**North East School Division**



**Unpacking Outcomes**

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| **Harvesting the Outcome** | | | **BIG IDEAS** | |
| **SS3.2 Demonstrate understanding of measuring mass in g and kg by:**   * **selecting and justifying referents for g and kg** * **modelling and describing the relationship between g and kg** * **estimating mass using referents** * **measuring and recording mass** | | | **Wait! Is it all about weight?**  **Measuring up – What do I do?** | |
| **Outcome** (circle the verb and underline the nouns or noun phrases) | | | | |
| **Demonstrate** → understanding of measuring mass  **Modelling** → the relationship between g and kg  **Describing** → the relationship between g and kg between g and kg  **Estimating**  → mass using referents  **Measuring** → mass  **Recording** → mass | | | | |
| **KNOW BEFORE UNIT** | **KNOW AFTER UNIT** | **UNDERSTAND** | | **BE ABLE TO DO** |
| - what a 3-D object is  - what a referent is | - what grams and kilograms are  - how to estimate mass  - what a scale is and how to use it  - strategies for measuring | - objects have mass  - kg and g are related  - referents help us estimate mass  - that the mass of an object isn’t changed when it is reformed into different shapes and sizes  - the difference between weight and mass  - appropriate units of measuring mass are determined by the object being measured  - masses can be compared  - there are many real life situations that involve measuring mass | | - describe relevant situations that involve measuring mass  - create and solve questions involving estimating and measuring mass  - determine personal referents for 1 kg, 100 g, 10 g and 1 g.  - select an appropriate unit for measuring mass of a given object and justify your choice  - analyze the relationships between units for measuring mass  - use a scale to determine the mass of an object and record the mass  - compare the mass of 2 objects and than verify the mass using a scale  - estimate the mass of personal object and explain the strategy used  - model and describe the relationship between g and kg  - observe a variety of documents that use the word weight rather than mass |
| Vocabulary:  - grams  - kilograms  - mass | - weight  - referents  - scales |
| **Essential Questions** | | | | |
| **How are g and kg related?**  **How do you select an appropriate unit for measuring mass of an object?**  **How can you estimate the mass of any object?**  **What is mass?**  **When is an estimate good enough? When do I need to be precise?** | | | | |