

Reception (Foundation Year)		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
<p>-Numbers are said in a particular order and there are patterns in the way we say them</p> <p>-The last number counted tells us how many or how much</p> <p>-A collection tells us how many no matter what it looks like</p> <p>-We can recognise small collections without counting (<i>subitising</i>)</p>	<p><b>Strand:</b> Number &amp; Algebra</p> <p><b>Sub-strand:</b> Whole Number</p>	<p>By the end of Foundation year, students make connections between number names, numerals &amp; quantities up to 10</p> <p>Students subitise small collections of objects</p> <p>Students count to and from 20 and order collections</p>	<p><b>Introduce first</b></p> <ul style="list-style-type: none"> <li>Connect number names, numerals and quantities, including zero, initially up to 10 then beyond</li> <li>Subitise small collections of objects</li> </ul> <p><b>Then build on</b></p> <ul style="list-style-type: none"> <li>Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point</li> <li>Compare, order and make correspondences between collections initially up to 20, and explain reasoning</li> </ul>	<p>(Possible) Pre-school learning &amp; at-home learning</p> <ul style="list-style-type: none"> <li>Basic number knowledge to 10</li> <li>Counting songs</li> <li>Counting books</li> <li>Experiences with counting small collections</li> </ul>	<ul style="list-style-type: none"> <li>Subitising – (<i>Dianne Siemon – Trusting the Count</i>)</li> <li>Natural Maths Mental Routines &amp; problematised situations</li> <li>Bingo games</li> <li>Number playdough mats/ activity mats (sparkle box)</li> <li>Frieze tape number lines</li> <li>10 frames/ 20 frames</li> <li>Games with a focus on 1-10 recognition, counting to 25</li> <li>Dice games – 1-6, 1-12, 1-20 boards with counters, <i>cover the numbers</i>;</li> <li>Subitising the dots on the dice – “who rolled...”</li> <li>Subitising groups of “there are 2 groups of 2 counters”</li> <li>Patty pans with number inside</li> <li>Chicken feed/ chicken scramble – efficient counting</li> <li>Counters into cup/tin/floor and count</li> <li>Dice and counter arrangements (match the dice)</li> <li>Subitising games, matching games</li> <li>Making own Subitising cards (early part-part whole)</li> <li>Ball circle games/ buzz (starting from any number- 1-10 first, 1-20, backwards, count by 2s, etc)</li> <li>Ordering forwards/backwards 10 – with playing cards (where do I go?)</li> <li>Number stories – shared text/ guided reading</li> <li>IWB- e.g. subitising sets on PowerPoint/Smart Notebook ; counting video clips/songs</li> <li>ICT - Scootle; Study Ladder; Kid Pix; iPad</li> </ul>	<p><b>Diagnostic Assessment</b> <i>Big Ideas in Number Test – Trusting the Count (Professor Dianne Siemon)</i></p> <p><b>Formative Assessment</b> -Subitising Cards</p> <p>-Doug Clarke ‘Rich Assessment Tasks’ (e.g. <i>Ten New Preps</i>)</p> <p>-Natural maths mental routines and problematised situations work samples</p> <p>-Thinkboards – make, name, record</p> <p>-Games (e.g. <i>Michael Ymer- Get Outta My House</i>)</p> <p>-Conferencing/ anecdotal notes/ questioning</p> <p><b>Summative Assessment Tasks (Western Adelaide Region)</b> -R1: Can you count 10 more; R2: Coloured Jewels; R3: Paper plates</p>	<p>Introduced Term 1</p> <p>(6 weeks)</p> <p>Ongoing throughout the year</p>	<ul style="list-style-type: none"> <li>Subitising card sets- 1 collection (enough for groups of 3)</li> <li>10, 20 frames</li> <li>Mixed Dice</li> <li>Counters</li> <li>Flip tiles</li> <li>2 colour counters</li> <li>Unifix</li> <li>Playing cards/ Uno cards</li> <li>Number charts</li> <li>Flash cards</li> <li>Secret code cards</li> <li>Popsticks, etc</li> <li>IWB – games &amp; activities</li> <li>Gameboards/ matching activities</li> <li>Whiteboards</li> <li>Class subitising checklist</li> </ul>	<ul style="list-style-type: none"> <li>Spelling words/ lists/ word walls/ tracing number word cards</li> <li>English– shared text, counting books, counting songs/ rhymes</li> <li>P.E – number games, make groups of...</li> </ul>
