

KINETIC ENERGY WORKSHEET

1. Kinetic energy can be defined as....
2. The equation to be used to calculate kinetic energy (E_k) is...
3. The SI unit in which E_k is often measured is the ..._____.
4. Rodger Maris swung a bat which had a mass of 2 Kg at a velocity of 45 m/s.
How many joules of kinetic energy could he give to a ball?
5. Barry Bonds swings a bat which has a mass of 1.5 Kg at a velocity of 55 m/s.
How many joules of kinetic energy could he give to a ball?
6. Which is more important to hitting a home run - a heavier bat or a faster swing?

7. A golf pro swings his driver which weighs .75 kg at a velocity of 60 m/s.
Calculate the kinetic energy of the club.
8. Calculate the E_k of a car which has a mass of 1000 kg and is moving at the rate of 20 m/s.
9. What is the E_k of a soccer ball which has a mass of 0.8 kg and is kicked at a velocity of 10 m/s?
10. Calculate the E_k of a running back that has a mass of 80 kg and is running at a velocity of 8 m/s.