





Power Car

Name(s): _____

Date: _____

NGSS GOALS	 BRONZE	 SILVER	 GOLD	 PLATINUM
1. Student work related to this Crosscutting Concept: In this project, we made predictions and observed our power car move up a hill with different wheel and gear combinations.				
Stability and Change: Explain stability and change in designed systems by examining changes over time.	<ul style="list-style-type: none"> We predicted how much time it would take power cars A and B to drive up the ramp. We wrote our predictions and test results on our Student Worksheet. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We completed our predictions and test results for power cars C and D. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We predicted and tested at least two of our power cars with the sled pull experiment. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold We proposed and completed at least two additional experiments to test the motion of our power car on the ramp or in the sled pull experiment. <input type="checkbox"/>
2. Student work related to this Practice: In this project, we built a power car with different wheel and gear combinations. We used it in a hill climb experiment and a sled pull experiment.				
Developing and Using Models: Use a model to generate data to test ideas about designed systems.	<ul style="list-style-type: none"> We built power cars A and B that moved by battery power. We practiced running power cars A and B on the ramp for fair testing. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We changed wheels and gear combinations for power cars C and D. We used fair testing in all of our hill climb experiments. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We built the sled for pulling books or other objects. We used our power car in our sled pull experiments. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We completed the building necessary to test one or two new ideas for the sled pull experiment. <input type="checkbox"/>
3. Student work related to this Practice: In this project, we labeled our favorite Power Car design.				
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 power car design. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Bronze. We labeled two more important parts of our power car design. We explained how one of the important parts of our power car works. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Silver. We explained how all three important parts of our power car work. <input type="checkbox"/>	<ul style="list-style-type: none"> We met Gold. We created and shared our diagram and explanation with classmates. We revised our work and made it more clear for our classmates to understand. <input type="checkbox"/>
Notes:				