Name: _____

Period:_____

HW Unit 8:2 — Energy
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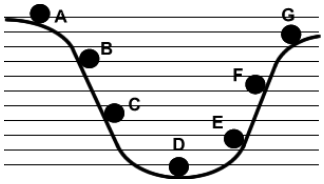
B-day: Due Tues., 2/19 (Assig: 2/15)
A-day: Due Wed., 2/20 (Assig: 2/16)

1. What is energy?



2. Kinetic or Potential Energy?
   A) ____ Point A
   B) ____ Point D
   C) ____ Point C

3. What kind of energy (use your notes for the types)
   A) ____ What powers a Bunsen burner.
   B) ____ What friction creates.
   C) ____ What an atom bomb uses.
   D) ____ A rolling ball.
   E) ____ What starts your car.
   F) ____ What your headlights give off.

4. Give three kinds of energy in a lit match. (And why.)

5. Prove an object on a desk has energy.

6. What is 4^2?
7. If $v^2 = 36$, what is v?

8. A 25 kg falling object is going 4m/s while it is still 5 m in the air. Give the variable list:

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9. What is "g" (and how much is it)?

Increases or Decreases?

10. ____ Kinetic energy: if the mass increases.
11. ____Potential energy: if the object is higher off the ground.
12. ____Kinetic energy: if the object is moving slower.
13. ____Potential energy if the object has less mass.
14. ____Potential energy if an object is moved to the moon.

15. A 6 kg object moving 2 m/s has how much kinetic energy?
    (This is the last time I write "show work" - I expect it, now.)

16. A 3 kg object is at the top of a 4 m tall table. Calculate its potential energy.

17. A 8 kg object has 64 Joules of kinetic energy.
    A) Write a variable list and formula:

    B) Put numbers into the formula:

    C) Solve.