

Name _____

Due Date _____

HB _____

Forces and Motion Science Project

Flight School Design Report

Scientific Investigation of Forces and Flight

OVERALL COMPREHENSION SCORE:

OVERALL APPLICATION SCORE:

Novice <i>begins to approach expectations</i>	Apprentice <i>approaches expectations</i>	Proficient <i>meets expectations</i>	Distinguished <i>exceeds expectations</i>
		<p><u>Content</u></p> <p><input type="checkbox"/> Introduction defines all four forces of flight (lift, drag, thrust, and weight/gravity) <i>(Identify and explain lift, drag, friction, thrust, and gravity in rockets. (8.T.6.4))</i></p>	
		<p><input type="checkbox"/> Introduction relates forces of flight to planes and rockets using appropriate vocabulary.</p>	
		<p><input type="checkbox"/> Introduction identifies and explains propulsion and guidance systems of the rocket. <i>(Identify and describe three subsystems of a transportation vehicle or device, i.e., structural, propulsion, guidance, suspension, control, and support. (8.T.6.3))</i></p>	
		<p><input type="checkbox"/> Materials section identifies specific properties (weight, strength, flexibility, etc) of materials used are identified <i>(Describe why the materials you used were important or unique to your designs. (8.T.1.1))</i></p>	
		<p><input type="checkbox"/> Methods section explains how you designed and built the rocket to fly high and straight.</p>	
		<p><input type="checkbox"/> Results section presents tables, diagrams, and calculations accurately.</p>	
		<p><input type="checkbox"/> Discussion section gives a clear and accurate explanation for results and relates results to design choices.</p>	
		<p><u>Quality and Format</u></p> <p><input type="checkbox"/> No spelling or grammar errors exist in your writing.</p>	
		<p><input type="checkbox"/> All work handed in on time.</p>	
		<p><input type="checkbox"/> Your report is follows official Murdoch lab report format.</p>	
		<p><input type="checkbox"/> Final design drawing and graphs are tidy, accurate, and to scale.</p>	

**Water Bottle Rockets Laboratory Report
Steps to Success**

1. Have you completed all required sections of the lab report?	<input type="checkbox"/>
2. Does your results section include (with units!) an explanation of what you measured and what that tells you about the success of your design?	<input type="checkbox"/>
3. Did you include all design drawings and diagrams with proper units labeled?	<input type="checkbox"/>
4. Have you stapled in order: Rubric, final draft, rough draft, design drawing, graph of rocket height?	<input type="checkbox"/>

Teacher Comments and Suggestions

You did a great job on this!	Things that can be revised

Parent/Guardian Signature

Date