

Hot Air Balloon Project Rubric

Names: _____

Criteria

3

4

2

1

Balloon - group				
Criteria	1	2	3	5
A completed balloon is present on launch day	A balloon is present but not ready to launch or incapable of launching.	A balloon is present but does not show evidence of being able to leave the launch pad.	A balloon is present and is about to leave the launch pad but fails to lift.	A balloon just barely leaves the launch pad. This type of balloon may float or hover, but does not fly upwards.
A balloon is present and lifts off the ground and flies!				
Reflection (x4) - Individual				
1. Analyze each gas law that has been covered in class (Avogadro, Boyle, Charles, Dalton, Gay-Lussac, Combined, and Ideal) and determine if the gas law has any effect on the flight of a balloon. Include an explanation as to whether or not this law can explain the flight of your balloon, from launch to descent.	- Analysis of questions is - Too many grammatical/typographical errors which inhibit understanding - Handwritten / printed copy - Little to no organization	- Analysis of questions is lacking / missing - Many grammatical/typographical errors - Handwritten / printed copy - Poor organization	- Includes observations - Incorrect conclusions or not very in-depth or missing analyses of questions - Some grammatical errors - Document is submitted as a Google Doc - No comment privileges given to instructor and/or document not shared - Some organization evident	- Cites observations from experiments - Few grammatical errors - Some in-depth analysis of each question - Document is submitted as a Google Doc - Comment privileges not given to instructor - Fairly well-organized
2. Describe how the kinetic molecular theory impacts the flight of a balloon.				
3. How does density affect the flight of the balloon? How does the density affect the construction of your balloon?				
4. What advice would you give for another group building their balloon, so that they could learn from your successes and/or failures?				
5. If you had any additional materials at your disposal, what would you use to make your balloon more successful?				

Note: The answers to questions will comprise 15 of the possible 20 points for the reflection. The remaining 5 points will be comprised of the structure of the reflection (i.e. grammar, organization, typed / handwritten / submitted via Google Docs, etc.). Remember to share your document with Mrs. Brockland (bbrockland@d155.org) and submit your reflection at: https://docs.google.com/a/d155.org/forms/d/12tazd5K4XLclstOc9-py5Qry6lvhf3rHLKZ-e_zL8tk/viewform.

Total Score = / 25