Harnessing Human Energy Review

Part I. *Identify the energy in each statement as kinetic OR potential.*

1) _____ A mouse running away from a cat.
2) _____ A rock sitting on top of a hill.
3) _____ A bird resting on its nest in a tree.
4) _____ A car driving down Harmony Rd.
5) _____ A bowling ball rolling down the lane.

Part II. *Use the words kinetic OR potential to fill in the blanks below.*

When a pecan pie is resting on a windowsill, all of its energy is _____ energy; it has no _____ energy because it is not moving. However, accidentally, the pecan pie was pushed off the windowsill and is falling through the air. At that time, the amount of _____ energy is decreasing while the amount of _____ energy is increasing as the pecan pie picks up speed. Right before the pecan pie hits the ground, all of its energy is in _____ energy. It does not have any _____ energy because the pecan pie is in motion.

Part III. *Remember that kinetic energy depends on **mass** and **speed***
** Remember that mass depends on the weight of an object and also how big it is*

1) A bowling ball and a soccer ball are both rolling at the same speed. Which has more kinetic energy?

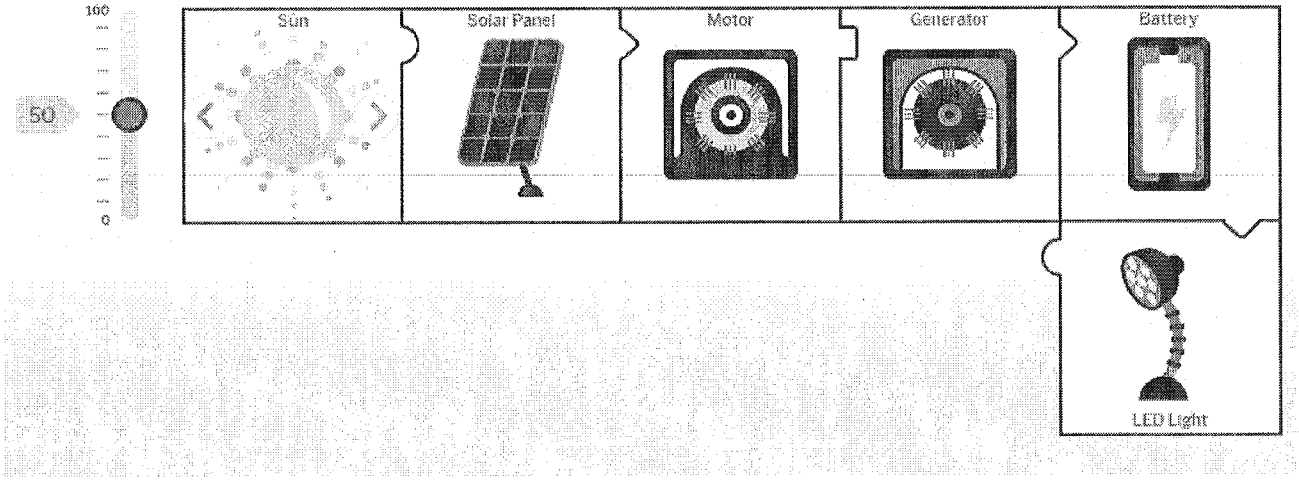
2) A rock and a feather are dropped from the top of a building. Which has more kinetic energy?

3) The same baseball is thrown two different times. The second throw is faster than the first throw. Which has more kinetic energy?

4) A car drives 45 miles per hour down Winchester Rd. It then drives 65 miles per hour down the highway. At which time does the car have more kinetic energy?

Part IV-Describe what is happening in the picture below frame by frame in the space provided. Be sure to use the words below. Some words may be used more than once, **please underline the word the <u>first time</u> you use it.**

kinetic energy, potential energy, light energy, electrical energy, transfer, system and convert



In this system where is the energy ***<u>created</u>***? _____

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