Year 1 — Mathematics Term Planner – Western Adelaide Region *(Draft 05/07/13)* — Term 1

Big Ideas/ Topic focus	Strand/ Sub Strand	Achievement Standard	Content Descriptor(s)	Student Prior Knowledge	Suggested Teaching & Learning Experiences	Assessment Focus/ Task	Time Frame	Resources	Links to other learning areas
-Numbers are said in a particular order and there are patterns in the way we say them -The last number counted tells us how many or how much -A collection tells us how many no matter what it looks like -We can recognise small collections without counting (*subitising)*	Strand: Number & Algebra Sub-strand: Number & Place Value	By the end of **Year 1**, students describe number sequences resulting from skip counting from any starting point. They skip count by 2's, 5's, and 10's starting from zero Students count to and from 100 and locate numbers on the number line	Develop Confidence with number sequences to and from 100 by ones from any starting point. Skip count by 2's, 5's, 10's starting from 0 Recognise, model, read, write and order numbers to at least 100. They locate these on a number line	• Number knowledge to 20 • Counting songs, books, games • Subitising • Count all • Count on /back • Matching number names, numerals & quantities • Ordering numbers to 10 and beyond	• Subitising – (*Dianne Siemon – Trusting the Count)* • Natural Maths Mental Routines & problematised situations, *(e.g. 100's board mental routine- could also use 1-30 or 1-50 if needed)* (Problem Solving Book 1) • 1-100 chart- counting patterns • Number playdough mats/ activity mats (sparkle box) • Frieze tape number lines, IWB number lines • Big step, little step – counting game (+10 take a big step, + 1 take a little step, students mentally calculate the running total. Students could also carry and record on whiteboards) • 10 frames/ 20 frames/ 100 frames (10x10) • Make to 25/ 50/ 100 (5 and 10 frame games) • Dice games –1-12, 1-20 boards; Bingo games • Michael Ymer games – Race to 50 • Subitising the dots on the dice – "who rolled…" • Subitising groups of ''there are 2 groups of 2 counters" • Chicken feed/ chicken scramble- efficient counting • Subitising games, matching games • Making own Subitising cards (early part-part whole) • Ball circle games/ buzz (starting from any number, counting to 100 and beyond, counting backwards, skip counting) • Number stories – shared text/ guided reading • IWB- e.g. subitising sets on PowerPoint/Smart Notebook ; counting video clips/songs • ICT - Scootle; Study Ladder; Kid Pix; iPad	**Diagnostic Assessment** *Big Ideas in Number Test*– Trusting the Count *(Professor Dianne Siemon)* **Formative Assessment** -Subitising 2 & 3 collections -Doug Clarke 'Rich Assessment Tasks' *(e.g. Peeking Dots, Newspaper Numbers)* -Natural maths mental routines and problematised situations work samples -Thinkboards – make, name, record -Games (e.g. *Michael Ymer- Race to 50)* -Conferencing/ anecdotal notes/ questioning **Summative Assessment Tasks *(Western Adelaide Region)*** -1.1: Number Chains	Introduced Term 1 (4 weeks) Ongoing throughout the year	• Subitising card sets- 2 & 3 collections (enough for groups of 3) • 100's board • Number lines, frieze tape • Whiteboards • Mixed Dice • Counters • Flip tiles • Unifix • Playing cards/ Uno cards • Number charts • Flash cards • Secret code cards • Popsticks, etc • IWB – games & activities • Gameboards/ matching activities • Sticky dots	• Spelling words/ lists/ word walls/ tracing number word cards • English– shared text, counting books, counting songs/ rhymes • P.E – number games, make groups of…
-In place value a new unit is introduced *(10 ones is 1 ten, 10 tens is 1 hundred)*	Strand: Number & Algebra Sub-strand: Number & Place Value	By the end of **Year 1**, students partition number using place value	Count collections to 100 by partitioning numbers using place value	• Number knowledge of counting to 100 • Part-part whole • Counting small collections • Subitising small collections	• Hundreds chart counting patterns – counting on & back by 10's; exploring the one doesn't change when adding 10 • Mental routines (100's chart, place value buttons) – Natural Maths; Natural maths Place Value software • Problematised situations – involving efficient counting of 10 • H/T/O boards, whiteboards- using popstick bundles or lids marked with 1, 10, 100 (MAB not recommended at year 1) • Place value games • Story books (e.g. 1 is a Snail, 10 is a Crab – A counting by feet book, April Pulley) • Place value card sets – words and numbers • Number expanders (H,T,O) for renaming • Thinkboard – The answer is 100	**Diagnostic Assessment** *Big Ideas in Number* – Place Value diagnostic test **Formative Assessment** -Place value games -Problematised situations & mental routines **Summative Assessment Tasks *(Western Adelaide Region)*** -1.2: Mystery Number	(4 weeks) Ongoing throughout the year	• Popsticks • H/T/O boards • Natural Maths Place Value software • Stories involving counting in groups & by tens • Milk container lids with 1, 10, 100 marked • Thinkboard • Sticky dots	• Spelling words/ lists/ word walls • English– shared text, counting books • P.E – number games, make groups
-Shapes and objects have characteristics and geometric features in which they can be grouped and sorted	Strand: Measurement & Geometry Sub-strand: Shape	By the end of **Year 1,** students describe 2-dimensional shapes and 3-dimensional objects	Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features	• Naming and drawing basic shapes • Shape patterns • Identifying shapes in their environment • What am I?	• Feely bags of 2D shapes- describe attributes • Comparing objects (Venn circles) • Sort and describe familiar and unfamiliar (irregular) shapes • What shapes can we see in our classroom? In our playground? • Draw 2D shapes freehand, by tracing, using ICT's • Continue shape patterns • What am I questions • Create shape picture form oral clues • Shape thinkboard (draw it, find it, describe it, name it) • Combine shapes to make a new 2D shape- give it a name	**Formative Assessment** -Make, name, record a shape picture -Build, name shapes using consumables, IT programs -Continue shape patterns using characteristics -Shape sort **Summative Assessment Task Ideas** -Shape thinkboard -Shape picture, inc. labels	Term 1 (2 Weeks) *Revisit when introducing 3D objects*	• Mixed 2D & 3D shapes • Thinkboards • Shape beads • Geoboards • Polydrons/ geoshapes • Mixed objects, inc. beads, lids, pasta, popsticks • Tracing shapes	• Physical and Chemical Science – properties • Design & Technology • English– spelling, shared text • Visual Arts – shape pictures

