentages to a fraction or decimal with teacher assistance.	Recognises percentages in everyday situations. Relates a common percentage to a fraction or decimal with teacher assistance (recognises 25% means 25/100 or 0.25)	Recognises percentages in everyday situations. Relates a common percentage to a fraction or decimal independently (recognises 25% means 25/100 or 0.25)	Represents common percentages with decimals and fractions
	Perform calculations with money	Performs simple calculations of money using concrete materials and teacher assistance	⇐Limited + Uses a formal written algorithm for addition & subtraction with money with significant teacher assistance	Uses a formal written algorithm for addition & subtraction with money some teacher assistance	Uses a formal written algorithm for addition & subtraction with money independently	Uses a formal written algorithm for addition, subtraction & multiplication of money independently
Chance NS2.5 – Describes & compares chance events in social & experimental contexts.	Explore all possible outcomes in a simple chance situation	YES / NO				
	Conduct simple chance experiments	YES / NO				
	Collect data & compare likelihood of events in different contexts	Collects data & compares the likelihood of familiar events with significant teacher assistance.	Collects data & compares the likelihood of familiar events. Begins to distinguish between certain and uncertain with teacher assistance.	Collects data & compares the likelihood of familiar events. Distinguishes between certain and uncertain.	Collects data & compare likelihood of events in different contexts independently.	Collects data & begin to order the likelihood of events in different contexts

	Patterns & Algebra – key ideas	Limited	Basic	Sound	High	Outstanding
PAS2.1 Generates, describes & records number patterns using a variety of strategies & completes simple number sentences by calculating missing values.	Generate, describe & record number patterns using a variety of strategies	Generates, describes & records number patterns using one strategy with teacher assistance	Generates, describes & records number patterns using minimal (2-3) strategies with teacher assistance	Generates, describes & records number patterns using a variety of strategies with teacher assistance.	Generate, describe & record number patterns using a variety of strategies independently.	Generates and begins to describe & record a pattern in words. (It looks like the three times table)
	Build number relationships by relating multiplication & division facts to at least 10 x 10	Builds number relationships by relating multiplication & division facts for 0, 1, 2 times tables with significant teacher assistance	Builds number relationships by relating multiplication & division facts for 0, 1, 2, 5, 10 times tables with some teacher assistance	Builds number relationships by relating multiplication & division facts for 0, 1, 2, 3, 4 , 5, 6, 10 times tables with some teacher assistance.	Builds number relationships by relating multiplication & division facts to 10 x 10 independently. (6x4=4x6) (6x4=24 so 24÷4 = 6)	Begins to use abstract relationships in multiplication & division facts to at least 10 x 10
	Complete simple number sentences by calculating the value of a missing number	Attempts number sentences involving one operation by calculating missing values e.g. 5+☐=13 with significant teacher support.	Completes number sentences involving one operation by calculating missing values e.g. 5+☐=13 with significant teacher support.	Completes number sentences involving one operation by calculating missing values e.g. 5+☐=13	Completes simple number sentences involving one to two operations by calculating the value of a missing number independently.	Completes number sentences that involve more than two operations. 5+☐=12-4

	Data – key ideas					
DS2.1 Gathers & organsies data,displays data using tables & graphs, & interprets results.	Conduct surveys, classify & organize data using tables	Conducts surveys with teacher assistance.	Conduct surveys and attempts to organize data using tables with teacher assistance.	Conduct surveys, classify & begin to organize data using tables with some teacher assistance.	Conduct surveys, classify & organize data using tables independently.	
	Construct vertical & horizontal column graphs & picture graphs	Constructs one type of graph with significant teacher assistance.	Constructs one type of graph with teacher assistance.	Constructs vertical & horizontal column graphs & picture graphs with some teacher assistance.	Constructs vertical & horizontal column graphs & picture graphs independently.	Constructs vertical & horizontal column graphs & picture graphs independently. Begins to construct basic line graphs.
	Interpret data presented in tables, column graphs & picture graphs	Interprets data presented in a table or graph with significant teacher assistance.	Interprets data presented in a table or graph with teacher assistance.	Interpret data presented in tables, column graphs & picture graphs with some teacher assistance.	Interpret data presented in tables, column graphs & picture graphs independently.	Interpret data presented in tables, column graphs, picture graphs& begins to interpret data in line graphs.
	Measurement – key ideas					
Length MS2.1 – Estimates, measures, compares & records lengths, distance & perimeters in metre, centimetres and millimetres.	Estimate, measure, compare & record lengths & distances using metres, centimeters and/or millimetres	Attempts to estimate & measure lengths & distances using metres and/or centimetres with significant teacher support.	Begins to estimate, measure & record lengths & distances using metres & centimetres with teacher support.	Begins to estimate, measure, compare & record lengths & distances using metres & centimetres and/or millimetres with some teacher assistance.	Estimates, measures, compares & records lengths & distances using metres, centimetres and/or millimetres independently.	Estimates, measures compares & records lengths & distances using metres, centimetres, millimetres and recognizes that a unit larger than a metre is needed.

	Convert between metres & centimetres, & centimetres & millimetres	Convert between metres & centimeters with significant teacher assistance.	Convert between metres & centimeters with some teacher assistance.	Convert between metres & centimetres, & centimetres & millimetres with some teacher assistance.	Convert between metres & centimetres, & centimetres & millimetres independently.	Convert between metres & centimetres, & centimetres & millimetres and beginning to convert between metres & kilometres.

	Estimate & measure the perimeter of 2D shapes	Attempts to estimate & measure the perimeter of 2D shapes with significant teacher assistance.	Attempts to estimate & measure the perimeter of 2D shapes with some teacher assistance.	Estimate & measure the perimeter of 2D shapes with teacher assistance.	Estimate & measure the perimeter of 2D shapes independently.	Estimate & measure the perimeter of 2D shapes and begins to measure larger areas (school grounds)
	Record lengths & distances using decimal notation of two places	Record lengths & distances using whole numbers with some teacher assistance.	Record lengths & distances using decimal notation of one place with some teacher assistance.	Record lengths & distances using decimal notation of one-two places with teacher assistance.	Record lengths & distances using decimal notation of two places independently.	Record lengths & distances using decimal notation of more than two places independently.

Early Stage 2	*Measurement – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Area – MS2.2 - Estimates, measures, compares & records the areas of surfaces in square centimetres and square metres.	Recognise the need for square centimetres & square metres to measure area	YES / NO				
	Estimate, measure, compare & record areas in square cm & square metres	Estimates, measures and records areas in square cm & square metres with significant teacher support	Estimates, measures and records areas in square cm & square metres with some teacher support	Estimates, measures, records and begins to compare areas in square cm & square metres	Estimate, measure, compare & record areas in square cm & square metres independently	Beginning to use decimal notation in recording area. Uses kilometre units.
Volume & Capacity MS2.3 Estimates, measures, compares & records volumes and capacities using litres, millilitres and cubic centimetres.	Recognise the need for a formal unit to measure volume & capacity	YES / NO				
	Estimate, measure, compare & record volumes and capacities using litres & millilitres	Estimates, measures and records volumes and capacities in litres with significant teacher support	Estimates, measures and records volumes and capacities in litres with some teacher support	Estimates, measures, records and begins to compare volumes and capacities in litres and millilitres	Estimates, measures, compares and records volumes and capacities in litres and millilitres independently	Beginning to use decimal notation in recording volume and capacity
	Measure the volume of models in cubic centimetres	YES / NO				
	Convert between litres and millilitres	YES / NO				
Mass MS2.4 Estimates, measures, compares & records masses using kilograms and grams.	Recognise the need for a formal unit to measure mass	YES / NO				
	Estimate, measure, compare & record masses using kilograms & grams	Estimates, measures and records masses in kilograms with significant teacher support	Estimates, measures and records masses in kilograms with some teacher support	Estimates, measures, records and begins to compare masses in kilograms and grams	Estimates, measures, compares and records masses in kilograms and grams independently	Beginning to use decimal notation in recording mass

