**MATHEMATICS EARLY STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: | WEEK: 2 | STRAND: Statistics and Probability | **SUB-STRAND: Data** | **WORKING MATHEMATICALLY: Mae3-WM** |
| OUTCOMES: MAe-17SP | | **Represents data and interprets data displays made from objects** | | |
| **CONTENT:** | | **Organise groups into simple data displays and interpret the displays**   * Group objects according to characteristics to form a simple data display * Compare the sizes of groups of objects by counting (Reasoning) | | |
| ASSESSMENT FOR LEARNING (PRE-ASSESSMENT) | | * Pre Assessment: Students take a handful of blocks and sort according to colour. Match this information by colouring circles on a chart and give their graph a title. Share this information with a partner and ask questions about each other’s data. | | |
| WARM UP / DRILL | | * Ask the students “Are there more boys than girls in our class today?” “How can we find out?”   Students line up in a row of boys and girls emphasising the need to match one for one before comparing which group has the higher number of students. Discuss. | | |
| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION | | Yesterday there were 9 boys at school. There were 11 more girls than boys that day. How many students were at school that day? How many more girls than boys were at school? | | |
| QUALITY TEACHING ELEMENTS | | **INTELLECTUALQUALITY** | **QUALITY LEARNINGENVIRONMENT** | **SIGNIFICANCE** |
| * Deepknowledge * Deepunderstanding * Problematicknowledge * Higher-orderthinking * Metalanguage * Substantivecommunication | * Explicit quality criteria * Engagement * High expectations * Social support * Students’ self-regulation * Student direction | * Background knowledge * Cultural knowledge * Knowledge integration * Inclusivity * Connectedness * Narrative |
| RESOURCES | | Metalanguage signs and environmental print, Fruit, paper and pencils, scissors, glue, cardboard, blocks. | | |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTIONMODELLED ACTIVITIES | GUIDED &INDEPENDENT ACTIVITIES | |
| Explicitly communicate lesson outcomes and work quality  * Teach and review terms used in this unit. * Define and reinforce language used in this unit eg information, data, largest, smallest, longest, shortest, compared to, collect, display, same, equal, unequal, tally marks, columns, graphs, rows, sort * Class discussion on knowledge of tally marks | LEARNING SEQUENCEPre Foundation Skills | * Review the terms used for this unit. * Review last terms birthday graph and discuss how tally marks made the counting easier. |
| LEARNING SEQUENCEES1 | Whole class instruction and modelled activities   * Students bring their lunchboxes to the floor and take out their piece of fruit. * Label each piece of fruit. Ask students “How can we sort the fruit?” Colour, type, length etc. Decide on one way of classifying the fruit. * Write the agreed categories as a column heading on a prepared chart. * Provide each student with a piece of paper. Draw their fruit on the paper. Paste into appropriate column. * Make another collection using a different attribute eg If they grouped according to type of fruit previously, this time group according to colour . Make another column graph. What is the difference between the two? Discuss and share findings with the class. * Investigation: In small groups, discuss what you notice. * Assessment: Provide students with their own column graph for them to complete according to another different attribute of the fruit. |
| LEARNING SEQUENCEExtensionS1 | * Describe information presented in simple data displays using comparative language such as ‘more than’ and ‘less than’ eg There were more apples than banana. There were less oranges than bananas. * Use concrete materials such as Unifix blocks to represent different fruit. |
| **EVALUATION &REFLECTION** | **Student Engagement: Achievement of Outcomes:**  **Resources: Follow Up:** |

* 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.