**Inertia Lab**

**Objective:** To investigate how mass affects inertia.

**Problem:** Which object, the tiny paper square or the coin, will drop into the beaker more times?

**Hypothesis:** If I flick the index card off the beaker, then the ______________ will land in the beaker more times because ____________________________________________

**Materials:** 250 ml beaker, coin, index card, tiny paper square, balance

**Procedure:**
1. Mass each object.
2. Place the index card so that it is centered on top of the beaker.
3. Set the tiny paper square on the center of the index card.
4. Flick the card so that it moves forward for 5 trials.
5. Put a checkmark on the Data Table if the object falls in the beaker and an “X” if it does not fall into the beaker
6. Repeat steps 1-4 with the coin.

**Data/Observations:**

<table>
<thead>
<tr>
<th>Object</th>
<th>Mass (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Object</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Trial 3</th>
<th>Trial 4</th>
<th>Trial 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coin</td>
<td></td>
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</tbody>
</table>

**Conclusion Questions:**

1. What type of force caused the 3X5 card to move, a push or a pull?+2

2. What object(s) is force being applied to?+2

3. Using the terms mass and inertia explain, why one object should’ve fallen in the beaker more times+2

4. Write a conclusion statement. +3

5. Graph your data from Table 2. The y-axis will be the number of times the object fell in the beaker. You may use the back of this paper. (Hint: this data has categories.)+10