**MATHEMATICS STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: 1 | WEEK: 2 | 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)\* Describes part of a whole object as ‘about a half’, ‘more than a half’ or ‘less than a half’. |
| ASSESSMENT FOR LEARNING(PRE-ASSESSMENT) | * Observation and marking of previous half lesson to determine children’s understanding and ability.
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| WARM UP / DRILL | * Children in groups put number cards to 30 into correct order then quickly identify the number that comes after that a nominated child gives.
 |
| 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 |  Playdough, pictures of objects, 2D shapes, circle paper pizza shape.  IWB – Studyladder. iPads –Geoboards.  |

**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 background knowledge of a half.
* Use playdough in pairs and cut in half, not in half.
* Introduce the terms of more than half, less than half.
* Worksheet – Identify the pictures that show half only even though there are some less than half, more than half. Discuss the other pictures.
* IWB – Studyladder – Video with 10 questions on less, half, more.
* **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.
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| LEARNING SEQUENCES1 | **Whole Class Instruction and Modelled Activities*** 2D paper shapes children fold to show half, less, more. Continue to discover other ways to fold the shapes.
* iPads – make the nominated shape then display the nominated size of less, half, more.
* Assessment – Worksheet – Children are given a circle shape to represent a pizza. Using coloured paper toppings they make their pizza but have decide it is going to be less, half, more decorated. They then have to complete the sentence adding the correct word.
* I have \_\_\_\_\_\_\_\_\_\_\_ of a pizza. (less than half/ half/ more than half).
* Children then sort their pizzas into 3 groups. Discuss results.
* Investigation – Finding things in the room that are representing less than half, half, more than half.
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| LEARNING SEQUENCEExtension S2 | * Using the S1 lesson for the pizza but using a different shape e.g. square or rectangle. – Year 2 extension, e.g. triangle, hexagon, pentagon – Year 3 extension
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| **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.