## **EXPERIMENTAL DESIGN**

You must conduct an experiment dealing with the task given below. You must use at least two of the materials below. You have 40 minutes to conduct, write up and clean up your experiment. Good Luck!

**TASK:** Thanuja Neerukonda wants to host a birthday party for Pranathi Gummadi in March. For a really important game during the birthday party, she needs a perfect ball: a ball with the fastest vertical speed. In order to make Thanuja happy, conduct an experiment with this task in mind and the materials given. Please do not break anything (this will make her even happier).

## **MATERIALS GIVEN:**

Meter Stick	Stopwatch
Tennis Ball	Metal Ball
Ping pong Ball	Marble

## Yes, it might be easy to come up with the answer, but in order to receive points you need to follow a clear and concise experimental write-up. Your write-up must include all of the following parts clearly labeled!

- 1. Statement of Problem
- 2. Hypothesis with rationale
- 3. Variables

Dependent, Independent, Controlled

- 4. Standard of Comparison
- 5. Materials and Procedure
- 6. Qualitative Observations
- 7. Quantitative Data: including data tables, graphs, and statistics
- 8. Analysis and Interpretation of Data
- 9. Possible Experimental Errors
- 10. Conclusion
- 11. Recommendation for Further Experimentation