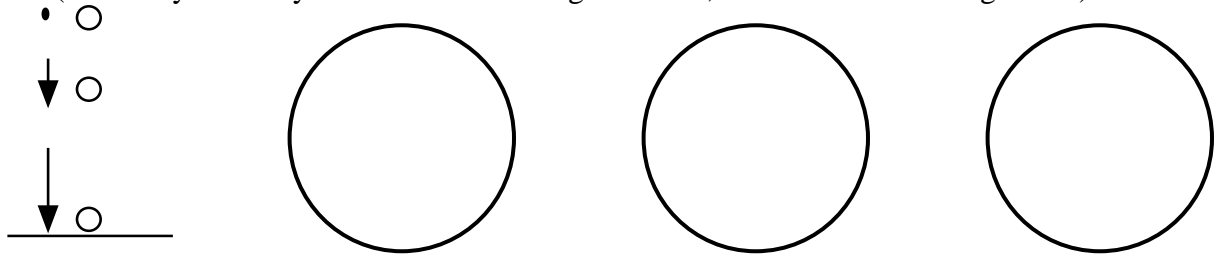


Energy: Worksheet 1

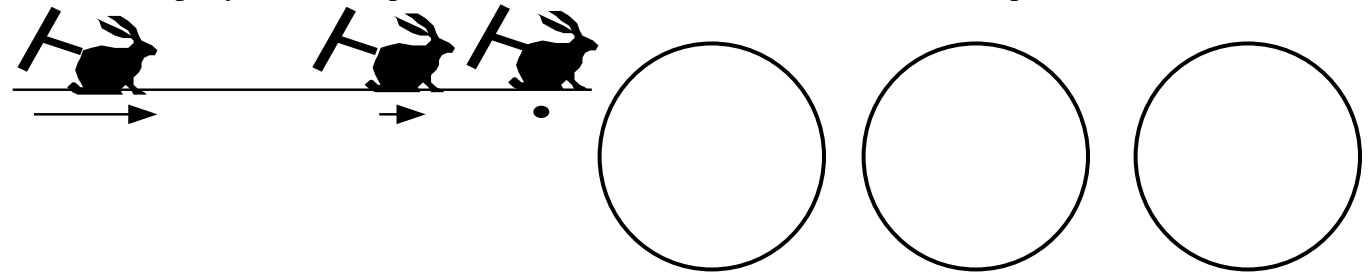
Use pie charts to analyze the energy changes in each situation given.

- Carefully label the pies to correspond with the positions of the objects given. (A, B, C, etc.)
- The pies should be accurately divided and labeled with the energy storage mechanisms involved.
- The arrows in each diagram are vectors to show velocity. A dot represents a velocity of zero.

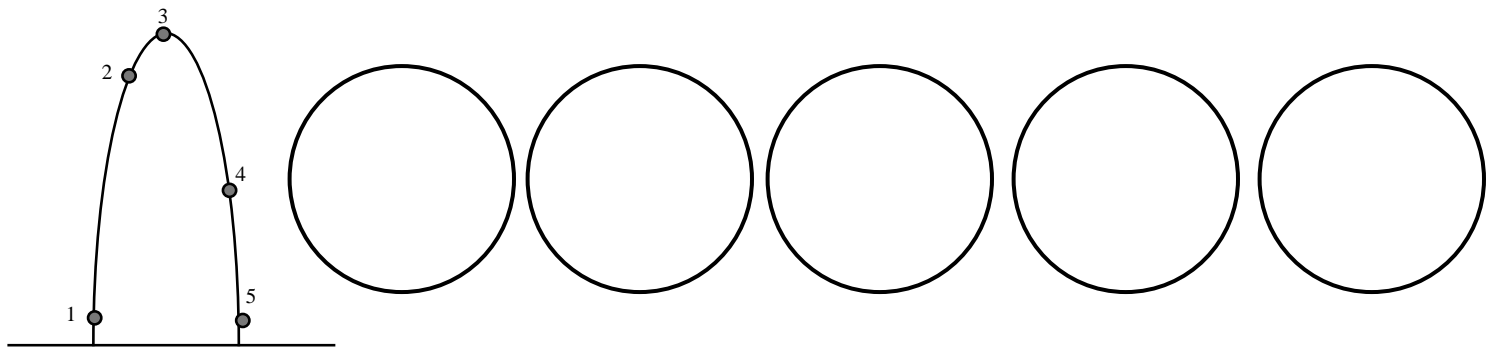
1. A ball is held above the ground, and then is dropped **through the air** so it falls straight down. (Restrict your analysis to the ball moving in the air, BEFORE it hits the ground.)



