

Click-Clock

Name(s): _____

Date: _____

NGSS GOALS	 BRONZE	 SILVER	 GOLD	 PLATINUM
1. Student work related to this Crosscutting Concept: In this project, we built the long pendulum and described its motion compared to the smaller pendulums from the first part of the activity.				
Scale, Proportion, and Quantity: It is important to recognize how changes in scale, proportion, and quantity affect a system's structure and performance.	<ul style="list-style-type: none"> We built the long pendulum. We described what we observed. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We compared our observations of the long pendulum with our observations of the smaller pendulums. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We measured the number of seconds it took for the pointer to go around. We calculated ratios to compare the times of the long pendulum vs. the shorter pendulums. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold We compared the ratio of the pendulums lengths to the ratio of the pendulums times. <input type="checkbox"/>
2. Student work related to this Practice: In this project, we built a click-clock timer and made changes to the pendulum to see if we could make the click-clock go slower or faster.				
Planning and Carrying Out Investigations: Collect data about the performance of a proposed object under a range of conditions.	<ul style="list-style-type: none"> We completed the construction of our click-clock timer. We changed the position and type of wheel on the pendulum. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We wrote down at least three predictions and measurements for different wheel positions and types. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver We used the provided tip to make the click-clock time one minute. We wrote down our measurements that were close to one minute. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We proposed additional experiments to our teacher using the click-clock timer. We wrote down our measurements for at least one of those experiments. <input type="checkbox"/>
3. Student work related to this Practice: In this project, we labeled our favorite shock-o'clock timer design. We described how three important parts of our shock-o'clock worked.				
Obtaining, Evaluating, and Communicating Information: Integrate qualitative and/or quantitative information in written text with visual displays to clarify claims and findings.	<ul style="list-style-type: none"> We labeled one important part of our shock-o'clock design. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We labeled two more important parts of our shock-o'clock design. We explained how one of important parts of our shock-o'clock works. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We explained how all three important parts of our shock-o'clock work. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We created and shared our diagram and explanation to classmates. We revised our work and made it more clear for our classmates to understand. <input type="checkbox"/>
Notes:				