Power



Power

- What is power?
 - The rate at which work is done
 - How quickly work is done
- What unit is used to measure power?
 - Watts (1W = 1J/s), sometimes horsepower (1 hp = 746W)

• What is the formula for power?

• Power = Work / Time





Power Example Problems P U 1. How much power is needed for a motor to do 3000J of work in 1 minute?





Power Example Problems 7 2. How much work is done by 200W motor in 30s?







Power Example Problems 4. How much longer would a 15W CFL light bulb stay lit? (0005 = n) $t = \frac{w}{p} = \frac{60005}{15w} = 4005$ 4005-1005 = 3005 longer



Power Example Problems F S. How long will it take a 100 W motor to lift a 20 kg object a distance of 2m?



