

Work and Power Worksheet

Name: _____

$$\text{Work} = \text{Force} \times \text{distance}$$

$$\text{Power} = \text{Work} / \text{Time} = \text{Force} \times \text{distance} / \text{time}$$

SHOW YOUR WORK AND REMEMBER YOUR UNITS

1. How much work is done when an 8 N force moves a block 7m? [2 Points]
2. Eva applies 40N force to move her bookcase 3m, how much work did Eva do? [2 Pts]
3. How far will 490 J of work raise a block weighing 7 N? [3 Points]
4. Sheila did 110 J of work to move a chair 2 m to the right. How much force did Sheila use to move the chair? [3 Points]
5. Which is more work, pushing with 115 N over 15m or lifting 20N over 10 m? [2 Pts]
6. How much power does it take to do 500 J of work in 10 sec? [2 Points]
7. How much power does it take to lift 250 N, 40 m high in 2 seconds? [3 Points]
8. If it takes 20 N to move a box, how much power will be needed to move the box a distance of 5 meters in 5 seconds? [3 Points]