Time MS2.5 Reads and records time in 1 minute intervals and makes comparisons between time units.	Recognise the coordinated movements of the hands on a clock	YES / NO				
	Read & record time using digital & analog notation	Reads time in digital and analog notation in 30 min intervals and compares time units with teacher assistance	Reads time using digital and analog notation independently in 30 min intervals and compares time units with some assistance	Reads and records time using digital and analog notation in 15 min intervals *(past and to the hour)* and makes comparisons between time units with some assistance	Reads and records time using digital and analog notation independently in 5 min intervals *(past the hour)* and makes comparisons between time units	Reads and records time using digital and analog notation independently in 1 min intervals *(past and to the hour)* and makes comparisons between time units
	Read & interpret simple timetables, timelines & calendars	Reads simple timetables, timelines and calendars with significant teacher assistance	Reads simple timetables, timelines and calendars with some teacher assistance	Reads independently; interprets simple timetables, timelines and calendars with teacher assistance	Interprets simple timetables, timelines and calendars independently	Reads and interprets more complex time-tables, timelines and calendars independently

Space & Geometry – key ideas

Three Dimensional Space SGS2.1 – Makes, compares, describes & names 3 dimensional objects including pyramids, & represents them in drawing.	Name, describe, sort, make & sketch prisms, pyramids, cylinders, cones & spheres	Names and sorts prisms, pyramids, cylinders, cones & spheres with significant teacher assistance	Names, describes and sorts prisms, pyramids, cylinders, cones & spheres with some assistance	Names, describes, sorts makes and attempts to sketch prisms, pyramids cylinders, cones & spheres with some assistance	Names, describes, sorts makes and sketches prisms, pyramids, cylinders, cones & spheres independently	Begins to name prisms and pyramids according to the shape of their base
	Create nets from everyday packages	YES / NO				
	Describe cross-sections of 3D objects	Describes the cross-section shape of a prism with teacher assistance	Describes the cross-section shapes of a wider range of 3D objects with teacher assistance	⇐ Basic + recognises that the cross-sections of prisms have a uniform shape and size when parallel to base	⇐ Sound + recognises that pyramids, cones and spheres do not have a uniform cross-section	Describes cross-sections of 3D shapes that are not parallel to the base

Early Stage 2	*Space & Geometry – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Two Dimensional Space SGS2.2a – Manipulates, compares, sketches & names 2 dimensional shapes & describes their features.	Identify & name pentagons, octagons & parallelograms presented in different orientations	Identifies pentagons and octagons in one orientation only with teacher assistance	Begins to identify and name pentagons & octagons presented in different orientations with significant teacher assistance	Identifies and names pentagons & octagons and begins to identify parallelograms presented in different orientations with some teacher assistance	Identifies and names pentagons, octagons & parallelograms presented in different orientations independently	Identifies and names pentagons, octagons & parallelograms presented in different orientations. Identifies and names triangles independently
	Compare & describe special groups of quadrilaterals	YES / NO				
	Make tessellating designs by reflecting, translating & rotating	YES / NO				
	Find all lines of symmetry for a 2D shape	Finds one line of symmetry for a 2D shape with teacher assistance	Finds only one line of symmetry for a 2D shape	Finds two lines of symmetry for a 2D shape plus more with teacher assistance	Finds all lines of symmetry for a 2D shape independently	
SGS2.2b – Identifies, compares & describes angles in practical situations.	Recognise openings, slopes & turns as angles	YES / NO				
	Describe angles using everyday language & the term 'right'	YES / NO				
	Compare angles using informal means	Can only compare angles by placing one angle on top of the other	Begins to compare angles using informal means (simple angle tester) with significant teacher assistance	Begins to compare angles using informal means (simple angle tester) with some teacher assistance	Compares angles using informal means independently	⇐ High + begins to recognize the need for a formal unit to measure angles

Position SGS2.3 – Uses simple maps & grids to represent position & follow routes.	Use simple maps & grids to represent position & follow routes	Uses simple maps & grids to follow routes with significant teacher assistance	Uses simple maps & grids to follow routes with some teacher assistance	Uses simple maps & grids to follow routes and represents position with some assistance	Uses simple maps & grids to represent position & follow routes independently	Represents position & follows routes using more complicated maps e.g. street directory
	Determine the directions N, S, E & W; NE, NW, SE & SW, given one of the directions	Recognises the directions N, S, E & W on a map	Recognises the directions N,S,E & W, NE,NW,SE & SW on a map. Determines the directions N,S,E & W, given one of the directions, with teacher assistance	Determines the directions N,S,E & W independently given one of the directions and NE,NW,SE &SW with teacher assistance	Determines the directions N,S,E & W, NE,NW,SE &SW independently, given one of the directions	⇐High + can determine more complicated directions e.g. NNW, ESE etc.
	Describe the location of an object on a simple map using coordinates or directions	Describes the location of an object using simple directions with teacher assistance	Describes the location of an object using simple directions only independently	Describes the location of an object using directions independently and coordinates with some assistance	Describes the location of an object on a simple map using coordinates or directions independently	Uses directions and coordinates to describe the location of objects on more complex maps

Mathematics – Later Stage 2 (Year 4)

Later Stage 2	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number NS2.1 – Counts, orders, reads & records numbers up to 4 digits.	Count Forwards & backwards by tens or hundreds, on and off the decade.	Counts forwards and backwards by tens and hundreds with teacher assistance and visual aids.	Count Forwards & backwards by tens or hundreds, on and off the decade with or visual aids.	Count forwards & backwards by tens or hundreds, on and off the decade independently.	Count forwards & backwards by tens, hundreds and thousands on and off the decade independently.	Count forwards & backwards from any given number on and off the decade independently.
	Use place value to read, represent & order numbers up to four digits	Beginning to understand place value and ordering 2-4 digit numbers with assistance.	Use place value to read, represent & order numbers up to four digits with teacher assistance and / or visual aids.	Use place value to read, represent & order numbers up to four digits independently.	Use place value to read, represent & order numbers up to five digits independently.	Use place value to read, represent & order numbers up to six digits independently.
	Money concepts are developed further in Fractions & Decimals					
Addition and Subtraction NS2.2 – Uses mental & written strategies for addition & subtraction involving 2, 3 & 4 digit numbers.	Use a range of mental strategies for addition & subtraction involving two, three & four digit numbers	Beginning to use 1-2 different mental strategies for addition & subtraction involving two & three digit numbers with teacher assistance.	Use a range of mental strategies for addition& subtraction involving two, three & four digit numbers with teacher assistance.	Use a range of mental strategies for addition & subtraction involving two, three & four digit numbers independently.	Use a range of mental strategies for addition & subtraction involving four digit numbers and uses estimation to check.	Use a range of mental strategies for addition & subtraction involving five digit numbers and uses estimation and calculators to check.
	Explain and record methods for adding & subtracting	Beginning to explain and record methods for adding & subtracting with teacher assistance	Explain and record methods for adding & subtracting using concrete materials.	Explain and record 1 formal method for adding & subtracting independently.	Explain and record 2 formal methods for adding & subtracting independently. (decomposition, equal addends)	Explain the difference in the 2 formal methods for adding & subtracting independently.
	Use a formal written algorithm for addition & subtraction	Use a formal written algorithm for addition and subtraction with trading and significant teacher assistance.	Use a formal written algorithm for addition & subtraction with trading and some teacher assistance.	Use a formal written algorithm for addition & subtraction independently with trading to four digits.	Use a formal written algorithm for addition & subtraction independently with trading to five digits.	Use a formal written algorithm for addition & subtraction independently with trading to six digits.

