**Rubber Band Graphing**

**Procedure:**

1. Tape the Popsicle stick to the zero end of the ruler so that only 1” of the popsicle stick is sticking up over the numbered side of the ruler.
2. Place the ruler on the edge of a desk or table so that the popsicle stick is against the edge of the table.
3. Tape the ruler down to the table.
4. Shoot rubber bands that have been stretched different lengths to see the relationship between stretch length and the distance of flight.

*Note: Try to keep the angle of launch the same for every shot to get the most accurate distance.*

*Another Note: Each stretch distance should be repeated 3-4 times to get more accurate results.*

1. Once all the data has been collected, find the average distance for each stretched distance and graph their results (stretched distance (x) vs. distance of flight (y)).

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| **Stretch Length (cm)** | **Flight Length #1 (cm)** | **Flight Length #2 (cm)** | **Flight Length #3 (cm)** | **Flight Length #4 (cm)** | **Average Flight Length (cm)** |
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1. Analyze the graph. Does it make a linear relationship? If it does not, try to linearize the graph. Once you have found the a slope, give the relation between stretch length and distance of flight in the box below.