Calculating Work Worksheet

Think about work. Scientifically speaking, in order for something to be work, the force of moving the object must move in the same direction as the distance you are moving it.

Remember, work is when an object moves a distance due to a specific force.

- Work is calculated by multiplying the force of moving the object times the distance moved.
- Work is measured in Newton meters. (NM)
- The formula for work is force x distance = work.
- Force and distance must be in the same direction on an object.

Below are three story problems. Use the formula *force x distance = work* to solve each problem. Make sure you show your work and label your answers.

4. Helen's car ran out of gas and stalled 100 meters from a gas station. Helen knew she could push the car to the gas station. She put her car in neutral and pushed with a force of 40 N. How much work (in Newton meters) did Helen do to get her car to the gas station?

5. Bob mowed the grass every Saturday morning. He pushed the lawnmower with a force of 12 N. Bob's yard is 70 meters long. How much work (in Newton meters) did Bob do to mow from one end of the yard to the other?

6. A huge snow storm dropped 10 inches of snow on Joe's driveway. His driveway is 126 meters long and Joe must shovel to get his car out of the garage. Joe pushes the shovel with a force of 10 N. How much work (in Newton meters) does Joe do to clear one path down his driveway?

LIVEWORKSHEETS