1. What are some observations we can make to determine if something has energy?

________________________________________________________________________________________________

2. When an object moves, where does the energy come from? __________________________________________
________________________________________________________________________________________________

3. Where does a spring in a ball point pen or a pogo stick get its energy? ________________________________
________________________________________________________________________________________________

4. Explain how the end ball on the right of a Newton’s cradle moves when the end ball on the left was lifted
and released. __________________________________________________________________________________
________________________________________________________________________________________________

5. Why do the balls of the Newton’s cradle eventually stop? ____________________________________________
________________________________________________________________________________________________

6. How could you decrease the amount of energy an object has? _______________________________________
________________________________________________________________________________________________

7. The relationship between kinetic energy and speed is ____________________________________ proportional.

8. A graph of KE vs the mass of an object is _____________________________________.

9. In order for a roller coaster to work, why does the hill the cart climbs need to be higher than the top of the
loop? _________________________________________________________________________________________
________________________________________________________________________________________________

10. What are two ways engineers use their understanding of KE and PE to make their designs better/safer?
________________________________________________________________________________________________
________________________________________________________________________________________________