

### **Soaring Straws Lab Conclusion:**

1. What type of potential energy is represented by stretching the rubber band?      Elastic
2. What type of energy conversion takes place as soon as you release the rubber band?    Changes from PE to KE
3. What type of potential energy is represented when the rocket pauses in mid-air right before it starts to fall to the ground?  
A. Gravitational
4. Where is the potential energy of the rocket at its maximum?    At the highest point
5. Where is the kinetic energy of the rocket at its maximum?  
At the very bottom before it hits the ground
6. Write an answer statement for the purpose in complete sentences.  
The impact that elastic PE of the rubber band launcher has on the gravitational PE of a straw rocket is that the more you stretch the rubber band the higher the rocket will fly and the more gravitational PE it will have.

### **Bounce Ball Lab Conclusion**

1. Compare and contrast Potential energy, Kinetic energy: PE= stored energy KE= energy of motions
2. Explain the transformations from PE to KE throughout this experiment?  
A. When you drop the ball and it falls      PE to KE  
B. Right after the ball hits the ground on the way back up      PE to KE  
C. Right at the very top of the bounce and the way back down      PE to KE
3. When did the ball have the most kinetic energy in this investigation? Explain.  
The ball had the most KE right before it hit the ground because that is where it had built up the most speed.
4. How were you able to increase the amount of potential energy the ball had? I was able to increase the amount of potential energy the ball had by increasing the height from which it was dropped.
5. Extension: If we were to complete this experiment again, what could we do differently to change the potential energy? Change the size or weight of the balls used.