

CHECK FOR UNDERSTANDING:  $KE = \frac{1}{2} \times \text{mass} \times \text{speed}^2$

1. A car is travelling at a velocity of 10 m/s and it has a mass of 250 Kg. Compute its Kinetic energy?

$$m = \underline{\hspace{2cm}} \text{ kg}$$

$$v = \underline{\hspace{2cm}} \text{ m/s}$$

$$KE = \underline{\hspace{2cm}} \text{ J}$$

2. What is the Kinetic Energy of a 150 kg object that is moving with a speed of 15 m/s?

$$m = \underline{\hspace{2cm}} \text{ kg}$$

$$v = \underline{\hspace{2cm}} \text{ m/s}$$

$$KE = \underline{\hspace{2cm}} \text{ J}$$

3. What is the Kinetic Energy of a 1200 kg object that is moving with a speed of 24 m/s?

$$m = \underline{\hspace{2cm}} \text{ kg}$$

$$v = \underline{\hspace{2cm}} \text{ m/s}$$

$$KE = \underline{\hspace{2cm}} \text{ J}$$

4. What is the Kinetic Energy of a 478 kg object that is moving with a speed of 15 m/s?

$$m = \underline{\hspace{2cm}} \text{ kg}$$

$$v = \underline{\hspace{2cm}} \text{ m/s}$$

$$KE = \underline{\hspace{2cm}} \text{ J}$$

5. What is the Kinetic Energy of a 100 kg object that is moving with a speed of 12.5 m/s?

$$m = \underline{\hspace{2cm}} \text{ kg}$$

$$v = \underline{\hspace{2cm}} \text{ m/s}$$

$$KE = \underline{\hspace{2cm}} \text{ J}$$