Multiplication & Division NS2.3 – Uses mental & written strategies for multiplication & division.	Develop mental facility for number facts up to 10 x 10	Develop mental facility for number facts up for 0x, 1x, 2x, 5x and 10x.	Develop mental facility for number facts for 0x, 1x, 2x, 3x, 4x, 5x, 6x and 10x	Develop mental facility for number facts up to 10 x 10 independently.	Develop mental facility for number facts beyond 10 x 10 independently.	Explain the relationship between multiplication and division facts.
	Find multiples & squares of numbers	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	Interpret remainders in division problems	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	Determine factors for a given number	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	Use mental and informal written strategies for multiplying or dividing a two digit number by a one digit operator	Use mental and informal written strategies for multiplying or dividing a two digit number by a one digit operator independently.	Use mental and informal written strategies for multiplying or dividing a two-digit number by a one digit operator with limited teacher assistance.	Use mental and informal written strategies for multiplying or dividing a two-digit number by a one-digit operator independently.	Use formal written strategies for multiplying a two- digit number by a two-digit operator and dividing a two-digit number by a one- digit operator independently.	Use formal written strategies for multiplying a three-digit number by a two-digit operator and dividing a three-digit number by a one-digit operator.
Fractions & Decimals NS2.4 – Models, compares & represents commonly used fractions & decimals, adds & subtracts decimals to 2 decimal places & interprets everyday percentages.	Model, compare & represent fractions with denominators 2, 4, & 8, followed by fractions with denominators 5, 10 & 100	Model, compare & represent fractions with denominators 2, 4, & 8 with teacher assistance.	Model, compare & represent fractions with denominators 2, 4, & 8.	Model, compare & represent fractions with denominators 2, 4, & 8, 5, 10 & 100 independently.	Model, compare & represent fractions with denominators 2, 4, & 8, 5, 10, 100, 3,6 independently.	Model, compare & represent fractions with denominators 2, 4, & 8, 5, 10 & 100, 3, 6,12 independently.
	Find equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths	Find equivalence between halves, quarters & eighths; fifths & tenths with teacher assistance.	Find equivalence between halves, quarters & eighths; fifths & tenths independently.	Find equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths independently.	Find equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths; thirds and sixth independently.	Find equivalence between halves, quarters & eighths; fifths & tenths; tenths & hundredths: thirds & sixths & twelfths.
	Model, compare & represent decimals to 2 decimal places			Yes/No		
	Add and subtract decimals with the same number of decimal places (to 2 decimal places)			Yes/No		

	Recognise percentages in everyday situations Relate a common percentage to a fraction or decimal	Recognise percentages in everyday situations, beginning to relate common percentages to a fraction or decimal with teacher assistance. (recognise 25% means 25/100 or 0.25)	Recognise percentages in everyday situations. Relate a common percentage to a fraction or decimal with teacher assistance. (recognise 25% means 25/100 or 0.25)	Recognise percentages in everyday situations. Relate a common percentage to a fraction or decimal independently. (recognise 25% means 25/100 or 0.25)	Represents common percentages with decimals and fractions.	Represents and calculates common percentages with decimals and fractions.
	Perform calculations with money	Use a formal written algorithm for addition & subtraction with money with significant teacher assistance.	Use a formal written algorithm for addition & subtraction with money with teacher assistance.	Use a formal written algorithm for addition & subtraction with money independently.	Use a formal written algorithm for addition, subtraction & multiplication.	Use a formal written algorithm for addition & subtraction, multiplication and simple division.

Later Stage 2	*Number – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Chance NS2.5 – Describes & compares chance events in social & experimental contexts.	Explore all possible outcomes in a simple chance situation			**Yes/No**		
	Conduct simple chance experiments			**Yes/NO**		
	Collect data & compare likelihood of events in different contexts	Collect data & compares the likelihood of familiar events. Begins to distinguish between certain and uncertain with teacher assistance.	Collect data & compares the likelihood of familiar events. Begins to distinguish between certain and uncertain.	Collect data & compare likelihood of events in different contexts independently.	Collect data & begin to order the likelihood of events in different contexts	Collect data & begin to order the likelihood of events in different contexts on number line from zero to one.
	Patterns & Algebra – key ideas					
PAS2.1 Generates, describes & records number patterns using a variety of strategies & completes simple number sentences by calculating missing values.	Generate, describe & record number patterns using a variety of strategies	Generate, describe & record number patterns using a variety of strategies with significant teacher assistance.	Generate, describe & record number patterns using a variety of strategies with teacher assistance.	Generate, describe & record number patterns using a variety of strategies independently.	Generates and begins to describe & record a pattern in words. (It looks like the three times table)	Generates, describes & records patterns in words more than way.

	Build number relationships by relating multiplication & division facts to at least 10 x 10	Build number relationships by relating multiplication & division facts to at least 0,1,2,5,10x tables with significant teacher assistance.	Build number relationships by relating multiplication & division facts to at least 1,2,3,4,5,6,10x with some teacher assistance.	Build number relationships by relating multiplication & division facts to 10 x 10 independently. (6x4=4x6) (6x4=24 so 24÷4 = 6)	Begins to use abstract relationships in multiplication & division facts to at least 10 x 10	Uses abstract relationships in multiplication & division facts to at least 10x10.
	Complete simple number sentences by calculating the value of a missing number	Begin to complete number sentences involving one operation by calculating missing values with significant teacher assistance. 5+☐=13	Complete number sentences involving one operation by calculating missing values with some teacher assistance.	Complete simple number sentences involving one to two operations by calculating the value of a missing number independently.	Complete number sentences that involve more than two operations. 5+☐=12-4	Complete and construct number sentences that involve more than two - three operations. Begin to check solutions by substituting the solution into the question.

	Data – key ideas					
DS2.1 Gathers & organsies data,displays data using tables & graphs, & interprets results.	Conduct surveys, classify & organize data using tables	Conduct surveys, begin to classify and organize data using tables with some teacher assistance.	Conduct surveys, classify & begin to organize data using tables with some teacher assistance.	Conduct surveys, classify & organize data using tables independently.		
	Construct vertical & horizontal column graphs & picture graphs	Begins to construct vertical & horizontal column graphs & picture graphs with significant teacher assistance.	Construct vertical & horizontal column graphs & picture graphs with some teacher assistance.	Construct vertical & horizontal column graphs & picture graphs independently.	Construct vertical & horizontal column graphs & picture graphs independently. Begin to construct basic line graphs.	Construct vertical & horizontal column graphs & picture graphs independently. Begin to construct basic line graphs and divided bar graphs (pie).
	Interpret data presented in tables, column graphs & picture graphs	Begins to interpret data presented in tables, column graphs & picture graphs with significant teacher assistance.	Interpret data presented in tables, column graphs & picture graphs with some teacher assistance.	Interpret data presented in tables, column graphs & picture graphs independently.	Interpret data presented in tables, column graphs, picture graphs& begins to interpret data in line graphs.	Interpret data presented in tables, column graphs, picture graphs & line graphs independently

	Measurement – key ideas					
Length MS2.1 – Estimates, measures, compares & records lengths, distance & perimeters in metre, centimetres and millimetres.	Estimate, measure, compare & record lengths & distances using metres, centimeters and/or millimetres	Begins to estimate, measure, compare & record lengths & distances using metres & centimetres with significant teacher assistance.	Begins to estimate, measure, compare & record lengths & distances using metres,& centimetres and/or millimetres with some teacher assistance.	Estimate, measure, compare & record lengths & distances using metres, centimeters and/or millimeters independently.	Estimate, measure, compare & record lengths & distances using metres, centimetres, millimetres and recognize that a unit larger than a metre is needed.	Estimate, measure, compare & record lengths & distances using metres, centimetres, millimetres and kilometres.
	Convert between metres & centimetres, & centimetres & millimetres	Begins to convert between metres & centimetres, & centimetres & millimetres with significant teacher assistance.	Convert between metres & centimetres, & centimetres & millimetres with some teacher assistance.	Convert between metres & centimetres, & centimetres & millimetres independently.	Convert between metres & centimetres, & centimetres & millimetres and beginning to convert between metres & kilometres.	Convert between metres & centimetres, & centimetres & millimetres and metres & kilometres.
	Estimate & measure the perimeter of 2D shapes	Begins to estimate & measure the perimeter of 2D shapes with significant teacher assistance.	Estimate & measure the perimeter of 2D shapes with some teacher assistance.	Estimate & measure the perimeter of 2D shapes independently.	Estimate & measure the perimeter of 2D shapes and begins to measure larger areas (school grounds)	Estimate & measure the perimeter of 2D shapes and larger areas Begins to compare perimeters.
	Record lengths & distances using decimal notation of two places	Record lengths & distances using decimal notation of one place with teacher assistance.	Record lengths & distances using decimal notation of one-two places with some teacher assistance.	Record lengths & distances using decimal notation of two places independently.	Record lengths & distances using decimal notation of two to three places independently.	Record lengths & distances using decimal notation of three places independently.

