

Bottle Rocket Rubric-Part 1

Science Criterion B: Inquiring and Designing	<ul style="list-style-type: none"> i. describe a problem or question to be tested by a scientific investigation ii. outline a testable hypothesis by a scientific investigation iii. describe how to manipulate the variables, and describe how the data will be collected iv. design scientific investigations 	SCIENCE Criterion made simple
0	Doesn't meet any of the criteria below	Student does not complete
1-2	<ul style="list-style-type: none"> i. state a problem or question to be tested by a scientific investigation, with limited success ii. state a testable prediction iii state a variable iv. design a method, with limited success. 	<ul style="list-style-type: none"> i. Problem-Problem stated is vague, unclear or difficult to test. ii. Hypothesis-Presents final group drawing is sloppy with few to no labels, measurements, or materials iii. Variable-Variable chosen is vague, and/or how data will be collected is not described. iv. Procedure-Presents an incomplete procedure with vague detail.
3-4	<ul style="list-style-type: none"> i. state a problem or question to be tested by a scientific investigation ii. outline a testable hypothesis using scientific reasoning iii outline how to manipulate variables, and state how relevant data will be collected iv. design a safe method in which he or she selects materials and equipment. 	<ul style="list-style-type: none"> i. Problem-Problem is outlined and able to be tested. ii. Hypothesis-Outlines reasons for the chosen design with vague analysis. Presents final group drawing with few labels, measurements, or materials iii. Variable-Outlines how the variable will be manipulated and how data will be collected. iv. Procedure-Presents a procedure with vague detail.
5-6	<ul style="list-style-type: none"> i. outline a problem or question to be tested by a scientific investigation ii. outline and explain a testable hypothesis using scientific reasoning iii outline how to manipulate variables, and outline how sufficient, relevant data will be collected iv. design a complete and safe method in which he or she selects appropriate materials 	<ul style="list-style-type: none"> i. Problem-Problem is clearly stated and able to be tested. ii. Hypothesis-Explains reasoning for the chosen design. Presents final group drawing with labels, measurements, and materials iii. Variable-Variable chosen is explained including how data will be collected. iv. Procedure-Presents a step-by-step design guide with detail
7-8	<ul style="list-style-type: none"> i. describe a problem or question to be tested by a scientific investigation ii. outline and explain a testable prediction using correct scientific reasoning iii describe how to manipulate variables, and describe how sufficient, relevant data will be collected iv. design a logical, complete, and safe method in which he or she selects appropriate materials and equipment 	<ul style="list-style-type: none"> i. Problem-Problem stated is detailed and able to be tested. ii. Hypothesis-Justifies reasoning for the chosen design with detailed explanation. Presents final group drawing with accurate labels, measurements, or materials in meticulous detail. iii. Variable-Variable chosen is described in detail with a clear explanation of how the data will be collected iv. Procedure-Communicates a step-by-step procedure with thorough detail.
OVERALL SCORE	Criterion B:	