

## Work Worksheet 2

1. Work is the product of the \_\_\_\_\_ exerted on an object and the distance the object moves in the \_\_\_\_\_ of the force.
2. The equation for work is \_\_\_\_\_.
3. The unit for work is the \_\_\_\_\_ which also called the \_\_\_\_\_.
4. Work is done on an object only if the object \_\_\_\_\_.
5. Work is done on an object only if the force and displacement are \_\_\_\_\_.

*For each problem, draw a diagram to make sure the force and displacement are in the same direction.*

6. A person lifts a package weighing 75 N. If she lifts it 1.2 m off the floor, what work has she done?
  7. When 142 J of work is done in pushing a box horizontally 13.3 m, how much force is applied?
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1. An 80 N force has been applied to a block and move it 20 m along the direction of the force. How much work has been done to the block?
  2. Calculate the work done when a 20-N force pushes a cart 3.5 m?
  3. How much work is required to lift a 360 kilogram piano to a window whose height is 10 meters from the ground?
  5. If 100 N force has  $30^\circ$  angle pulling on 15 kg block for 5 m. What's the work?