Later Stage 2	*Measurement – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Area – MS2.2 - Estimates, measures, compares & records the areas of surfaces in square centimetres and square metres.	Recognise the need for square centimetres & square metres to measure area			**Yes/No**		
	Estimate, measure, compare & record areas in square cm & square metres	Estimate, measure & record areas in square cm & square metres with teacher assistance.	Estimate, measure, record and begins to compare areas in square cm & square metres	Estimate, measure, compare & record areas in square cm & square metres independently.	Beginning to use decimal notation in recording areas. Uses kilometre units.	Beginning to use decimal notation in recording areas. Uses kilometre and hectare units.
Volume & Capacity MS2.3 Estimates, measures, compares & records volumes and capacities using litres, millilitres and cubic centimetres.	Recognise the need for a formal unit to measure volume & capacity			Yes/No		
	Estimate, measure, compare & record volumes and capacities using litres & milliltres	Estimate, measure, & record volumes and capacities using litres with teacher assistance.	Estimate, measure, record & begin to compare volumes and capacities using litres & milliltres	Estimate, measure, compare & record volumes and capacities using litres & milliltres independently.	Estimate, measure, compare & record volumes and capacities using litres & milliltres and begins to record using decimal notation in recording.	Estimate, measure, compare & record volumes and capacities using litres & milliltres and is able to use decimal notation in recording.
	Measure the volume of models in cubic centimetres			**Yes/No**		
	Convert between litres and millilitres			**Yes/No**		

Mass MS2.4 Estimates, measures, compares & records masses using kilograms and grams.	Recognise the need for a formal unit to measure mass			Yes/No		
	Estimate, measure, compare & record masses using kilograms & grams	Estimate, measure, record masses using kilograms & grams with significant teacher assistance.	Estimate, measure, record masses using kilograms & grams. Begins to compare two masses with limited teacher assistance.	Estimate, measure, compare & record masses using kilograms & grams independently.	Estimate, measure, compare & record masses using kilograms & grams independently. Begins to convert between grams and kilograms.	Estimate, measure, compare & record masses using kilograms & grams independently. Begins to convert between grams and kilograms and between kilograms and tones.
Time MS2.5 Reads and records time in 1 minute intervals and makes comparisons between time units.	Recognise the coordinated movements of the hands on a clock			**Yes/No**		

	Read & record time using digital & analog notation	Reads time using digital and analogue notation independently in 30 minute intervals and compares time unit with teacher assistance.	Reads and records time using digital and analogue notation in 15 min intervals (past and to the hour) and makes comparisons between time units with some teacher assistance.	Reads and records time using digital and analogue notation independently in 5 min intervals (past the hour) and makes comparisons between time units.	Reads and records time using digital and analogue notation independently in 1min intervals (past and to the hour) and makes comparisons between time units.	Reads and records time using digital and analogue notation independently in 1min intervals (past and to the hour) and makes comparisons between time units. Begins to convert between am/pm notation and 24 hour time.
	Read & interpret simple timetables, timelines & calendars	Read & begin to interpret simple timelines & calendars with significant teacher assistance.	Read & begin to interpret simple timelines & calendars with limited teacher assistance.	Read & interpret simple timetables, timelines & calendars independently.	Read & interpret simple timetables, timelines & calendars including those involving 24hr time.	Read & interpret simple timetables, timelines & calendars including those involving 24hr time. Begin to determine a suitable scale for drawing and interpreting a timeline.

	Space & Geometry – key ideas					
Three Dimensional Space SGS2.1 – Makes, compares, describes & names 3 dimensional objects including pyramids, & represents them in drawing.	Name, describe, sort, make & sketch prisms, pyramids, cylinders, cones & spheres	Name, describe & sort prisms, pyramids, cylinders, cones & spheres with significant teacher assistance.	Name, describe, sort, make & attempts to sketch prisms, pyramids, cylinders, cones & spheres with limited teacher assistance.	Name, describe, sort, make & sketch prisms, pyramids, cylinders, cones & spheres independently	Begins to name prisms & pyramids according to their base.	Begins to name prisms & pyramids according to their base. Begins to visualize, sketch & construct 3D shapes from different views.
	Create nets from everyday packages			Yes/No		
	Describe cross-sections of 3D objects	Describes the cross-section of shapes of a wider range of 3D objects with teacher assistance.	Describes the cross-section of shapes of a wider range of 3D objects & recognizes that the cross-sections of prisms have a uniform shape and size when parallel to base.	Describes the cross-section of shapes of a wider range of 3D objects & recognises that the cross-sections of prisms have a uniform shape and size when parallel to base &that pyramids, cones and spheres do not have a uniform cross-section	Describes the cross-sections of 3D shapes that are not parallel to the base.	

Later Stage 2	*Space & Geometry – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Two Dimensional Space SGS2.2a – Manipulates, compares, sketches & names 2 dimensional shapes & describes their features.	Identify & name pentagons, octagons & parallelograms presented in different orientations	Begins to identify & name pentagons & octagons presented in different orientations with significant teacher assistance.	Identify & name pentagons & octagons and begins to identify parallelograms presented in different orientations with some teacher assistance	Identify & name pentagons, octagons & parallelograms presented in different orientations independently.	Identify & name pentagons, octagons & parallelograms presented in different orientations. Begins to identify and name triangles independently.	Identify & name pentagons, octagons & parallelograms presented in different orientations. Identifies and names triangles independently.
	Compare & describe special groups of quadrilaterals			Yes/No		
	Make tessellating designs by reflecting, translating & rotating			Yes/No		
	Find all lines of symmetry for a 2D shape			Yes/No		
SGS2.2b – Identifies, compares & describes angles in practical situations.	Recognise openings, slopes & turns as angles			Yes/No		
	Describe angles using everyday language & the term 'right'			Yes/No		
	Compare angles using informal means	Begins to compare angles using informal means (simple angle tester) with significant teacher assistance.	Compare angles using informal means (simple angle tester) with limited teacher assistance.	Compare angles using informal means independently.	Compare angles using informal means independently. Begins to recognise the need for a formal unit to measure angles.	Begins to estimate and measure angles in degrees.

Position SGS2.3 – Uses simple maps & grids to represent position & follow routes.	Use simple maps & grids to represent position & follow routes	Use simple maps & grids to represent position & follow routes with significant teacher assistance.	Use simple maps & grids to represent position & follow routes with limited teacher assistance.	Use simple maps & grids to represent position & follow routes independently.	Begins to use a given map to plan or find a route.	Begins to use a given map to plan or find a route and is able to locate a place on a map given its coordinates.
	Determine the directions N, S, E & W; NE, NW, SE & SW, given one of the directions	Determine the directions N, S, E & W; given one of the directions with significant teacher assistance.	Determine the directions N, S, E & W; NE, & SE, given one of the directions with limited teacher assistance.	Determine the directions N, S, E & W; NE, NW, SE & SW, given one of the directions independently.		
	Describe the location of an object on a simple map using coordinates or directions	Begins to describe the location of an object on a simple map using 1-2 descriptors. Begins to use co-ordinates to locate on objects on a map with significant teacher assistance.	Describe the location of an object on a simple map using 1-2 descriptors or directions. Begins to use co-ordinates to locate on objects on a map with teacher assistance.	Describe the location of an object on a simple map using 1-2 descriptor or directions. Uses co-ordinates to locate on objects on a map.	Begins to describe the location of a place on a map which is a given direction from a landmark. (South from the station).	Begins to describe the location of a place on a map which is a given direction from a landmark. (South from the station). Begins to draw and label a grid on a map.

