

## Energy Storage (pie charts)

Name: \_\_\_\_\_

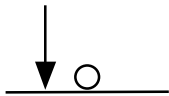
Date: \_\_\_\_\_

Period: \_\_\_\_\_

Use pie charts to analyze the energy changes in each situation given.

- Carefully label the pies to correspond with the positions of the objects given at different times.
- The pies should be accurately divided and labeled with the energy storage mechanisms involved ( $E_k$ ,  $E_g$ ,  $E_{int}$ ,  $E_{el}$ ,  $E_{chem}$ ).

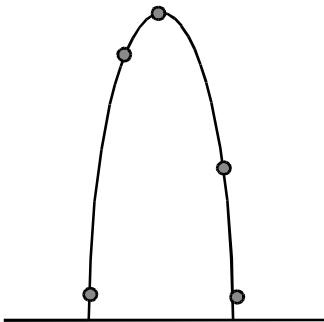
1. A ball is held above the ground, and then is dropped so it falls straight down. (Restrict your analysis to the ball moving in the air, BEFORE it hits the ground.)



2. A rubber band is stretched on the end of your finger, then launched.



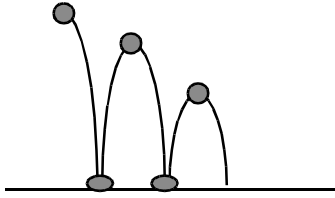
3. A baseball is thrown up in the air and then falls back down. Place velocity vectors (arrows) beside each image of the baseball in the drawing, and do a pie chart for each position.



4. A ball rolls to a stop on the floor.

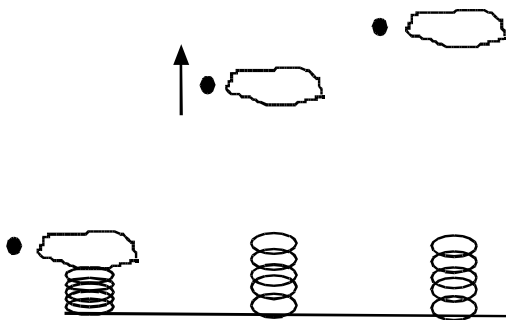


5. A superball is dropped and bounces up and down. Do a pie chart for each position of the ball shown.

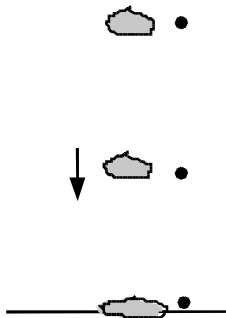


Why does the ball not bounce as high each time? Where did the energy "go"?

6. An object rests on a coiled spring, and is then launched upwards.



7. A piece of clay is dropped to the floor.



8. A truck is driven at constant speed down the street.

