**MATHEMATICS STAGE ES1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM:  | WEEK: 2 | STRAND: Measurement and Geometry | **SUB-STRAND:** Mass  | **WORKING MATHEMATICALLY:** Mae-3WM Mae-1WM |
| OUTCOMES: Mae-12MG  | **Describes and compares the masses of objects using everyday language**  |
| **CONTENT:**  | **Use direct and indirect comparisons to decide which is heavier, and explain their reasoning using everyday language*** Compares two masses directly by pushing and /or pulling.
* Use everyday language to describe objects in terms of their mass, eg heavy, light, hard to push, hard to pull
* record comparisons of mass informally using drawings, numerals and words
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| ASSESSMENT FOR LEARNING(PRE-ASSESSMENT) | * Teacher chooses objects according to size and weight. Objects should range from small and heavy to large and light. Objects are placed in the middle of the circle for children to see.
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| WARM UP / DRILL | * Children discuss finding from previous activity.
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| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION  |  |
| 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 | Classroom objects recording sheet  |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES |
| * Review of Week 1.
* Discussion of size in relation to mass.
* Find large objects in the classroom that are light.
* Find small objects in the classroom that are heavy.
 | LEARNING SEQUENCEPre foundation skills | * Early experiences often lead younger children to the conclusion that large things are heavy and small things are light. Two objects are lined up on a base line. Children take turns to push each object from the base line to a designated finish line. Each child secretly draws the object that was the lightest or heaviest. Children repeat the activity comparing and recording their findings.
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| LEARNING SEQUENCEES1 | * Children in a small group are given three objects to be pushed or pulled from a base line to a finish line. The children converse and compare to come to a conclusion and line the three objects from lightest to heaviest. This is recorded pictorially in a workbook or on a recording sheet.
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| LEARNING SEQUENCEExtension  S1 | * Discussion and comparison of results using correct Metalanguage.
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| **EVALUATION & REFLECTION** | * Observation by teacher.
* Recordings on simple work sheet or in a maths book.
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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.