Mathematics –Early Stage 3 (Year 5)

Early Stage 3	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number – N3.1 Orders, reads and writes numbers of any size.	Identify differences between Roman & Hindu-Arabic counting systems	Can operate only up to ten	Converts roman numerals up to 20.	Can convert Hindu Arabic numerals to roman numerals up to 50.	Can convert Hindu Arabic numerals to roman numerals up to 100.	Can convert Hindu Arabic numerals to roman numerals up to 500.
	Read, write & order numbers of any size using place value	Can only read and write numbers up to 3 digits	Reads writes and orders 4 digit numbers needs T/A for 5 places	Reads, writes and understands five digit numbers in numerals and words. Applies an understanding of place value in five place digits. Orders in ascending and descending order.	Reads and writes six digit numbers in numerals and words. Orders and understands to 6 digits	Reads, orders and writes up to seven digit numbers in numerals and words. Can use place value to build seven digit numbers.
	Record numbers in expanded notation	Expands numbers less than 10 000	Uses expanded notation up to 10 000	Can use expanded notation up to 100 000's	Can use expanded notation up to 1 000 000	Can use expanded notation up to 10 000 000
	Recognise the location of negative numbers in relation to zero			YES / NO		
	Money concepts are developed further in Fractions & Decimals					
Addition and Subtraction NS3.2 Selects and applies appropriate strategies for addition & subtraction with counting numbers of any size.	Select & apply appropriate mental, written or calculator strategies for addition & subtraction with counting numbers of any size	Can complete 1 digit addition and subtraction with teacher assistance	Can complete 1-3 digit additions & subtractions with or without concrete materials.	Can complete any addition or subtraction algorithm and problem with a sound level of accuracy.	High degree of accuracy with mixed subtraction and addition algorithms and problems.	High degree of accuracy with very complicated mixed subtraction and addition algorithms and problems.

Multiplication & Division NS3.3 Selects and applies appropriate strategies for multiplication & division.	Select & apply appropriate mental, written or calculator strategies for multiplication & division	Can complete 1 x1 digit multiplication & division with teacher assistance	Can complete 1-3 x 1 digit multiplication & division with or without concrete materials.(No assistance)	Can complete 2 x 2 digit multiplication & division algorithm and problem with a sound level of accuracy.	High degree of accuracy with mixed multiplication & division algorithms and problems.	High degree of accuracy with very complicated mixed subtraction and addition algorithms and problems.
	Explore prime and composite numbers	Can identify prime numbers when teacher assistance given for the rule	Can recognise prime numbers to ten	Can determine whether a number is prime or composite to 30 by finding the number of factors.	Can explore and recognise prime and composite numbers to 50	Can explore and recognise prime and composite numbers to 100
	Use formal written algorithms for multiplication (limit operators to two-digit numbers) & division (limit operators to single digits)	Multiplies and divides 2 digit by 1 digit with teacher assistance.	Independently multiplies and divides 2 digit by 1 digit.	Multiplies 2 digit by 2 digit numbers Dividing 3 digit by a 1 digit number.	Multiplies 3 digit by 2 digit numbers Dividing 4 digit by a 1 digit number.	Multiplies 4+ digit by 3 digit numbers & Divides 5+ digit by a 1 digit number.
Chance NS3.5 Orders the likelihood of simple events on a number line from zero to one.	Assign numerical values to the likelihood of simple events occurring	??	??	Expresses likelihood in terms of fractions. (Eg. 1 in 10 chance)	Expresses likelihood in terms of fractions & simple decimals and percentages.	Expresses likelihood in terms of fractions & more complex decimals and percentages.
	Order the likelihood of simple events on a number line from 0 to 1	Can use language to describe a known event e.g., likely, certain. Can distinguish between possible and impossible	Beginning to order events and represent on a number line 0-9	Use a number line 0-1 to order likelihood of an event.	Matches the possibility of an event occurring on a number line between 0-1. Can place a number 0-1 to an event that they have made up.	Expresses the probability of an event as a fraction, decimal or percentage between 0-1

Early Stage 3	*Number – key ideas continued*	Limited	Basic	Sound	High	Outstanding
Fractions & Decimals NS3.4 Compares, orders & calculates with decimals, simple fractions and simple percentages.	Model, compare & represent commonly used fractions (those with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100)	Can model and describe fractions with a denom. of 2,10 & 100 only.	Can model and represent any 4 of the commonly used fractions.	Model, compare & represent all commonly used fractions (those with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100)	Shows evidence of beginning to model or attempt to compare more complex fractions that are unrelated. 1/3 and 1/4	Demonstrate equivalence between fractions, decimals and percentages.
	Find equivalence between thirds, sixths & twelfths	Only understands that 2/4 = 1/2 when shown with concrete materials and teacher guidance.	Can only work with simple equivalence (Eg. 1/2=2/4)	Can represent related equivalent fractions e.g. 1/3, 2/6. 4/12. Can place thirds, sixths and twelfths on a number line	Develops a mental strategy for finding equivalent fractions by multiplying or dividing the numerator by the same number.	→
	Express a mixed numeral as an improper fraction & vice versa			YES / NO		
	Add & subtract simple fractions where one denominator is a multiple of the other			YES / NO		
	Multiply simple fractions by whole numbers. Calculate unit fractions of a number			YES / NO		
	Add & subtract decimals to three decimal places	Can add & subtract decimals to 1 decimal place with teacher assistance.	Can add decimals with the same number of decimal places (to 2 decimal places). Can subtract decimals with the same number of decimal place (to 2 decimal places) with assistance.	Can add and subtract numbers with the same number of decimal places (to 3 decimal places).	Can add and subtract numbers to more than 3 decimal places.	Can add and subtract a set of numbers more than 3 decimal places and with varying decimal places. (Eg. 1.2+3.92+2.102=)
	Multiply & divide decimals by whole numbers in everyday contexts.	Multiply (only) decimals by 10, 100, 1000 with assistance.	Multiply (only) decimals by 10, 100, 1000.	Multiply (only) decimals by single digit whole numbers and 10, 100, 1000.	Mult. & divide decimals by single digit whole numbers and 10, 100, 1000.	Mult. & divide decimals by double digit whole numbers.

	Calculate simple percentages of quantities	Can calculate simple percentages with substantial teacher assistance.	Can calculate simple percentages with minimal teacher assistance	Calculate 10%, 25%, and 50% of quantities	Can calculate 10% increments of quantities 10% of 50 = 40% of 60=	Can calculate % in 5% and 10% increments. E.g. 5%, 10%, 15%, 20%
	Apply the four operations to money in real-life situations	Can complete 1 of 4 with teacher assistance.	Can complete 1 of 4 independently.	Can complete 2 of 4.	Can complete 3 of 4.	Can complete 4 operations.
	Patterns & Algebra – key ideas					
PAS3.1a – Record, analyses and describes geometric and number patterns that involve one operation using tables and words.	Build simple geometric patterns involving multiples	Builds simple geometric patterns with substantial teacher assistance.	Builds simple geometric patterns with only concrete materials and some teacher assistance.	Builds simple geometric patterns using concrete materials and abstract ideas.	Builds geometric patterns using only abstract ideas	Readily builds complex geometric patterns with several functions.
	Complete a table of values for geometric & number patterns.	Can complete number patterns when the rule is given and only with assistance.	Can complete number patterns when the rule is given.	Completes basic tables involving geometric and number patterns and involving one operation.	Completes basic tables of values involving geometric and number patterns involving one operation and can use the rule to calculate the value for a larger number	Can complete a table of values where more than one operation is needed to decode the number pattern
	Describe a pattern in words in more than one way			YES / NO		
PAS3.1b – Constructs, verifies and completes number sentences involving the 4 operations with a variety of numbers.	Construct, verify & complete number sentences involving the four operations with a variety of numbers	Can complete number sentences that involve only one operation with substantial teacher assistance.	Can complete number sentences that involve only one operation with minimal teacher assistance	Complete number sentence that involve more than one operation.	Complete number sentences that involve more than one operation that can involve fractions and decimals	Constructs number sentences to match a problem presented in words.