Year 1 — Mathematics Term Planner – Western Adelaide Region *(Draft 05/07/13)* — Term 2

Big Ideas/ Topic focus	Strand/ Sub Strand	Achievement Standard	Content Descriptor(s)	Student Prior Knowledge	Suggested Teaching & Learning Experiences	Assessment Focus/ Task	Time Frame	Resources	Links to other learning areas
-Patterns can be represented in many ways using a combination of numbers, symbols and objects -Patterns are all around us	Strand: Number & Algebra Sub-strand: Patterns & Algebra	By the end of **Year 1,** students continue simple patterns involving numbers and objects	Investigate and describe number patterns formed by skip counting and patterns with objects	• Creating and describing patterns • Sorting and classifying familiar objects • Locating patterns in their environment	• Observe and draw patterns in the classroom, building, playground, yard • Clapping and rhythm patterns • Describing given patterns, continuing these patterns • Create new patterns from a range of equipment- coloured popsticks/toothpicks, 2D shapes & 3D objects, beads, frog/koala counters, coloured counters, flip tiles, unifix, Polydrons, etc. • Orally describe patterns • Patterns using people in the class (e.g. boy, boy, girl, girl, boy, boy, girl, girl)	**Formative Assessment** -Make, name, record patterns -Continue, describe patterns -Copy pattern from visual and oral information/clues **Summative Assessment Task** -1.4: Lucy's Ducks	Term 2 (2 weeks) *Ongoing throughout the year - informal*	• Pattern beads/ blocks/shapes • Shape counters • Polydrons • Thinkboards/ whiteboard • Everyday objects • Story books involving patterns • Unifix cubes	• English– spelling, word wall, rhyming words (patterns within words) • Science – environmental patterns • Art – drawing patterns
-Numbers can be named in terms of their parts *(part-part whole, 7 is 5 and 2, 6 and 1, 4 and 3…)* -Numbers have properties that help us work flexibly with them *(e.g. 7 is 5 and 2, 5 and 2 is 7, 7 take 2 is 5)* -Visualisation and partitioning numbers is essential for mental and written computation	Strand: Number & Algebra Sub-strand: Number & Place Value *(Addition & Subtraction)*	By the end of **Year 1,** students carry out simple additions & subtractions using counting strategies	Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning, and rearranging parts	• Subitising multiple collections • Making and Counting collections • 10, 20, 50 & 100 frames • 100's board • Early place value to the hundreds • Exploring H/T/O • Partitioning using place value • Patterning using objects and numbers	• Count on/back, Rainbow Facts, doubles, near doubles, turn around facts– *Natural Maths* (Ann & Johnny Baker) • Mental routines using 1-100 chart • Problematised Situations, using a real-world narrative – Natural Maths (Problem Solving book Level 1) • ___ and ___ is ___; ____ + _____ is _____ whiteboards • Wrapping paper (efficient counting) – E.g. could we find out how many lollies there are? How could we count them? Which lolly is the most popular? *(Frame it as a problem- "The manufacturer had heard that jellybeans were the most popular lolly. They want to know…")* • Dice games – roll 2 dice, how many altogether? Cover the number (1-12 chart or gameboard) • Open number lines for early addition • Hidden numbers – early algebraic thinking (the answer is… what might the numbers be? Could there be 3 numbers?) • Thinkboards – worded problem • Part-part whole – 7 is…(5 and 2, 6 and 1, 4 and 3, 10 take 3) • Cuisenaire rods – part-part whole *(e.g. a 2 unit rod and a 3 unit rod together equals the length of a 5 unit rod)* • Groups of- I have 3 groups of 2 I have 2, 4, 6 counters- then frame as a problem solving