<p>-Shapes and objects have characteristics on which they can be grouped and sorted</p>	<p><b>Strand:</b> Measurement &amp; Geometry</p> <p><b>Sub-strand:</b> Shape</p>	<p>By the end of Foundation year, students group objects based on common characteristics and sort shapes and objects</p>	<p>Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment</p>	<ul style="list-style-type: none"> <li>Informally naming and drawing basic shapes</li> <li>Playing with shapes during play-based learning</li> </ul>	<ul style="list-style-type: none"> <li>Feely bags of 2D shapes- describe attributes</li> <li>Comparing objects (Venn circles)</li> <li>Sort and describe – circles, squares, triangles, rectangles</li> <li>What shapes can we see in our classroom? In our playground?</li> <li>Draw 2D shapes freehand, by tracing, using ICT’s</li> <li>Continue shape patterns</li> <li>What am I questions</li> <li>Create shape picture form oral clues</li> <li>Shape thinkboard (draw it, find it, describe it, name it)</li> <li>Combine shapes to make a new 2D shape- give it a name</li> </ul>	<p><b>Formative Assessment</b> -Make, name, record a shape picture -Build, name shapes using consumables, IT programs -Continue shape patterns using characteristics -Shape sort; Thinkboard</p> <p><b>Summative Assessment Tasks (Western Adelaide Region)</b> -R6: What’s on your plate?</p>	<p>Term 1</p> <p>(3 Weeks)</p> <p>Revisit when introducing 3D objects</p>	<ul style="list-style-type: none"> <li>Mixed 2D shapes</li> <li>Thinkboards</li> <li>Shape beads</li> <li>Geoboards</li> <li>Polydrons/ geoshapes</li> <li>Mixed objects, inc. beads, lids, pasta, popsticks</li> <li>Tracing shapes</li> </ul>	<ul style="list-style-type: none"> <li>Physical and Chemical Science – properties</li> <li>Design &amp; Technology</li> <li>English– spelling, shared text</li> <li>Visual Arts – shape pictures</li> </ul>
<p>-Patterns can be represented in many ways using a combination of numbers, symbols and objects</p> <p>-Patterns are all around us</p>	<p><b>Strand:</b> Number &amp; Algebra</p> <p><b>Sub-strand:</b> Patterns</p>	<p>(Achievement standard not stated)</p>	<p>Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings</p>	<ul style="list-style-type: none"> <li>Knowledge of number to 10</li> <li>Sorting and arranging shapes</li> </ul>	<ul style="list-style-type: none"> <li>Observe and draw patterns in the classroom, playground, yard</li> <li>Clapping and rhythm patterns</li> <li>Describing given patterns, continuing these patterns</li> <li>Create new patterns from a range of equipment- coloured popsticks/toothpicks, 2D shapes, beads, frog/koala counters, coloured counters, flip tiles, unifix, Polydrons, coloured pasta, etc.</li> <li>Orally describe patterns</li> <li>Patterns using people in the class (e.g. boy, boy, girl, girl, boy, boy, girl, girl)</li> </ul>	<p><b>Formative Assessment</b> -Make, name, record patterns -Continue, describe patterns -Copy pattern from visual and oral information/clues</p> <p><b>Summative Assessment Task</b> -Repeating pattern; creating own pattern from previously unused items; explain patterns</p>	<p>Term 1</p> <p>(2 weeks)</p> <p>Ongoing throughout the year - informal</p>	<ul style="list-style-type: none"> <li>Pattern beads/ blocks/shapes</li> <li>Shape counters</li> <li>Polydrons</li> <li>Thinkboards/ whiteboard</li> <li>Everyday objects</li> <li>Story books – (e.g. Elmer the patchwork elephant)</li> <li>Unifix cubes</li> </ul>	<ul style="list-style-type: none"> <li>English– spelling, word wall, rhyming words (patterns within words)</li> <li>Science – environmental patterns</li> <li>Art – drawing patterns</li> </ul>

