

Drop Zone Worksheet

Observations

Sketch your design and modifications made during the testing period. Label all parts.

	Design Sketch the design and label all parts.	Performance Describe how well the design worked.	Improvements List all modifications made to the design prior to retesting.
Initial			
Modified			
Final			

Data Table

Trial	1	2	3	4	5	6	7	8	9	10
On Target (yes/no)										

Post-Lab Questions

1. Explain, in detail, how well your initial design held the marble as it moved down the zip line.
2. What modifications were made in order for the cup to hold the marble successfully?
3. When aiming for the target, which part(s) of your design were the most important for accuracy?
4. When testing the remote release, what problems were encountered?
5. What was the success rate for the modified cup? Use the data table above.
6. Explain the engineering design process used in this activity.
7. Describe the motion of the marble after it was ejected from the cup.
8. How did this activity demonstrate Newton's first law of motion?