

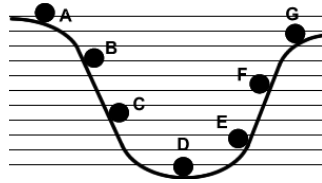
Name: \_\_\_\_\_

Period: \_\_\_\_\_

HW Unit 8:3 — Energy Transfers  
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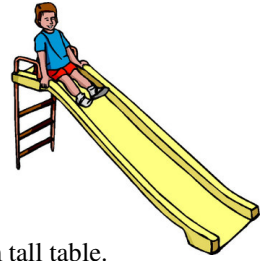
A-day: Due Fri., 2/23 (Assig: 2/21)  
B-day: Due Mon., 2/26 (Assig: 2/22)

1. What kind of energy is gained from B to D?
2. What kind of energy is gained from F to G?



3. What kind of energy transfers?  
A. A nuclear power plant.

5. What kind of energy:  $E_p$ ,  $E_k$ , or Work?  
A. \_\_\_\_\_ At the top of the slide?  
B. \_\_\_\_\_ Friction while sliding?  
C. \_\_\_\_\_ Part way down?  
D. \_\_\_\_\_ How they got to the top?  
E. \_\_\_\_\_ At the bottom.



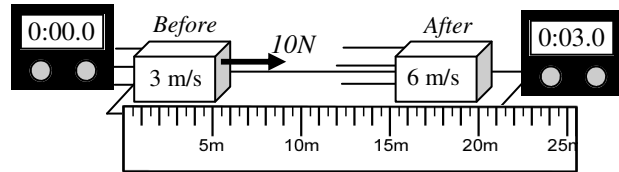
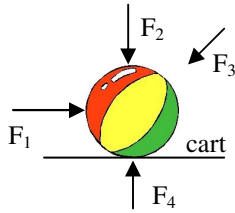
6. A person lifts a 3 kg box to the top of a 2 m tall table.  
A. Find the energy of the box on the table.

4. Energy increases or decreases?  
A. \_\_\_\_\_ A force pushes something up into the air.  
B. \_\_\_\_\_ When your car brakes.

- B. Where did that energy come from?  
C. How much work was done to lift the object?  
D. To calculate power you would need what?

7. A less powerful force does less work. True or false and why?

8. Which forces do work?
9. Which force does partial work?
10. Which forces do no work?
11. Find the work done by a person pushing a cart up a 3 m hill with 12 N.



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12. If the above person pushed for 10 seconds, find power.

14. Find the work done on the above object.

15. Find the power of the force.

13. What kind of energy did the above work turn into?

16. The work became what kind of energy?

17. BONUS: Find the mass of the box.