

## “Scientists Are Thinkers”

**Question/Problem: What do we want to find out?**

Will an object released from a higher point make an object at the bottom of a ramp move farther?

**Hypothesis: What do we think we will find out? Make a prediction.**

Objects released at higher points will move an object at the bottom further because there is more force

**Materials: List what you will need to test the hypothesis**

1. 2 rulers with cm markings
2. A deli container with a hole for a golf ball to fit through on the side.
3. 8 Books of equal width
4. Golf Ball

**Procedures/Steps: State step by step what you are going to do.....specifically**

1. Pile 3 books on top of each other
2. Place one of the rulers so that the edge is at 5cm on the books
3. Place the deli cup 10 cm from the bottom of the ruler ramp
4. Roll the ball down the ramp from the 10cm line
5. Measure the distance the deli cup moves
6. Place 1 more book to the ramp and repeat.
7. Do this with 2, 3, and 4 more

**Observe and Record Data: List, picture, chart, graph**

# of Books	Distance Traveled (cm)
4	
5	
6	
7	
8	

**Analysis/Results: What does the data tell us?**

Based on the data table, the larger the number of books, the farther the ball pushed the deli cup.

**Conclusion: What did I learn? What does it make me want to learn next?**

I learned that the higher the ramp the more force the ball will have to push the deli cup farther.

I would like to experiment to see if I released the ball at different positions along the ramp, if that would also increase the force of the ball hitting the deli cup.