

PreAP: due Tues., Nov 1 (Assigned: Mon., Oct 24)
Reg: due (Assigned: Tues., Oct 25)

Energy 1

1. A person holds onto an object for 2 minutes, but doesn't move it. Is work done on the object?
2. A person pushes 10 N down on a lever to lift a 25 N object.
Fout = _____
Fin = _____
Find the MA of the lever.
3. A pulley has 3 support ropes. What is the MA of the pulley system?
4. What kind of energy is being shown: Ek, Ep, W, or PEel?
 - A. ___ An object is pushed for 3 m.
 - B. ___ An object is going 6 m/s.
 - C. ___ A spring is compressed.
 - D. ___ An object on top of a 3 meter table.
 - E. ___ Friction stopping an object from moving.
 - F. ___ A moving car.
5. Name the six types of simple machines.
6. A 3 N force pushes on a object for 20 meters. Find the work done (include units).
7. A 200 kg object is going 4 m/s. Find its kinetic energy.
8. A 10 kg object is 15 meters up a hill. Find its potential energy.
9. A 4 kg object compresses a spring 0.12 meters. The spring constant for this spring is 2.3 N/m. Find the elastic potential energy stored in the spring.

10. What do we call the pivot point for a lever?

11. What kind of simple machine is this picture?



12. A knife is what kind of simple machine?

13. A prybar (to pry something open) is what kind of simple machine?

TAKS ON BACK

14. Find the oxidation numbers for
- A. oxygen: ____
 - B. magnesium: ____
 - C. carbon: ____
 - D. Aluminum: ____
15. If you add 2 protons to oxygen, what would you have?
16. If I added 3 neutrons to carbon, what element would I have?
17. If I took away 2 electrons from aluminum, it would become an ____.
18. What charge would the aluminum in #17 have?
19. Using the procedure from the bellwork, find the balanced chemical formula for a compound made from Sodium and Oxygen: