

1. A ball falls to gain 30J of KE, the ball has a mass of 2Kg. From what height did it fall?
2. A rock is dropped from a 10m cliff in France and strikes the ground transferring 350J of energy to the thermal store. What was the mass of the ball?
3. Billy goes bungee jumping in Wales (silly boy). It's his birthday, he normally has a mass of 60Kg, but ate 0.5Kg of cake. He jumps off a bridge and gains 30,000J of KE. How long was the bungee cord?
4. Sammy slides a slippery slide in East Park. The slide was 3m high and she gained 400J of KE. What was Sammy's mass?
5. Mr Patrick climbed up two flights of stairs then slid down the bannister to the bottom. Mr Patrick had 4000J of kinetic energy at the bottom and has 80Kg of mass. How high were the stairs?
6. A dog in America has learned how to skateboard. At the top of a hill the dog has 6,500J of GPE, the dog has a mass of 4.2Kg. What velocity was the dog going at the bottom of the hill?