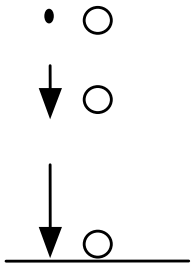
Name _____
Date_____

Energy Exercise 1: Qualitative Analysis - Pie Charts

- Construct a system schema for each situation. Designate your choice of system with a dotted line. On this worksheet the Earth will always be included in your system.
- Carefully label the pies to correspond with the positions of the objects given.
- The pies should be divided and labeled with the energy storage mechanisms involved.

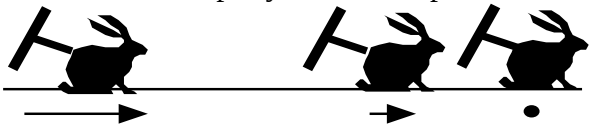
NOTE: Arrows stand for speed and direction of movement. The longer the arrows the greater the speed.

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



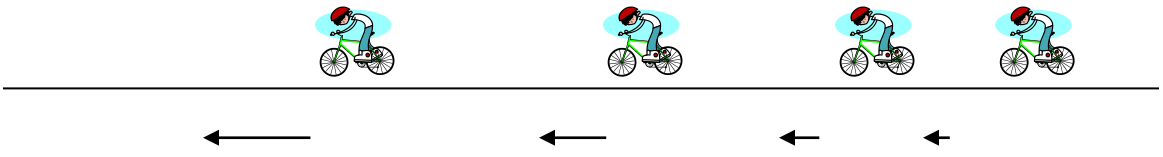
SYSTEM SCHEMA	ENERGY PIE CHARTS

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



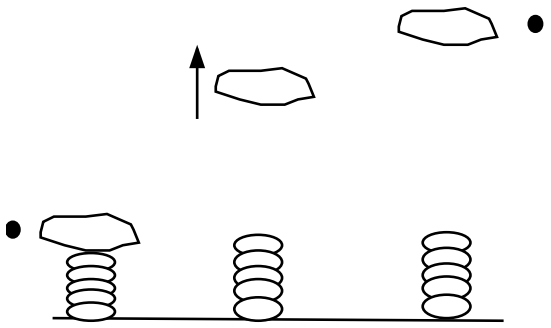
SYSTEM SCHEMA	**ENERGY PIE CHARTS**

3. A boy on a bike starts from rest and speeds up.



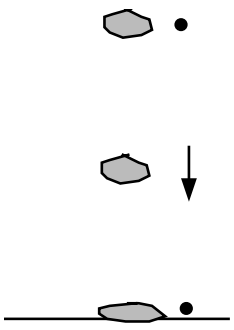
SYSTEM SCHEMA	ENERGY PIE CHARTS

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



SYSTEM SCHEMA	ENERGY PIE CHARTS

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

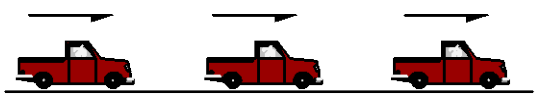


SYSTEM SCHEMA	ENERGY PIE CHARTS

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

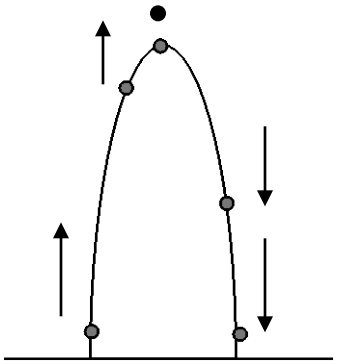
SYSTEM SCHEMA	ENERGY PIE CHARTS

7. An alternative fuel truck running on switchgrass biofuel is being driven down the street. The arrows above the truck signify that the truck is traveling.



SYSTEM SCHEMA	ENERGY PIE CHARTS

8. A baseball is thrown up in the air and then falls back down.



SYSTEM SCHEMA	ENERGY PIE CHARTS