

Name: _____

Period: _____

PHYSICS WORD PROBLEMS - EOC PRACTICE

1. A person with a weight of 125 Newton runs up the stairs a distance of 6 meters. How much work was done?
2. If a voltage difference of 4 V causes a 2.5 amp current to flow in a circuit, what is the resistance in the circuit?
3. If waves are produced with crests positioned 2.5 meters apart at a rate of 8 waves per second, what is their speed?
4. A baseball is thrown a distance of 55 feet. What is the speed if it takes .45 second to cover the distance?
5. A book with a mass of .97 kilograms is sliding on a table. If a frictional force of 3.8 Newtons is on the book, what is the book's acceleration?
6. A car's velocity changes from 0 m/s to 58 m/s 8 seconds later. Calculate the car's average acceleration.
7. How much force is needed to accelerate a 70 kg rider and her 200 kg motorcycle at 4 m/s/s?
8. Suppose you place a bulb with a resistance of 40 Ohms in a circuit with a 12 volt battery. What is the current in the circuit?
9. It takes a sound wave from a clap of thunder 6 minutes to reach you. Sound travels at 330 m/s. How far away is the storm?
10. A rollercoaster accelerations at a rate of 7.34 m/s/s. At the top of its highest hill, it accelerates from 10 m/s to 32 m/s just before it reaches the bottom. How long does it take to get to 32 m/s?
11. The speed of a wave at the lake is 31 m/s, the wavelength is 1.2 meters. What is the frequency with which the wave hits the shore?
12. A 275 kg block falls off a scaffold from the 12th floor of the building; with how much force does it hit the pavement?
13. A box is moved 45 meters by a mover. The amount of work done was 2240 Joules. How much force was exerted on the box?
14. In a skateboarding marathon, the winner covered a distance of 435 kilometers with a speed of 11.8 km/hr. How long did it take him to complete the marathon?
15. It takes a force of 3000 N to accelerate an empty 1000 kg car at 3 m/s/s. If a 160 kg wrestler is inside the car, how much force will be needed to produce the same acceleration?
16. A 725 kg object was moved with a force of 910 N. The object was pushed 10.2 meters. How much work was done?
17. If a wave travels with a frequency of 120 Hz and has a velocity of 960 m/s, what is its wavelength?
18. A circuit has a resistance of 5 Ohms. What voltage difference will cause a current of 2.4 Amps to flow in the circuit?
19. Calculate the speed of a train that went a distance of 500 miles in 3 hours time.
20. A wave with a wavelength of 1.4 m is traveling at a rate of 6.5 m/s. What is its frequency?