**MATHEMATICS EARLY STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: | WEEK:4 | STRAND: Statistics and Probability | **SUB-STRAND: Data** | **WORKING MATHEMATICALLY:**  **MAe1-WM** |
| OUTCOMES: MAe-17SP | | **Represents data and interprets data displays made from objects** | | |
| **CONTENT:** | | **Organise groups into simple data displays and interpret the displays**   * Arrange objects in rows and columns according to characteristics to form a data display * Give a reason why a row of three objects may look bigger than a row of five objects * Compare the sizes of groups of objects by counting (Reasoning) | | |
| ASSESSMENT FOR LEARNING (PRE-ASSESSMENT) | | * Pre assessment   Worksheet- Classification of groups according to their shape and /or colour | | |
| WARM UP / DRILL | | * **IWB** graph-and-tally.html * Carry out survey and record observations in tally charts, picture graphs and pictographs | | |
| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION | | My lunchbox is shaped like a square. Your lunchbox is shaped like a rectangle. Can they be the same length? | | |
| 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. Lunchboxes, cardboard, pictorial representation of a lunchbox, pencils, paper, glue, hoops, data worksheet | | |

**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 2D shapes * Define and reinforce language used in the unit eg data, column, row, longest, smallest, equal, unequal * Class discussion of knowledge of different types of graphs * IWB [www.turtle](http://www.turtle) diary.com Record number of animals on farm. Make a tally chart using tally marks. Explain that a tally mark is used to record how many. | LEARNING SEQUENCEPre Foundation Skills | * Review terms and explore properties of simple 2D shapes * Revise terms longest/shortest * Student investigate and identify simple 2D shapes |
| LEARNING SEQUENCEES1 | **Whole class instruction and modelled activities**   * Students get their lunchbox and place in front of them in a circle * With a partner, discuss how we can classify these lunchboxes eg shape/ colour/ length * Place lunchboxes into hoops labelled with colour names. * Discuss findings according to number in each hoop. Make a simple tally graph using this information. Colour lunchbox representation using correct colour, emphasising matching skills. * Using each group, place lunchboxes end to end to make rows * Discuss the findings eg does the group with the most colour also make the longest group? Why/ why not? * Make more groups using shapes of lunchbox lids eg square/ rectangular etc. Discuss findings. In a group, make your own tally graph. Compare all findings and discuss. * Investigation: Find square and rectangular shapes in the environment. * Assessment: Interprets the picture graph and completes data worksheet. |
| LEARNING SEQUENCEExtensionS1 | * Explain interpretations of information presented in data displays. * Write a simple sentence to describe data in a display. |
| **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.