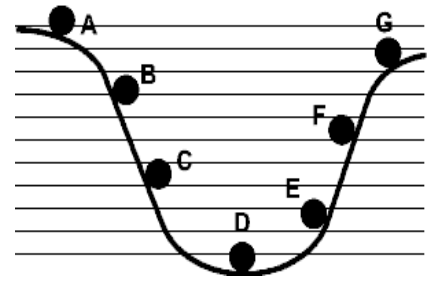
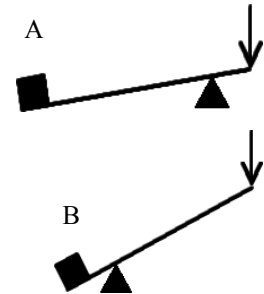


Energy 5

1. True or False? A more powerful motor can do more work? (And why?)
2. Explain the differences between kinetic and potential energy?
3. Use the picture at the right to answer the following:
 - A. Which position has the greatest E_k ?
 - B. Which position has the least E_p ?
 - C. Which position has the greatest E_p ?
 - D. Which position has the least E_k ?
 - E. Which position has the third greatest E_p ?
4. An object going 5 m/s is speed up by a force. Explain the energy transfers, what kind of energies there are, where they go, what causes them, etc.



5. How much power is necessary to do 5,000 J of work in 100 seconds?
6. Which of the levers at the right has the larger mechanical advantage?
7. On lever A label D_e , D_r , F_i , and F_o .
8. True or False and why: when Mr. Murray lifted students with the lever he got more work out than he put in.



9. An object is thrown up at 15 m/s. How high does it go?
10. A 15 kg object going 8 m/s slows down to 3 m/s. If it stops in 5 m, find the force of friction.
11. A spring with spring constant 1.3 N/m is compressed 2 m. When released it pushes a 2 kg object. Find how fast the 2 kg object is going afterward.
12. A 3 kg rock is dropped from a 25 m ledge. If air friction is 28 N, find how fast it is going at the bottom.

13. Will water go into or out of the circular membrane?
14. The water will move by _____.
14. Which way will the CH_4 move in the closed container?
15. The movement of CH_4 is called _____.
16. A cell membrane only allows certain substances to pass through it. It is known as a _____.

