**MATHEMATICS STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM:  | WEEK: 1 and 2 | STRAND: Number and Algebra | **SUB-STRAND:** Multiplication and Division 1 | **WORKING MATHEMATICALLY:** MA1-6NA |
| OUTCOMES: | **\*Describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols** |
| **CONTENT:**  | **Skip count by twos, fives and tens starting from zero (ACMNA012)**\* Count by twos, fives and tens using rhythmic counting and skip counting from zero.\* Use patterns on hundreds chart to assist in counting by twos, fives or tens (communicating)  |
| ASSESSMENT FOR LEARNING(PRE-ASSESSMENT) | Anecdotal notes following counting games, and group work to identify those who can skip count. |
| WARM UP / DRILL | \*Call out a number and have the students form groups of that number and sit as a group. Any students left standing nominate the next number.\* Skip count daily using IWB hundreds chart.\* Count out objects being handed out by twos. |
| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION  | What is the quickest way to count this jar of lollies?Is there more than one method? |
| QUALITY TEACHING ELEMENTS | **INTELLECTUAL QUALITY** | **QUALITY LEARNING ENVIRONMENT** | **SIGNIFICANCE** |
| * Deep knowledge
* Deep understanding
* Problematic knowledge
* Higher-order thinking
* Metalanguage
* Substantive communication
 | * Explicit quality criteria
* Engagement
* High expectations
* Social support
* Students’ self-regulation
* Student direction
 | * Background knowledge
* Cultural knowledge
* Knowledge integration
* Inclusivity
* Connectedness
* Narrative
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| RESOURCES | Individual hundreds charts, IWB hundreds chart, collections of a variety of objects such as counters, teddies, paddle pop sticks.I Pads or a camera. Painting equipment, |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES |
|  **Reasoning*** Discuss why it is quicker to skip count objects.
* Verbalise how they counted.
* Children should see a group as a countable unit.

**Model stressed and rhythmic counting*** Count showing that the first number in each pair can be said silently and the second can be voiced.
* Children can be chosen daily to count the class by twos when in line.
	+ Use body percussion to skip count

**Patterning*** Using IWB show the patterns made when counting by two’s, fives and tens on 100s chart
* Encourage children to count using stressed and skip counting by twos, fives and tens.
 | LEARNING SEQUENCERemediationES1  | * Children use the hundreds chart to count by ones. Then introduce the stressed method of counting for every second number.
	+ Instruct children to place two objects in four cups. They are encouraged to count them by twos. This can be extended as required.
* Use body percussion. Tap their heads for first count and clap hands for second.
* Use a double circle facing each other. Inside circle stress counts and outside circle takes sideways steps. On accented count children clap hands with their partner.
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| LEARNING SEQUENCES1 | Counting by twos.<http://www.youtube.com/watch?v=8wwydguSKOU> counting by 2 songCollect or draw items commonly found in pairs eg eyes or socks* + These can be displayed in the classroom and referred to at regular intervals.
* Model the method of counting these by twos
* **Counting by fives.**
* Make a chart of handprints to be used as basis to count by fives
	+ Using a hundreds chart colour the pattern made when counting by fives, twos or tens
* **Counting by tens**
* Children take photos of groups of ten objects. These are printed and used as a counting tool
* Use counters on ten frames as a basis to count by tens.

**Assessmen**t: Children can effectively count a pile of counters by twos ,fives and tens. **Investigation**: What is the quickest method of counting a large group of counters. |
| LEARNING SEQUENCEExtension Late stage 1 | **Extension*** Using a hundreds chart count by tens off the decade.
* Using a hundreds chart colour patterns for multiples of other numbers eg 3. 4 ,7 etc
* In pairs ask one child to make a pattern using coloured cubes. The other continues pattern and states what are the multiples eg. It is counting by fours. This can be extended.
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| **EVALUATION & REFLECTION** | * Children need to be able to skip count when determining the total of objects. They need this knowledge so their multiplication and division strategies will not be limited.
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* All assessment tasks should be written in **red** and planning should be based around developing the skills to complete that task
* Assessment rubrics or marking scale should be considered.