

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 a 26N force moves a box of buffalo chicken wings 2.3m? [2 Points]

2. Romeo Santos applies 89N force to move his Ducati 7.5m. How much work did Romeo do? [2 Pts]

3. How far will 45J of work raise a bowl of shrimp Alfredo weighing 9N? [3 Points]

4. Beyonce did 146J of work to move a chair 8m to the right during a dance routine. How much force did Beyonce use to move the chair? [3 Points]

5. Which is more work: pushing a grocery cart of sushi using 115 N of force over 15m OR pulling cheeseburgers with 20N of force over 10 m? [2 Pts]

6. How much power does it take to do 500J of work with Arnold Schwarzeneger in 10 sec? [2 Points]

7. How much power does it take to lift Tom Brady using 250 N of force, 40 m high in 2 seconds? [3 Points]

8. If it takes 500N to move Imagine Dragon's tour bus, how much power will be needed to move the bus a distance of 5 meters in 5 seconds? [3 Points]