Data – Key Ideas

DS3.1 – Displays & interprets data in graphs with scales of many-to-one correspondence.	Draw picture, column, line & divided bar graphs using scales of many-to-one correspondence	Can draw some of these graphs using scales of many-to-one correspondence. (??)	Can draw picture, column, line & divided bar graphs using scales of many-to-one correspondence with assistance.	Can draw picture, column, line & divided bar graphs using scales of many-to-one correspondence.	Can draw more advanced picture, column, line & divided bar graphs using scales of many-to-one correspondence.	
	Read & interpret sector (pie) graphs			Yes/no		
	Read & interpret graphs with scales of many-to-one correspondence		Read simple graphs with scales of many-to-one correspondence with assistance.	Read simple graphs with scales of many-to-one correspondence.	Read & interpret simple graphs with scales of many-to-one correspondence.	Read & interpret graphs with scales of many-to-one correspondence that contain more complex information.
	Determine the mean (average) for a small set of data			Determine the mean for a small set of data with assistance.	Determine the mean for a small set of data.	Determine the mean for a larger set of data

Early Stage 3	*Measurement – key ideas*	Limited	Basic	Sound	High	Outstanding
Length MS3.1 – Selects and uses the appropriate unit and device to measure length, distance and perimeter.	Select & use the appropriate unit and device to measure lengths, distances & perimeters			Selects the appropriate unit & device with assistance.	Selects the appropriate unit & device.	Uses the appropriate unit & device.
	Convert between metres & kilometres; millimetres, centimetres & metres		Can convert between some of these units using whole numbers & only with assistance.	Can convert between some of these units using whole numbers.	Can convert between all these units using whole numbers & simple decimal/fractions E.g. 105cm=1m 5cm, 105cm=1.05m	Can convert between these using decimals to 3 places e.g. 25mm=0.025m
	Calculate & compare perimeters of squares, rectangles & equilateral & isosceles triangles	Calculates the perimeter of squares and rectangles only & only with assistance.	Calculates the perimeter of squares and rectangles only.	Calculates and compares the perimeter of squares and rectangles.	Calculates and compares the perimeter of squares, rectangles and equilateral and isosceles triangles.	Finds the relationship between the lengths of sides of squares, rectangles and triangles to compare.
	Record lengths & distances using decimal notation of three places			YES/ NO		
Area MS3.2 – Selects and uses the appropriate unit to calculate area, including the area of squares, rectangles & triangles.	Select & use the appropriate unit to calculate area			YES/ NO		
	Recognise the need for square kilometres and hectares			YES/ NO		
	Develop formulae in words for finding area of squares, rectangles & triangles	With assistance, develops area formulae for squares, rectangles **only.**	Develops area formulae for squares, rectangles **only.**	Develops area formulae for squares, rectangles **&** triangles with assistance.	Develops area formulae for squares, rectangles & triangles.	With some assistance, develops area formulae for squares, rectangles, triangles **and** irregular shapes. (Eg. Area 1 + Area 2)
Volume & Capacity MS3.3 - Selects and uses the appropriate unit to	Select the appropriate unit to measure volume & capacity			**YES / NO**		
	Recognise the need for cubic metres			**YES/NO**		

estimate and measure volume & capacity, including volume of rectangular prisms.	Estimate & measure the volume of rectangular prisms	←	With assistance, attempts to estimate & measure volume using centicubes, but with inconsistent accuracy.	With assistance, estimates & measures volume using centicubes & with reasonable accuracy.	Estimates & measures volume using centicubes	Estimates & measures volume using the formula, LxWxH = volume.
	Determine the relationship between cubic centimetres and millilitres			Understands that 1mL = 1cm ^{3} .	Determines that, because 1mL = 1cm^3 , then 1 litre = 1000cm^3 .	Readily uses this knowledge to calculate volumes of varying difficulty.
	Record volume and capacity using decimal notation to three decimal places			YES/ NO		
Mass MS3.4 - Selects and uses the appropriate unit and measuring device to find the mass of objects.	Select & use the appropriate unit & device to measure mass			YES/ NO		
	Recognise the need for tonnes			YES/ NO		
	Convert between kilograms & grams & between kilograms & tonnes			YES/ NO		
	Record mass using decimal notation to 3 decimal places		Can apply 1-2 decimal places to measuring mass with assistance.	Can apply 3 decimal places to measuring mass with assistance.	Can apply 3 decimal places to measuring mass.	Can apply calculations using the four operations.
Time MS3.5 – Uses 24 hour time & am & pm notation in real life situations and constructs timelines. ↓	Convert between am/pm notation and 24 hour time			YES/ NO		
	Compare various time zones in Australia, including during daylight saving			YES/ NO		
	Draw & interpret a timeline using a scale		Can interpret a timeline using a simple scale with assistance, though has trouble drawing one.	Can draw and interpret a timeline using a simple scale with assistance.	Can draw and interpret a timeline using a simple scale.	Can draw and interpret a timeline using a more complex scale.
	Use timetables involving 24 hour time			YES/ NO		

Early Stage 3	*Space & Geometry – key ideas*	Limited	Basic	Sound	High	Outstanding
Three Dimensional Space SGS3.1 – Identifies 3D objects, including particular prisms & pyramids, on the basis of their properties & visualizes, sketches & constructs them given drawings of different views.	Identify 3D objects, including particular prisms & pyramids, on the basis of their properties		Identifies only a few common prisms & pyramids.	Identifies most common prisms & pyramids.	Identifies all common prisms & pyramids.	Identifies all common prisms & pyramids & some less common ones.
	Construct 3D models given drawings of different views		Can construct only a few common prisms & pyramids.	Can construct most common prisms & pyramids.	Can construct all common prisms & pyramids.	Can construct all common prisms & pyramids & some more intricate ones.
Two Dimensional Space SGS3.2a – Manipulates, classifies & draws 2D shapes &describes side and angle properties.	Identify right-angled, isosceles, equilateral & scalene triangles		Can identify none or 1 of these triangles.	Can identify 2 of these triangles.	Can identify all 3 of these triangles. →	
	Identify & draw regular & irregular 2D shapes		Can identify and draw some regular & irregular 2D shapes with or without assistance.	Can identify and draw a variety of regular & irregular 2D shapes.	Can identify and draw most regular & irregular 2D shapes.	Can confidently identify and draw most regular & irregular 2D shapes.
	Identify and name parts of circle			**YES / NO**		
	Enlarge & reduce shapes, pictures & maps			**YES / NO**		
	Identify shapes that have rotational symmetry			**YES / NO**		
SGS3.2b – Measures, constructs & classifies angles.	Classify angles as right, acute, obtuse, reflex, straight or a revolution		Can identify some of these angles.	Can identify most of these angles.	Can identify all of these angles. →	

	Measure in degrees & construct angles using a protractor		Can measure in degrees with assistance, but finds construction of angles very difficult. (?)	Can measure in degrees **and** construct angles using a protractor with assistance.	Can measure in degrees **and** construct angles using a protractor.	Can measure in degrees **and** construct angles using a protractor to produce a common 2D shape.
Position SGS3.3 – Uses a variety of mapping skills.	Interpret scales on maps & plans			**YES / NO**		
	Make simple calculations using scale		Can only make simple calculations with a high level of assistance.	Can make simple calculations with a moderate amount of assistance.	Can make simple calculations with minimal assistance.	Can make more involved calculations including those containing decimals. (Eg. 1.5cm = 2km)
	Uses coordinates and directions to locate places and describe a route on a map.		Describes location using only 1 descriptor (Eg. The house is at the top)	Uses coordinates to describe position (Eg. The house is at E5)	Can locate places with coordinates & vice-versa.	Can locate the best route between 2 sets of coordinates (one direction only)

