

NAME:

PERIOD:

DATE:

## Work Work

Answer all questions as best you can. Be specific. Be scientific. Use a textbook to help.

1. What is **work**? (Define work.)

2. Put an "x" by examples of work being **done by me**.

- ☐ I pick up a rock from the ground
- ☐ I carry the rock to another place in the yard
- ☐ I let go of the rock and it drops onto the rock pile
- ☐ I hold my pick in my hand
- ☐ I swing the pick and hit the rock
- ☐ I drag my ball and chain across the ground towards another rock
- ☐ I wipe my hand across my forehead to get rid of the sweat
- ☐ I pull and push on a rock stuck in the ground, but it won't move



3. What is the mathematical formula for **work**? Write out all parts.

4. What are the units for **work**?

5. Jesse wanted to lift his car's cylinder heads off the floor and onto his workbench. The top of the workbench is 1.5 meters off the ground. The force needed to lift the cylinder heads is 1,550 Newtons. How much work does it take for Jesse to lift the cylinder heads?

Show your work (no pun intended)

6. Heidi was scraping an old trunk across her attic floor. The trunk took a force of 350 Newtons to move, and she needed to push it 20 meters to her attic door. How much work did she do?  
Show your work.



7. Devin is carrying his heavy 7<sup>th</sup> grade backpack. It takes 275 Newtons to move the heavy pack anywhere. Now he needs to get from gym to Mr. Frantz' room which is 135 meters away, how much work does it take to haul that backpack?  
Show your work.

8. The Joule is named for who? Get on the computer and find out when he was born and where.