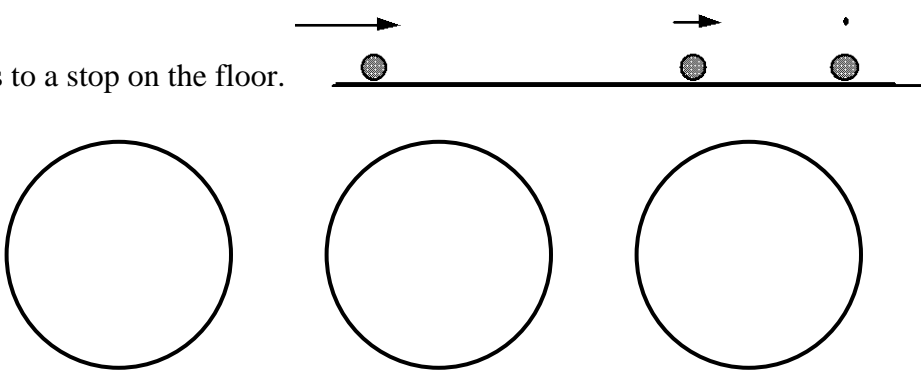
2. A wind-up toy is wound up, then "walks" across a table and comes to a stop.



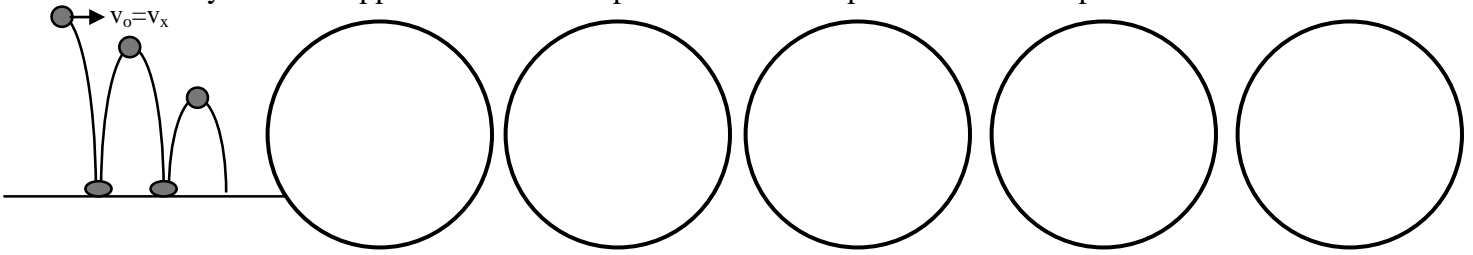
3. A baseball is thrown up **in the air** and then falls back down. Do a pie chart for each position.



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

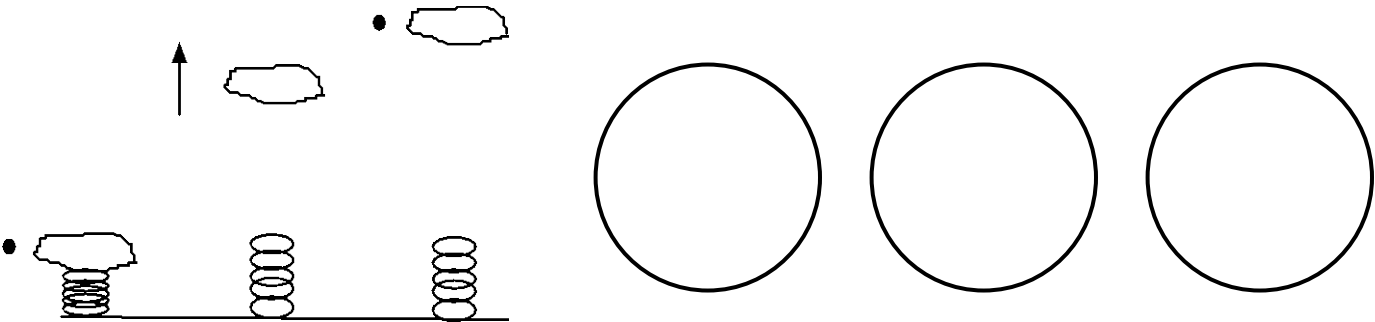


5. A bouncy ball is dropped and bounces up and down. Do a pie chart for each position of the ball shown.

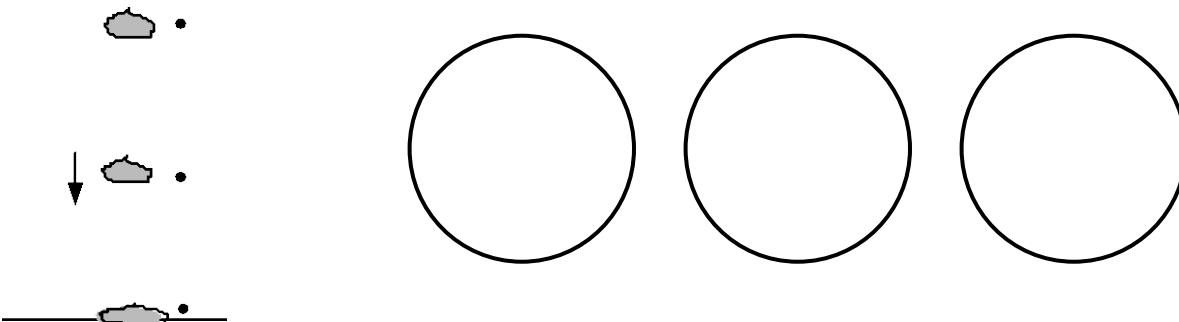


Why does the ball not bounce as high each time? Where did the energy "go"?

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



7. A piece of clay is dropped and falls to the floor through the air.



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

