

Name:

Date:

Class:

## Power Drag Post-Lab Assessment

**Instruction:** After completing the lab, answer the following questions.

1. How does the work done on the objects compare with the different weights? Example: The bigger the weight, the \_\_\_\_\_ the work done.
2. Which one has more power, the fast movement one or the slow movement one? Explain your choice.
3. What are the factors that determine the work done on an object? (Hint: See the equation.)
4. What are the factors that determine the power used on an object? (Hint:  $P=W/t$ )
5. A 2-kg box is pushed a distance of 3.67 m by a force of 300 N. How much work was done on the box?
6. A 4,500 J amount of work is applied to a 2.2-kg ball that moved a distance of 3.3 m. How much force was applied to the ball?

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7. If a cart is pushed by a force of 300 N with 4,500 J of work, how much distance did it move?
  
  
  
  
  
  
  
  
  
  
8. A box is lifted up in 15 seconds by applying 2,000 J of work on it. How much power was applied on the box?
  
  
  
  
  
  
  
  
  
  
9. A box is pushed with a force of 100 N that moved it a distance of 15 m in 20 seconds. How much power was applied on the box?
  
  
  
  
  
  
  
  
  
  
10. How much work was applied on a box pushed for 10 seconds by a machine with 300 W power?