Mathematics – Later Stage 3 (Year 6)

Later Stage 3	*Number – key ideas*	Limited	Basic	Sound	High	Outstanding
Whole Number – N3.1 Orders, reads and writes numbers of any size.	Identify differences between Roman & Hindu-Arabic counting systems	Requires teacher assistance to convert R.N. to H.A. to 10 & use in everyday context.	Can convert R.N. to H.A. to 10 & use in everyday context.	Can convert R.N. to H.A. to 100 & use in everyday context.	Can convert R.N. to H.A. to 3000 & use in everyday context.	Can convert R.N. to H.A. to 10 000 & use in everyday context.
	Read, write & order numbers of any size using place value			Yes / No		
	Record numbers in expanded notation	Up to 99 999	Up to 999 999	Up to 10 000 000	Up to 100 000 000	Beyond 100 000 000
	Recognise the location of negative numbers in relation to zero			Yes or no. →	→	→
	Money concepts are developed further in Fractions & Decimals					
Addition and Subtraction NS3.2 Selects and applies appropriate strategies for addition & subtraction with counting numbers of any size.	Select & apply appropriate mental, written or calculator strategies for addition & subtraction with counting numbers of any size			Yes or no. →	→	→
Multiplication & Division NS3.3 Selects and applies appropriate strategies for multiplication & division.	Select & apply appropriate mental, written or calculator strategies for multiplication & division			Yes or no. →	→	→
	Explore prime and composite numbers	Can recognise prime & composite numbers to ten	Can determine whether a number is prime or composite to 30 by Finding the number of factors.	Can explore and recognise prime and composite numbers to 50	Can explore and recognise prime and composite numbers to 100	Can explore and recognise prime and composite numbers beyond 100

	Use formal written algorithms for multiplication (limit operators to two-digit numbers) & division (limit operators to single digits)	Multiplies and divides 2 digit by 1 digit with teacher assistance.	Multiplies and divides 2 digit by 1 digit.	Multiplying 2 or 3 digit by 2 digit numbers (long division) Dividing 3+ digit by a 1 digit number.	Multiply 4+ digit by 2 digit numbers. Dividing 3+ digit by a 2 digit number.	Multiply 4+ digit by 3 digit numbers. Dividing 3+ digit by a 3 digit number.
Chance NS3.5 Orders the likelihood of simple events on a number line from zero to one.	Assign numerical values to the likelihood of simple events occurring	Expresses likelihood in terms of fractions. (Eg. 1 in 10 chance) with assistance.	Expresses likelihood in terms of fractions. (Eg. 1 in 10 chance)	Expresses likelihood in terms of fractions, decimals and percentages.	Analyses likelihood in terms of fractions, decimals and percentages.	Analyses likelihood in terms of fractions, decimals and percentages and confidently justifies choices.
	Order the likelihood of simple events on a number line from 0 to 1	**???**	Uses a number line from 0 – 1 to depict simple chance scenarios with teacher assistance.	Uses a number line from 0 – 1 to depict simple chance scenarios.	Uses a number line (less common fractions/ decimals) to depict simple chance scenarios.	Uses a number line (less common fractions/ decimals) to depict more complex chance scenarios.

Later Stage 3	***Number – key ideas continued***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Fractions & Decimals NS3.4 Compares, orders & calculates with decimals, simple fractions and simple percentages.	Model, compare & represent commonly used fractions (those with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100)	Models, compares & represents fractions (denom. 2,3,4, 10, 100) with teacher assistance.	Models, compares & represents fractions (denom. 2,3,4, 10, 100).	Models, compares & represents fractions (denom. 2,3,4,5,6,8,10,12, 100)	Models, compares & represents fractions with more complex denominators.	Models, compares & represents fractions with more complex denominators and numerators..
	Find equivalence between thirds, sixths & twelfths			**Yes or no.** →		
	Express a mixed numeral as an improper fraction & vice versa			**Yes or no.** →		
	Add & subtract simple fractions where one denominator is a multiple of the other			**Yes or no.** →		
	Multiply simple fractions by whole numbers. Calculate unit fractions of a number			**Yes or no.** →		
	Multiply & divide decimals by whole numbers in everyday contexts.	Multiply (only) decimals by 10, 100, 1000.	Multiply (only) decimals by single digit whole numbers and 10, 100, 1000.	Mult. & divide decimals by single digit whole numbers and 10, 100, 1000.	Mult. & divide decimals by double digit whole numbers.	Mult. & divide decimals by simple decimals (eg. 0.1)

	Add & subtract decimals to three decimal places	Add & subtract decimals to 1-2 decimal places with assistance.	Add & subtract decimals to 1- 2 decimal places.	Add & subtract decimals to three decimal places.	Add & subtract decimals to 4-5 decimal places.	Add & subtract decimals to more than 5 decimal places.
	Calculate simple percentages of quantities	Can calculate %age in the most basic amounts only (ie. 10%, 50%) & only with assistance.	Can calculate %age in the most basic amounts only (ie. 10%, 50%)	Can calculate 10% increments of quantities 10% of 50 = 40% of 60=	Can calculate % in 5% and 10% increments. E.g. 5%, 10%, 15%, 20% of …	Can calculate % in unusual amounts E.g. – 12%, 47%
	Apply the four operations to money in real-life situations	Can only complete 1or 2 operations	Can complete 3 operations	Can complete 4 operations	Can complete 4 operations with more demanding examples.	???
	Patterns & Algebra – key ideas					
PAS3.1a – Record, analyses and describes geometric and number patterns that involve one operation using tables and words.	Build simple geometric patterns involving multiples	Builds simple geometric patterns with only concrete materials and extensive teacher assistance.	Builds simple geometric patterns with only concrete materials and some teacher assistance.	Builds simple geometric patterns using concrete and abstract materials.	Builds geometric patterns using only abstract ideas	Readily builds complex geometric patterns with several functions.
	Complete a table of values for geometric & number patterns	Completes a table of values involving geometric and number patterns involving one operation with teacher assistance.	Completes a table of values involving geometric and number patterns involving one operation.	Completes a table of values involving geometric and number patterns involving one operation and can use the rule to calculate the value for a larger number	Can complete a table of values where more than one operation is needed to decode the number pattern	Can complete a table of values where more than one operation is needed to decode the number pattern and fractions are involved.
	Describe a pattern in words in more than one way			**Yes or no.** →		
PAS3.1b – Constructs, verifies and completes number sentences involving the 4 operations with a variety of numbers.	Construct, verify & complete number sentences involving the four operations with a variety of numbers.	Complete number sentences that involve one operation (whole numbers only). Can identify the inverse operation. (ALL WITH ASSISTANCE)	Complete number sentences that involve one operation (whole numbers only). Can identify the inverse operation.	Complete number sentences that involve more than one operation (whole numbers only). Can identify the inverse operation.	Complete number sentences that involve more than one operation and can involve fractions and decimals.	Recognise & use simple equivalent algebraic equations. E.g. : x+x+y+y+y = 2x+3y

	Data – key ideas					
DS3.1 – Displays & interprets data in graphs with scales of many-to-one correspondence.	Draw picture, column, line & divided bar graphs using scales of many-to-one correspondence	**?????**				
	Read & interpret sector (pie) graphs	Begins to read & interpret simple sector (pie) graphs with assistance.	Begins to read & interpret simple sector (pie) graphs.	Read & interpret simple sector (pie) graphs.	Begins to read & interpret sector (pie) graphs that contain more complex information.	Confidently read & interpret sector (pie) graphs that contain more complex information.
	Read & interpret graphs with scales of many-to-one correspondence		Read simple graphs with scales of many-to-one correspondence	Read & interpret simple graphs with scales of many-to-one correspondence	Read & interpret graphs with scales of many-to-one correspondence that contain more complex information.	
	Determine the mean (average) for a small set of data			Determine the mean for a small set of data	Determine the mean for a larger set of data	Determine the mean for a larger & more complex set of data