task	**Formative Assessment** -Make, name, record using concrete materials -Addition stories/ Thinkboards -Work samples from problematised situations -Problem solving strategies, solution, conference students and record their thinking -Language - Counting on/ counting back, more/less -Mental routines using 1-10, 1-12 or 1-20 charts -Secret code strategy checklist **Summative Assessment Tasks *(Western Adelaide Region)*** - 1.3 On the Bus	Term 2 (4-5 weeks) Ongoing throughout the year	• Subitising cards • Dice • Counters • Flip tiles • 2 colour counters • Unifix • Playing cards/ Uno cards • Number charts • Flash cards • Secret code cards • Popsticks, etc • Thinkboards • Mini whiteboards • Sultanas/ Smarties for counting • Clipart pictures • Wrapping paper	• Spelling words/ lists • English– shared text, word wall, counting stories, addition stories • Visual arts – cut items and arrange into groups *(e.g. 5 hands and 3 hands is 8 hands)* • P.E – counting, organising teams, games, equipment
-Measurement is a comparison of the size of an object with the size of another -The same object can be described by using different methods of measurements -In order to make a direct comparison the unit of measurement must be the same	Strand: Measurement & Geometry Sub-strand: Using units of measurement	By the end of **Year 1**, students order objects based on lengths and capacities using informal units	Measure and compare the lengths and capacities of pairs of objects using uniform informal units	• Informal measuring and comparing • Counting on, counting back 1, 2, 3 • Informal language to describe *(e.g. taller, more, less)*	• Comparing objects directly, by placing one object against another to determine which is longer, shorter, equal in length • Unifix towers to explore the language of measurement, such as 'tall' and 'taller', 'more than', 'less than' • Using real/relevant objects when measuring and comparing lengths (popsticks, toothpicks, pipe cleaners – all at the same length) • Using body parts to describe length *(e.g. my page is 4 fingers long, the line is 6 feet long)* • Using a range of items to measure the same object *(e.g. my table is 10 popsticks long, my table is 25 matchsticks long, my table is 32 unifix long)* • Problem solving tasks and mental routines- Ann Baker, Natural Maths • Measurement thinkboard – longer, shorter, same	**Formative Assessment** -Thinkboard -Mental routine *(e.g. finding lengths using pipe cleaners)* -Problem Solving tasks -Work samples and annotations -Verbal descriptions -Unifix towers (identifying 3 more than, 2 less than…) **possible summative assessment task* **Summative Assessment Tasks *(Western Adelaide Region)*** -R5: Long and Short snakes	Term 2 (3- 4 weeks) *Time/ Capacity in Term 3 or continue for remainder of Term 2*	• A range of measuring items – popsticks, pipe cleaners, unifix, toothpicks, streamers, frieze tape, etc. • Items to measure • Thinkboards/ whiteboards + markers • Word wall • Paul Swan Developing Mathematics Unifix book	• Spelling word wall • English – measuring stories *(e.g. 'Who sank the boat?')* • Science – Biological Sciences • P.E – make lines that are longer, shorter, wider than…

End of Term 2/Beginning of Term 3: Revise any content requiring additional teaching and development, then begin a new unit on **Time, Capacity, Fractions or Money & Financial Mathematics.**

Term 2 (1-2 weeks)

Future Learning Considerations

- What were the students able to do and show? What are the areas needing further development?
-What misconceptions did students have? Have these been adequately addressed?
-What content is still to be covered? What are the next big ideas? What are my learning goals?