

# Gummy bears in space assignment



**ASSIGN  
BUSTER**

Popsicle sticks and attach them into a shape with a rubber band. 2. Attach a 3rd Popsicle stick across the center of the other Popsicle sticks with a rubber band. 3. From there, stretch a rubber band across the top. 4. Then, take the gummy bear and suspend it back against the front of the rubber band and let go! 5. Lastly, record how far it went, using centimeters. Qualitative Observations I noticed that the further I pulled the rubber band back, the more potential energy was created, which increased the distance the gummy bear went.

Quantitative Results Statistics Mean: 12. Mm Median: 8. Mm Mode: None Range: mom Analysis/Results The data shows that when you pull back the rubber band, it creates potential energy and, when you let go of the rubber band it turns to kinetic energy. The data also shows that the further I pulled the rubber band back the further the gummy bear went. The statistics show that there is no mode because none of the distances were the same.

For example, in Trial 1, I only pulled the rubber band back a little bit and it went 6. 5 meters. Then in Trial 2, I pulled the rubber band back twice as far as in Trial 1 and it went 8. Meters. Finally, in Trial 3, I pulled it back as far as it would go and it went 23. 5 meters. Possible Experimental Errors

Accidentally using the back part of the rubber band to launch the gummy bear. ; Launched the gummy bear backwards.

Conclusion This experiment proves that you can build something out of Popsicle sticks and rubber bands to launch a gummy bear. The purpose of this experiment was to show how a rubber band can create enough potential energy to launch a gummy bear in space. My hypothesis stated that if I tie

three Popsicle sticks in a certain way and, eighteen the rubber bands around them, that when you pull the rubber band back it will create enough potential energy to launch a gummy bear.

The data from the experiment supports my hypothesis. Recommendations for Further Experimentation and Practical Applications I personally think we should be given more materials and more guidance for this experiment. Another possible experiment to prove potential energy is having different objects and lifting them up to the second floor off building and drop it. You could then measure this by seeing how fast it takes the object to reach the ground and compare it to other objects.