Physics—Work, Power, & Energy Packet

Blizzard Day 1

Matching is used twice.

__1. How fast you can do work

__2. The actual movement of An object over a distance

__3. The ability to move an Object over a distance

A. Work

B. Power

C. Energy

__4. Kory can run 10 miles.

__5. Kory ran 10 miles

__6. Kory ran 10 miles in 1 hour.

Matching: each is used 3 times

__7. Compressed spring

__8. Battery

__9. Energy of motion

__10. Book on a shelf

__11. Leaf falling from a tree

__12. Driving home from school

A. Kinetic energy

B. Potential energy

13. After this Physics quiz, a 75 Kg student decides to jump off the nearest 20 m tall building. For each of the following please show your work or explain your answer.

a) How much PE does the student have relative to the ground? PE = _____

b) KE at 20 m about ground (just before they jump) = _____

c) PE at 10 m = _____ How does this answer compare to part a? Why?

d) KE at 10 m = _____

e) PE when they hit the ground = _____

f) KE just before they hit = _____

g) Where does the PE go as he falls?

h) Is the energy destroyed when they hit the ground? Explain

i) PE at 12 m = _____

j) KE at 12 m = _____

k) His speed after falling 6 m = _____

1) Suppose the student drops his 18 N book instead.
What is the PE of the book before he drops it?