## Notes - Conservation of Energy

- Energy can change form but in a closed, isolated system energy always remains constant. This understanding is called the <u>law of conservation of energy</u>. - Ball thrown up Explanation: This says that the initial kinetic plus the initial potential equals the final kinetic plus  $-E_k + E_p = E_k + E_p$ the final potential. -  $\underline{\mathsf{Ex.}}$  - A chunk of ice of mass  $15.0\,kg$  falls off the school's roof which is  $8.00\,m$  off the ground. What is the kinetic energy of the ice when it reaches the ground? Answer -

- Ex. - What is the speed when the ice reaches the ground?

Answer -