

Student Names: _____, _____

OBJECTIVE: Create a bungee line for an object to allow it the most thrilling, yet **SAFE**, fall from a height of 3 or more meters.

Each group gets their own object, a meter stick, and 7 *new* same-size rubber bands.

Directions (*Encourage everyone in your group to participate! You will score each other later!*)

1. Measure the objects height. Record this as rubber band length of 0.
2. Connect 2 rubber bands with a slipknot.
3. Wrap one of the two rubber bands tightly around the object.
4. Drop the object, holding the rubber band level with the meter stick.
5. Record the object's fall using the lowest point the object reaches in centimeters. This number is your rubber band length of 1. Do three trials for each length.
6. Add another rubber band, drop Barbie, and record (3 trials). Do this for a total of six rubber band lengths.

Number of Rubber Bands	Distance of Fall (cm)		
0			
1			
2			
3			
4			
5			
6			

7. Graph your data on a coordinate plane.
8. Draw a Line of Best Fit.
9. Determine the Long Height you will drop your object from and record below. Then make a prediction of how many rubber bands you will need to get the object close to the floor without smashing into it. Once your prediction is made you may not change it. You only get one chance to drop your object. Good luck!

Long Height: _____ Prediction of Rubber Bands to Use: _____

Actual Distance of Fall: _____ Success or Smash?

