





Letter Balance

Name(s): _____

Date: _____

NGSS GOALS	 BRONZE	 SILVER	 GOLD	 PLATINUM
1. Student work related to this Crosscutting Concept: In this project, we drew and explained how the three important parts of our weighing machine worked.				
Cause and Effect: Mechanism and Explanation: Use cause and effect relationships to explain observations in designed systems.	<ul style="list-style-type: none"> We drew our weighing machine. We labeled the three important parts of the weighing machine. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We correctly identified the parts in our weighing machine that caused it to move the pointer for our measurements. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We explained which parts of our weighing machine need to be adjusted to measure heavier objects. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We explained which parts of our weighing machine did not cause it to weigh objects accurately. <input type="checkbox"/>
2. Student work related to this Practice: In this project, we built a model of a tool to measure the weight of different objects.				
Developing and Using Models: Evaluate limitations of a model for a proposed object or tool.	<ul style="list-style-type: none"> We built the weighing machine according to the building instructions. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We put markings on our blue plastic scale so we could measure objects in grams. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We built our weighing machine to handle heavier objects by adding an additional counterweight wheel. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We compared our scale with the scales created by our classmates. We used our observations to revise our weighing machine and make improvements. <input type="checkbox"/>
3. Student work related to this Practice: In this project, we investigated which was better at measuring weight, our hand or our weighing machine.				
Planning and Carrying Out Investigations: Evaluate the accuracy of various methods for collecting data.	<ul style="list-style-type: none"> We estimated the weight of at least three objects with our hands. We weighed at least three objects with our weighing machine. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We estimated the weight of two more objects with our hands. We weighed two more objects with our weighing machine. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We changed our weighing machine and investigated the weight of different numbers of coins. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We correctly guessed (within a few coins) the number of coins in the secret money bag. We weighed and made predictions for at least two additional secret money bags. <input type="checkbox"/>
Notes:				