

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

Date: \_\_\_\_\_

## Work and Power Worksheet

*Answer each question by calculating for the missing variable. Be sure to show all calculation work in the space provided. Please circle your final answer and be sure it has the proper label.*

1. You must exert a force of 4.5 N on a book to slide it across a table. If you do 2.7 J of work in the process, how far have you moved the book?
2. A child pulls a sled up a snow-covered hill. The child does 405 J of work on the sled. If the child walks 15 m up the hill, how large of a force must the child exert?
3. How much work is done on a small car if a 3150 N force is exerted to move it 75.5 m to the side of the road?
4. A crate is being lifted into a truck. If it is moved with a 2470 N force and 3650 J of work is done, then how far is the crate being lifted?
5. If 16,700 J of work is done to shoot the human cannonball down a 3.05 m barrel, then how much force is applied to the person to fire them out the cannon?
6. An elephant pushes with 2000 N on a load of trees. It then pushes these trees for 150 m. How much work did the elephant do?