


NATIONAL MATHEMATICS TEAM


GRADE 1 PLANNING TEMPLATE

MEASUREMENT			
Topics/Objectives	Main Concept	Teaching/Learning Activities	Assessment/Homework Activities
1. Estimate the weight of objects in non - standard units 2. Compare the weights of objects	<ul style="list-style-type: none"> • Heavier • Lighter • compare • Balance • Estimate • Measurement 	<p><u>Estimate the weight of objects in non -standard units</u></p> <p>Estimating weights</p> <p>Gather a variety of items for exploration. For example: note book, toys, inflated balloon, crayon, tennis ball, and sharpener.</p> <p>Select the tennis ball and the inflated balloon and ask students to suggest the heavier of the two.</p>	<p><u>Estimate the weight of objects in non - standard units</u></p> <p>Heavier or Lighter worksheet</p> <p>Give students a worksheet to categorize items as ‘heavier’ or ‘lighter’ than a tennis ball. <i>See page 1 of the Resource Document for the Heavier or Lighter worksheet</i></p>

		<p>Guided questions</p> <p><i>How can we find out which is heavier?</i></p> <p><i>(Answers may vary as some may say they can hold both, one in each hand, to tell which is heavier.)</i></p> <p>Pass around the two objects (inflated balloon and a tennis ball) to selected students (number depends on class size) for them to ‘weigh’ and to decide which is heavier.</p> <p>Place students in small groups. Have them use the ‘heavier’ item (the tennis ball) as a reference object to estimate the weight of other objects (in relation to the reference object).</p> <p>Expected responses: backpack is heavier than a tennis ball; a crayon is lighter than a Tennis ball.</p> <p>Engage students in a discussion on their findings.</p> <p>Guided questions</p> <ul style="list-style-type: none"> • <i>Which items were heavier than the tennis ball?</i> • <i>Which items were lighter than the tennis ball?</i> • <i>Were there any items that you found difficult to compare with the tennis ball? Why do you think this happened?</i> 	<p>Heavier or Lighter in my home</p> <p>Have students draw or paste items (in their homes) that are heavier than a tennis ball. See page 2 of the Resource Document for the ‘Heavier or lighter in my home’ worksheet.</p>
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		<p><u>Compare the weights of objects</u></p> <p><i>Using a balance scale</i></p> <p>Display a beam balance and solicit information from the students to determine if they are familiar with the item.</p> <p>Hold two objects, one in each hand and ask students to suggest the item that could be heavier. Place the items on the beam balance and ask students to share their observations and suggest reasons for one side of the beam being lower than the other. Have two other demonstrations with the whole group.</p> <p>Place students in groups of 2s and provide each group with a beam balance and several objects <i>see page 5 of the Resource Document for instructions on how to make a beam balance.</i></p> <p>Have students select two objects, from their supply, at a time. For each selection, have them ‘suggest’ the item that they think is heavier and record this information on the Estimate and Weight worksheet. They will then weigh the items and record the name of the object that is actually heavier. The worksheet <i>can be found on page 7 of the Resource Document.</i></p>	<p><u>Compare the weight of objects</u></p> <p>Activity Name: Lighter objects 1</p> <p>Provide students with a set of objects (as shown in sample document) which they will compare using their balances.</p> <p><i>See page 3 of the Resource Document for a sample worksheet.</i> You can use this sample as a guide. Insert images of the objects that you have available.</p> <p>Activity Name: Heavy vs Light</p> <p>Provide students with the worksheet <i>‘Heavy versus light’ found on page 4 of the Resource document.</i></p> <p>ICT Inclusion:</p> <p>Students can practice selecting the heavier or lighter object by interacting with the beam balance at https://www.splashmath.com/math-games-for-kindergarteners</p>
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		 <p>Have studen</p> <p>ts complete the <u>Mystery Bag Weight Comparison worksheet</u>. <u>See page 8 of the Resource document for the worksheet</u></p>	
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