**MATHEMATICS STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: 1 | WEEK: 3 | STRAND: NUMBER AND ALGEBRA | **SUB-STRAND:** FRACTIONS AND DECIMALS | **WORKING MATHEMATICALLY:**  MAe-1WM MAe-3WM MA1-1WM |
| OUTCOMES: MA1-7NA | | **Represents and models halves, quarters and eighths.** | | |
| **CONTENT:** | | **Recognise and describe one-half as one of two equal parts of a whole (**ACMNA016)  \* Record two equal parts of whole objects and shapes, and the relationship of the parts to the whole, using pictures and the fraction notation for half. | | |
| ASSESSMENT FOR LEARNING (PRE-ASSESSMENT) | | * Observation of decorating a cake (on paper) deciding less than a half, a half, more than a half. | | |
| WARM UP / DRILL | | * Using a bucket and blocks children count on or back from a given number as a few more blocks are added or taken out. | | |
| 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 |
| RESOURCES | | Worksheets – Half a shape and object, half/more/less to identify, writing the notation ½ in the appropriate shapes and objects, paper and pictures to glue into their book or on an A4 piece of paper to show ½.  iPads – Drawing Pad. | | |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES | |
| Explicitly communicate lesson outcomes and work quality.  * **Teach and review** the concept and continuing background knowledge of a half. * Worksheet – To show very good knowledge of the concept. * Some examples can be found in:- * Maths Plus 1 pages 3 and 31. * NSW Maths Assessment pages 43, 45 and 47. * The worksheets are covering half of a shape and object, more/ less/ of a shape or object. * Introduce the notation ½ to be included. * **Metalanguage** whole, part,equal parts, half, halves, less, more. | LEARNING SEQUENCERemediation ES1 | * Review terms and language of half. * Identify 2D shapes and pictures cut in half. |
| LEARNING SEQUENCES1 | * **Whole Class Instruction and Modelled Activities** * Assessment – Worksheet – Representing lessons previously taught to reflect the children’s knowledge on the topic of halves. * Studyladder – Worksheet available on half and matching halves. * iPads – Drawing Pad – Drawing pictures and colouring half and recording the notation ½ on correct components. * Creating half on paper shapes and objects, writing the notation ½ and gluing them into their book or on a piece of A4 paper. |
| LEARNING SEQUENCEExtensionS2 | * To introduce or develop the concept of a quarter (1/4) – Year 2 extension. * To introduce or develop the concept of a third (1/3), a fifth (1/5), an eighth (1/8) or 2 or more parts of the fraction – Year 3 extension. |
| **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.