Reception (Foundation Year)		Mathematics Term Planner – Western Adelaide Region (Draft 05/07/13)						Term 2	
Big Ideas/ Topic focus	Strand/ Sub Strand	Achievement Standard	Content Descriptor	Student Prior Knowledge	Suggested Teaching & Learning Experiences	Assessment Focus/ Task	Time Frame	Resources	Links to other learning areas
<p>-Collections can be measured, compared and classified (i.e. as more of, less than, equal to... or how are 5 and 10 similar, different?)</p> <p>-There are many ways to represent numbers</p>	<p><b>Strand:</b> Number &amp; Algebra</p> <p><b>Sub-strand:</b> Addition &amp; Subtraction</p>	(Achievement standard not stated)	Represent practical situations to model addition and sharing	<ul style="list-style-type: none"> <li>Number names to 20</li> <li>Informal addition</li> <li>Subitising cards, dice, counter, etc.</li> <li>Counting songs, books, video clips</li> <li>10 frames</li> <li>Counting with objects</li> <li>Making small collections</li> <li>Early part-part whole</li> </ul>	<ul style="list-style-type: none"> <li>Make to ten – flip tiles/ 2 sided counters/ bead frame/ 10, 20 frames (make 10-frame packs and keep them on desks)</li> <li>Subitising, Count on, Count back, Rainbow Facts – <i>Natural Maths</i> (Ann &amp; Johnny Baker)</li> <li>Mental routines using 1-10, 1-12 or 1-20 charts</li> <li>'Jitterbugs' – <i>Natural Maths Problem Solving Level 1 book</i></li> <li>Problem Solving stories ("My friend's cat had 7 kittens – she was really happy about that because she said they would all have a partner to play with, but I didn't think she was right. I thought there would be one left out. I told her but she didn't agree. I told her not to worry that my class were really clever and they could help us. Do you think you could?")</li> <li>Make to 10 ladybugs (6 dots on a wing and 4 dots on a wing, how many other ladybugs can we make?)</li> <li>Sparkle box placemats/flashcards (without symbols for +)</li> <li>___ and ___ is ___ whiteboards</li> <li>Unifix task – Doug Clarke (<i>How many in each bag? Students count and record, then move around the circle...3 places to the left and check. How many do you think there are altogether? How could we count them?</i>)</li> <li>Dice games – roll 2 dice, how many altogether? Cover the number (1-12 chart or gameboard)</li> <li>Open number line (1-20)</li> <li>Hidden counters- "I have 8 counters. How many counters can you see? How many counters are hidden in my cup?"</li> <li>Thinkboards – worded problem</li> <li>Part-part whole – 7 is...(5 and 2, 6 and 1, 4 and 3, 10 take 3)</li> <li>Race to 25 games using 1-25 gameboards or 5-5 frames</li> <li>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)</li> <li>Groups of- I have 3 groups of 2 I have 2, 4 6 counters- then frame as a problem solving task (e.g. "When I went to the library I saw some children sitting on the cushions reading books together. I saw that there were 3 books and there were 2 children reading each book. How many children did I see?")</li> </ul>	<p><b>Formative Assessment</b></p> <p>-Make, name, record using concrete materials</p> <p>-Addition stories</p> <p>-Problem solving strategies, solution, conference students and record their thinking</p> <p>-Language - Counting on/ counting back, more/less</p> <p>-Mental routines using 1-10, 1-12 or 1-20 charts</p> <p><b>Summative Assessment Tasks (Western Adelaide Region)</b></p> <p>- R4: Ten new Receptions; or alternatively a Thinkboard task (worded addition or subtraction problem)</p> <p>-The forgetful farmer "A farmer had 12 chickens in his coop, but he was very forgetful and he left the gate open. Some of the chickens escaped. What happened to the chickens and how many were left?"