ENERGY OF MOTION--Ek or KE

http://cochrane.rockyview.ab.ca/Members/lynnmmoore/science-10/unit-2-energy-flow-in-technological-systems-ch-4-6/ch-5-energy-and-motion/s10-lesson-7-kinetic-energy/s10-notes-kinetic-energy/view

What is **energy**?

- "the ability to do work"
- work = energy in the process of transfer from 1 body to another

What are some examples of different types of energy?

2 types only → E_k, E_p

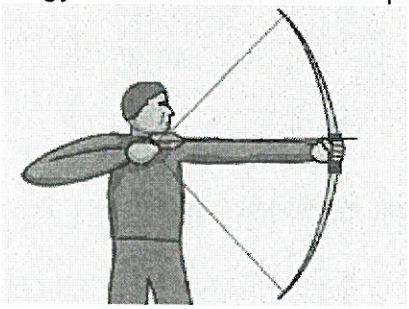
Butt ... • thermal • mechanical • chemical etc • light • electrical • sound

1st Law of Thermodynamics:

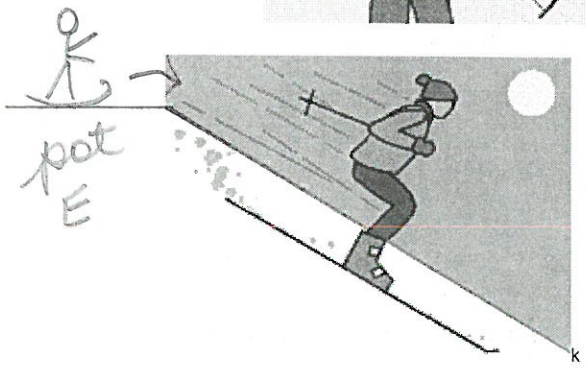
Energy is neither created nor destroyed, it simply converts from one form to another.

└ changes

What energy **conversions** do these pictures depict?



chem E → mech E → E_k (food)



pot E → kinetic E = wanted E !

→ thermal E (friction) } dissipated or "LOST" E

→ sound E }

- not really "lost" just in forms of E that are useless to the skier

What is **kinetic energy**?

- E of motion

What factors might contribute to an object's kinetic energy?

mRae } mass & velocity / speed

we Mirgi }

100 km/h East ~ 100 km/h