13 Energy

Name_____

Worksheet B: Work and Energy Concepts (Textbook Sections 5.2, 5.3) Inquiry Physics

In the space to the left, write the answer that best completes each statement.

_____ 1. List three different units which are used to measure work and/or energy (NOT power).

_____

_____

_____ 2. Energy is the ability to do _____ .

_____ 3. Energy is easily _____ from one form to another.

_____ 4. _____ energy is stored energy.

_____ 5. _____ energy is the energy of motion.

_____ 6. A falling stone has the ability to do _____ .

_____ 7. An object's position above a surface determines its _____ potential energy.

_____ 8. The path that an object follows as it is raised does not affect its _____ energy.
(Need a hint? Think about how you solved #11 on 13 Worksheet A - that's the worksheet where your group invented equations for U_g and K.)

_____ 9. Under ideal conditions, if a 300 N mass is lifted 1 meter, it should provide _____ J to do work as it falls back to Earth.

_____ 10. The position at which U_g=0 is called the _____ _____ .

_____

_____ 11. Energy is always _____ when it is changed from one form to another.

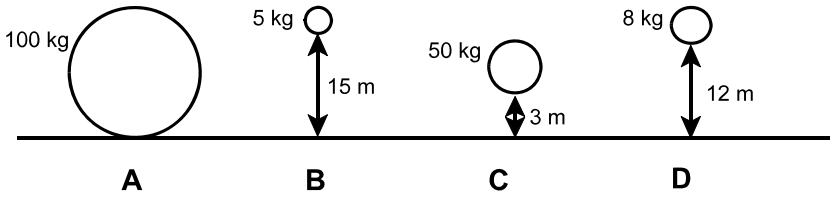
_____ 12. An object is falling toward the earth. The loss of _____ energy from the object is equal to its gain in _____ energy.

_____

In the space to the left, write the letter of the best answer to each question.

_____ 13. Which of the following is an energy unit?
A. watt B. joule C. newton•second D. joule/second

_____ 14. Which object below has the most potential energy relative to the surface?



_____ 15. Which object below has the most kinetic energy?