Later Stage 3	***Measurement – key ideas***	**Limited**	**Basic**	**Sound**	**High**	**Outstanding**
Length MS3.1 – Selects and uses the appropriate unit and device to measure length, distance and perimeter.	Select & use the appropriate unit and device to measure lengths, distances & perimeters			Selects the appropriate unit & device.	Uses the appropriate unit & device.	Can justify the use of this unit & device.
	Convert between metres & kilometres; millimetres, centimetres & metres	Can convert between some of these units using whole numbers & only with assistance.	Can convert between some of these units using whole numbers.	Can convert between all these units using whole numbers & simple decimal/fractions E.g. 105cm=1m 5cm, 105cm=1.05m	Can convert between these using decimals to 3 places e.g. 25mm=0.025m	Can convert between these using decimals to 4+ places e.g. 25cm=0.0025km

	Calculate & compare perimeters of squares, rectangles & equilateral & isosceles triangles	Calculates the perimeter of squares and rectangles only.	Calculates and compares the perimeter of squares and rectangles.	Calculates and compares the perimeter of squares, rectangles and equilateral and isosceles triangles.	Finds the relationship between the lengths of sides of squares, rectangles and triangles to compare.	Uses the formulas (LxB & 1/2BxH) to find areas of simple irregular shapes.
	Record lengths & distances using decimal notation of three places			**Yes or no.** →	→	→
Area MS3.2 – Selects and uses the appropriate unit to calculate area, including the area of squares, rectangles & triangles.	Select & use the appropriate unit to calculate area			**Yes or no.** →	→	→
	Recognise the need for square kilometres and hectares			**Yes or no.** →	→	→
	Develop formulae in words for finding area of squares, rectangles & triangles	Develops area formulae for squares, rectangles **only.**	Develops area formulae for squares, rectangles **&** triangles with assistance.	Develops area formulae for squares, rectangles & triangles.	With some assistance, develops area formulae for squares, rectangles, triangles **and** irregular shapes. (Eg. Area 1 + Area 2)	Independently develops area formulae for squares, rectangles, triangles **and** irregular shapes. (Eg. Area 1 + Area 2)
Volume & Capacity MS3.3 - Selects and uses the appropriate unit to estimate and measure volume & capacity, including volume of rectangular prisms.	Select the appropriate unit to measure volume & capacity			**Yes or no.** →	→	→
	Recognise the need for cubic metres			**Yes or no.** →	→	→
	Estimate & measure the volume of rectangular prisms	With assistance, attempts to estimate & measure volume using centicubes, but with inconsistent accuracy.	With assistance, estimates & measures volume using centicubes & with reasonable accuracy.	Estimates & measures volume using centicubes	Estimates & measures volume using the formula, LxWxH = volume.	Estimates & measures any of the parts of the formula where one of them is removed Eg. L(2cm)x W(?)x H(3cm)= V($24cm^3$) →what is the width?
	Determine the relationship between cubic centimetres and millilitres	←	←	Understands that 1mL = $1cm^3$.	Determines that, because 1mL = $1cm^3$, then 1 litre = $1000cm^3$.	Readily uses this knowledge to calculate volumes of varying difficulty.

	Record volume and capacity using decimal notation to three decimal places	Can apply 1-2 decimal places to measuring capacity and volume with assistance.	Can apply 3 decimal places to measuring capacity and volume with assistance.	Can apply 3 decimal places to measuring capacity and volume	Can apply calculations using the four operations.	Can solve more complex problems involving capacity & volume to 3 or more decimal places.
Mass MS3.4 - Selects and uses the appropriate unit and measuring device to find the mass of objects.	Select & use the appropriate unit & device to measure mass			Yes or no. →	→	→
	Recognise the need for tonnes			Yes or no. →	→	→
	Convert between kilograms & grams & between kilograms & tonnes			Yes or no. →	→	→
	Record mass using decimal notation to 3 decimal places	Can apply 1-2 decimal places to measuring mass with assistance.	Can apply 3 decimal places to measuring mass with assistance.	Can apply 3 decimal places to measuring mass.	Can apply calculations using the four operations.	Can solve more complex problems involving mass to 3 or more decimal places.
Time MS3.5 – Uses 24 hour time & am & pm notation in real life situations and constructs timelines.	Convert between am/pm notation and 24 hour time			Yes or no. →	→	→
	Compare various time zones in Australia, including during daylight saving			Yes or no. →	→	→
	Draw & interpret a timeline using a scale	Can interpret a timeline using a simple scale with assistance, though has trouble drawing one.	Can draw and interpret a timeline using a simple scale with assistance.	Can draw and interpret a timeline using a simple scale.	Can draw and interpret a timeline using a more complex scale.	Can analyse and answer complex inferential questions about any given timeline.
	Use timetables involving 24 hour time			Yes or no. (??) →	→	→

Later Stage 3	*Space & Geometry – key ideas*	Limited	Basic	Sound	High	Outstanding
Three Dimensional Space SGS3.1 – Identifies 3D objects, including particular prisms & pyramids, on the basis of their properties & visualizes, sketches & constructs them given drawings of different views.	Identify 3D objects, including particular prisms & pyramids, on the basis of their properties	Identifies only a few common prisms & pyramids.	Identifies most common prisms & pyramids.	Identifies all common prisms & pyramids.	Identifies all common prisms & pyramids & some less common ones.	Identifies all common prisms & pyramids & a variety of less common ones.
	Construct 3D models given drawings of different views.	Can construct only a few common prisms & pyramids.	Can construct most common prisms & pyramids.	Can construct all common prisms & pyramids.	Can construct all common prisms & pyramids & some more intricate ones.	Can construct all common prisms & pyramids & a variety of more intricate ones.
Two Dimensional Space SGS3.2a – Manipulates, classifies & draws 2D shapes &describes side and angle properties.	Identify right-angled, isosceles, equilateral & scalene triangles	Can identify none or 1 of these triangles.	Can identify 2 of these triangles.	Can identify all 3 of these triangles. →	→	→
	Identify & draw regular & irregular 2D shapes	Can identify and draw some regular & irregular 2D shapes with or without assistance.	Can identify and draw a variety of regular & irregular 2D shapes.	Can identify and draw most regular & irregular 2D shapes.	Can confidently identify and draw most regular & irregular 2D shapes.	Can confidently identify and draw any regular & irregular 2D shape.
	Identify and name parts of circle			Yes or No. →	→	→
	Enlarge & reduce shapes, pictures & maps			Yes or No. →	→	→
	Identify shapes that have rotational symmetry			Yes or No. →	→	→
SGS3.2b – Measures, constructs & classifies angles.	Classify angles as right, acute, obtuse, reflex, straight or a revolution	Can identify some of these angles.	Can identify most of these angles.	Can identify all of these angles. →	→	→

	Measure in degrees & construct angles using a protractor	Can measure in degrees with assistance, but finds construction of angles very difficult. (?)	Can measure in degrees **and** construct angles using a protractor with assistance.	Can measure in degrees **and** construct angles using a protractor.	Can measure in degrees **and** construct angles using a protractor to produce a common 2D shape.	Can measure in degrees **and** construct angles using a protractor to produce any 2D shape. (?)
Position SGS3.3 – Uses a variety of mapping skills.	Interpret scales on maps & plans			Yes or No →		
	Make simple calculations using scale	Can only make simple calculations with a high level of assistance.	Can make simple calculations with a moderate amount of assistance.	Can make simple calculations with minimal assistance.	Can make more involved calculations including those containing decimals. (Eg. 1.5cm = 2km)	Can make advanced calculations including those containing decimals to 2 or more places. (Eg. 1.cm = 2.79km)
	Uses coordinates & directions to locate places & describe a route on a map.	Describes location using only 1 descriptor (Eg. The house is at the top)	Uses coordinates to describe position (Eg. The house is at E5)	Can locate places with coordinates & vice-versa.	Can locate the best route between 2 sets of coordinates (one direction only)	Can locate the best route between 2 sets of coordinates (multiple directions)