

Practice \#1: A baseball is pitched with a speed of $35 \mathrm{~m} / \mathrm{s}$. If the baseball has a mass of .146 kg , what is the kinetic energy (in J ) of the baseball?

Practice \#2: The greatest speed that a meteoroid can have and still be pulled down to Earth's surface is $70,000 \mathrm{~m} / \mathrm{s}$. If a meteoroid traveling with this speed has a kinetic energy of $2.56 \times 10^{13} \mathrm{~J}$, what is its mass (in kg )?

Practice \#3: A 725 kg automobile has a kinetic energy of $3.02 \mathrm{X} 10^{5} \mathrm{~J}$ as it travels along a highway. What is the car's speed (in $\mathrm{m} / \mathrm{s}$ ).

