**MASS 1 –STAGE 2**

**OUTCOMES**

A student:

MA2-1WM

uses appropriate terminology to describe, and symbols to represent, mathematical ideas

MA2-3WM › checks the accuracy of a statement and explains the reasoning used

MA2-12MG › measures, records, compares and estimates the masses of objects using kilograms and grams

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| **CONTENT** | **Plan** |
| **Measure, order and compare objects using familiar metric units of mass (ACMMG061)** |  |
| • recognise the need for a formal unit to measure mass | 3 |
| • use the kilogram as a unit to measure mass, using a pan balance | 2 |
| associate kilogram measures with familiar objects, eg a standard pack of flour has a mass of 1 kg, a litre of milk has a mass of approximately 1 kg (Reasoning) | 2 |
| recognise that objects with a mass of one kilogram can be a variety of shapes and sizes (Reasoning) | 2 |
| • record masses using the abbreviation for kilograms (kg) | 4 |
| • use hefting to identify objects that have a mass of 'more than', 'less than' and 'about the same as' one kilogram | 1 |
| discuss strategies used to estimate mass, eg by referring to a known mass (Communicating, Problem Solving) | 1 |
| • compare and order two or more objects by mass measured to the nearest kilogram | 4 |
| • estimate the number of similar objects that have a total mass of one kilogram and check by measuring | 3 |
| ! explain why two students may obtain different measures for the same mass (Communicating, Reasoning) | 4 |

**MASS 2 – STAGE 2**

**OUTCOMES**

A student:

MA2-1WM

uses appropriate terminology to describe, and symbols to represent, mathematical ideas MA2-2WM

› selects and uses appropriate mental or written strategies, or technology, to solve problems

MA2-12MG › measures, records, compares and estimates the masses of objects using kilograms and grams

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| **CONTENT** | **plan** |
| **Use scaled instruments to measure and compare masses (ACMMG084)** |  |
| • recognise the need for a formal unit smaller than the kilogram | 5 |
| • recognise that there are 1000 grams in one kilogram, ie 1000 grams = 1 kilogram | 5 |
| • use the gram as a unit to measure mass, using a scaled instrument | 5 and 6 |
| associate gram measures with familiar objects, eg a standard egg has a mass of about 60 grams (Reasoning) | 5 and 6 |
| • record masses using the abbreviation for grams (g) | 6 |
| • compare two or more objects by mass measured in kilograms and grams, using a set of scales packaging (Communicating, Problem Solving) | 7 |
| • interpret commonly used fractions of a kilogram, including , , , and relate these to the number of grams | 8 |
| solve problems, including those involving commonly used fractions of a kilogram (Problem Solving) | 8 |
| • record masses using kilograms and grams, eg 1 kg 200 g | 6 |