Name: _____

Period:_____

HW Unit 8:7 — Test Review
Mr. Murray, IPC
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A-day: Due Wed., 3/7 (Assig: 3/5)
B-day: Due Thurs., 3/8 (Assig: 3/6)

1. What is conduction?

2. What is convection?

3. What is radiation?

4. What is thermal equilibrium?

5. What is potential energy?

6. What is kinetic energy?

7. What is work?

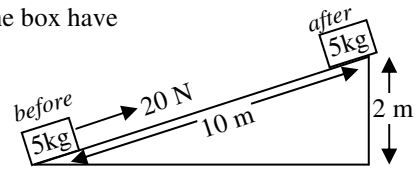
8. What kinds of energy?
   A) A box is on the ground at rest.
   B) The box is pushed along the ground.
   C) After it is moving.
   D) It goes up a hill.
9. A 4 kg ball is thrown into the air going 10 m/s.
   A) How much energy does it have?

   B) How much energy does it have at the top?

   C) Using B) calculate how high the ball goes.

HW Unit 8:7

10. How much energy does the box have before?
11. What kind of energy is necessary to move the box up the ramp?



12. Calculate this energy.

13. What kind of energy do you get out at the top?
14. Calculate this energy.

15. Calculate the efficiency of the energy transfer.

16. When a piece of paper burns what kinds of energies are there?

17. To increase an object's energy do you add or subtract work?
18. In the same amount of time, which of the following does more work: an 80 W bulb or a 20 W bulb?

19. If an object is moving and slows down…
    A) What kind of energy does it have before?
    B) What kind of energy after?
    C) Choose one: $E_{before} = E_{after}$; W added; W subtracted.
    D) Write a Conservation of Energy equation (tell the energy transfers in an equation).

    E) Put in the equations for each part of the part D.