

Ch 4

Sec 4.1

obj: What is work?

Energy

- If an object has energy it can change itself or its surroundings
- Energy is not a force.
- Energy is measured in units called the joule. (J)

Work

- Work is defined as a transfer of mechanical energy.
- To transfer energy to an object two things must happen.
 - 1) A force must be applied to an object
 - 2) The object must move.
- * The force and the motion must both be in the same direction.

How to calculate Work

- Work is calculated by the product of the force applied to the object + the distance the object moves.

$$W = Fd$$

N·m (J)