## Dropped Ball Investigation

You will work with your partner to complete a short investigation about the forces involved in dropping a ball. Experiment several times with dropping the ball, think about what forces are acting before you drop the ball and after it is dropped. Each person should take a turn-see if you can "narrate" the forces before you start to analyze them.

On SN page 31 set up a T-chart that looks like this:

|  | Before Dropping the Ball | After Dropping the Ball <br> (before it hits floor) |
| :--- | :--- | :--- |
| Force <br> Interaction <br> Table |  |  |
|  |  |  |
|  |  |  |
| Model of <br> Forces <br> (show all in <br> pairs, both <br> contact and <br> distance) |  |  |
| Free Body <br> Diagram <br> (show only <br> forces acting <br> on the ball) |  |  |

Challenge: If energy is neither created nor destroyed explain why the ball bounces less high with each bounce and eventually does not bounce at all.

When you are done get a sticker from me and start the HW on page 30.