</p>	<p>Term 2</p> <p>(6 weeks)</p> <p>Ongoing throughout the year</p>	<ul style="list-style-type: none"> <li>Subitising cards</li> <li>Dice</li> <li>Counters</li> <li>Flip tiles</li> <li>2 colour counters</li> <li>Unifix</li> <li>Playing cards/ Uno cards</li> <li>Number charts</li> <li>Flash cards</li> <li>Secret code cards</li> <li>Popsticks, etc</li> <li>Thinkboards</li> <li>Mini whiteboards</li> <li>Sultanas/ smarties/ etc</li> <li>Clipart pictures (e.g. animals, skittles)</li> </ul>	<ul style="list-style-type: none"> <li>Spelling words/ lists</li> <li>English – shared text, word wall, counting stories, addition stories (e.g. 1 is a snail, 10 is a crab – April Pulley)</li> <li>Visual arts – cut items and arrange into groups (e.g. 5 hands and 3 hands is 8 hands)</li> <li>P.E – counting, organising teams, games, equipment</li> </ul>
-Measurement is the comparison of objects and it can be described	<p><b>Strand:</b> Measurement &amp; Geometry</p> <p><b>Sub-strand:</b> Using units of measurement</p>	By the end of Foundation year, students compare objects using mass, length and capacity	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language	<ul style="list-style-type: none"> <li>Informal measuring and comparing</li> <li>Counting on, counting back 1, 2, 3</li> <li>Informal language to describe (e.g. taller, more, less)</li> </ul>	<ul style="list-style-type: none"> <li>Comparing objects directly, by placing one object against another to determine which is longer, short, equal in length</li> <li>Unifix towers to explore the language of measurement, such as 'tall' and 'taller', 'more than', 'less than'</li> <li>Using real/relevant objects when measuring and comparing lengths (popsticks, toothpicks, pipe cleaners – all at the same length)</li> <li>Using body parts to describe length (e.g. my page is 4 fingers long, the line is 6 feet long)</li> <li>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)</li> <li>Problem solving tasks and mental routines- Ann Baker, <i>Natural Maths</i></li> <li>Measurement thinkboard – longer, shorter, same</li> </ul>	<p><b>Formative Assessment</b></p> <p>-Thinkboard</p> <p>-Mental routine (e.g. finding lengths using pipe cleaners)</p> <p>-Problem Solving tasks</p> <p>-Work samples and annotations</p> <p>-Verbal descriptions</p> <p>-Unifix towers (identifying 3 more than, 2 less than...)</p> <p><i>*possible summative assessment task</i></p> <p><b>Summative Assessment Tasks (Western Adelaide Region)</b></p> <p>-R5: Long and Short snakes</p>	<p>Term 2</p> <p>(4 weeks)</p> <p>Capacity, Time in Term 3</p>	<ul style="list-style-type: none"> <li>A range of measuring items – popsticks, pipe cleaners, unifix, toothpicks, streamers, frieze tape, etc.</li> <li>Items to measure</li> <li>Thinkboards/ whiteboards + markers</li> <li>Word wall</li> <li>Paul Swan Developing Mathematics Unifix book</li> </ul>	<ul style="list-style-type: none"> <li>Spelling word wall</li> <li>English – measuring stories (e.g. 'Who sank the boat?')</li> <li>Science – Biological Sciences</li> <li>P.E – make lines that are longer, shorter, wider than...</li> </ul>
<b>End of Term 2/ Beginning of Term 3:</b> Revise any content requiring additional teaching and development, then begin a new unit on <b>Time or Capacity</b> .				Term 2 (1-2 weeks)	<b>Future Learning Considerations</b>	<ul style="list-style-type: none"> <li>- What were the students able to do and show? What are the areas needing further development?</li> <li>-What misconceptions did students have? Have these been adequately addressed?</li> <li>-What content is still to be covered? What are the next big ideas? What are my learning goals?</li> </ul>			