

Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet Mechanical Energy

A. Write the letter of the correct answer in the space provided.

Choices for items 1–5:

- | | |
|---------------------|----------------------|
| A. kinetic energy | C. electrical energy |
| B. potential energy | D. mechanical energy |

- _____ 1. If you increase an object's velocity, which energy is added to the system?
- _____ 2. What do you call the sum of kinetic energy and potential energy?
- _____ 3. In a diving pool, when the diver jumps up, he/she loses kinetic energy. Which energy will he/she gain?
- _____ 4. A juggler in a children's party juggles a ball at a height exchanging left to right. What form of energy will the ball's kinetic energy change into?
- _____ 5. A group of students went to Pagsanjan Falls; they observed that the potential energy of the water at the top was transformed into _____.

B. An object of mass 200 kg is dropped from a height of 60 m. Fill in the blanks in the following table by computing the potential energy and kinetic energy in each case.

Height at which the object is located (m)	Potential energy ($EP mgh$) (J)	Kinetic energy ($E_K = TME - E_p = \frac{1}{2}mv^2$) (J)	Total mechanical energy ($TME = E_p + E_K$) (J)
60			
40			
20			
0			