B Physics Interactive Quiz: Energy
Name:

|  | \# | 2 | question | Answer |  |  | 0 | <--score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 200 | grams is the mass of a bullet shot from a gun with a barrel 40 cm long, with Vf of 400 $\mathrm{m} / \mathrm{s}$. Find the force on the bullet |  | 40000 | 100 | 0 |  |
| \# | 2 | 200 | Find the final KE for the bullet |  | 16000 | 100 | 0 |  |
| \# | 3 | 200 | Find the ultimate altitude of the bullet if shot upwards |  | 8163.3 | 100 | 0 |  |
| \# | 4 | 200 | find the speed of the bullet after being shot through a 4 cm door where the Ff was -2000 N |  | 398.99 | 100 | 0 |  |
| \# | 5 | 160 | is the vertical height of a $40^{\circ}$ slope 60 kg Kenny skis on his snowboard. If the $\mu$ for Kenny is 0.1 , find his PE at the top of the hill |  | 94080 | 100 | 0 |  |
| \# | 6 | 160 | FInd his KE at the bottom of the hill |  | 60405 | 100 | 0 |  |
| \# | 7 | 160 | find his velocity at the bottom of the hill |  | 44.872 | 100 | 0 |  |
| \# | 8 | 10 | $\mathrm{N} / \mathrm{m}$ is the k for a spring that is compressed 30 cm to shoot a ball of mass 180 grams. Find the velocity of the ball |  | 2.2361 | 100 | 0 |  |
| \# | 9 | 8 | meters is the height of a hill Ben runs up in 7.5 seconds. Find his horsepower if his mass is 75 kg |  | 1.0509 | 100 | 0 |  |
| \# | 10 | 36 | Newtons is the frictional force overcome at a constant velocity of $4 \mathrm{~m} / \mathrm{s}$ for someone pushing their car along a road. Find the power dissipated as heat. |  | 144 | 100 | 0 |  |

## Extra Credit:

