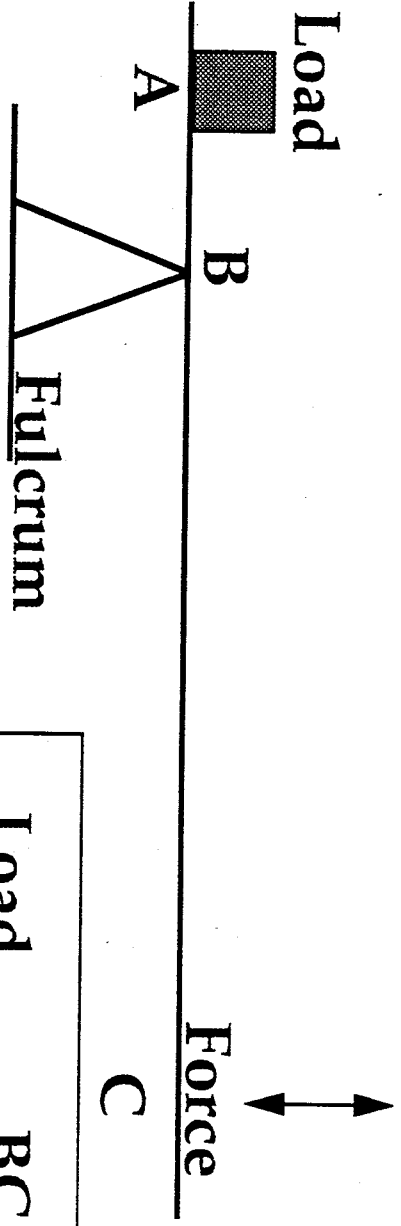
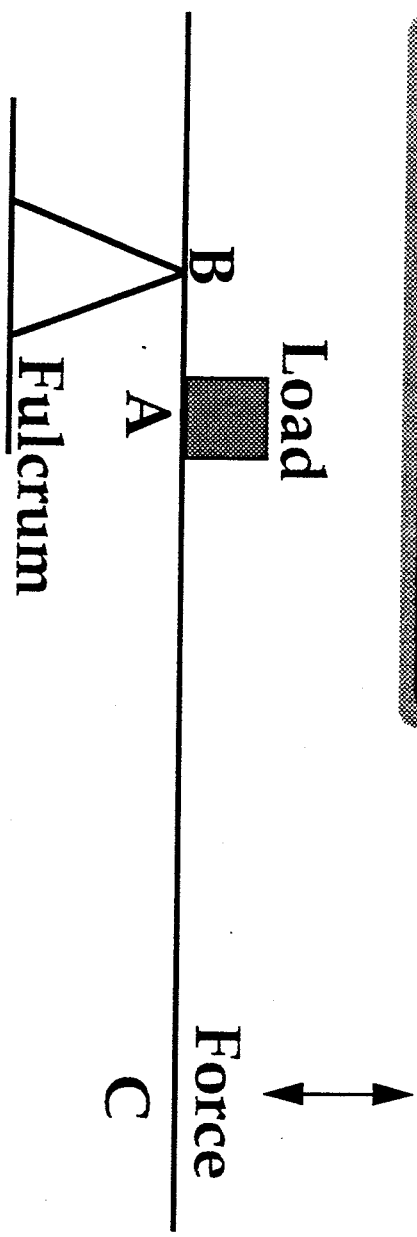
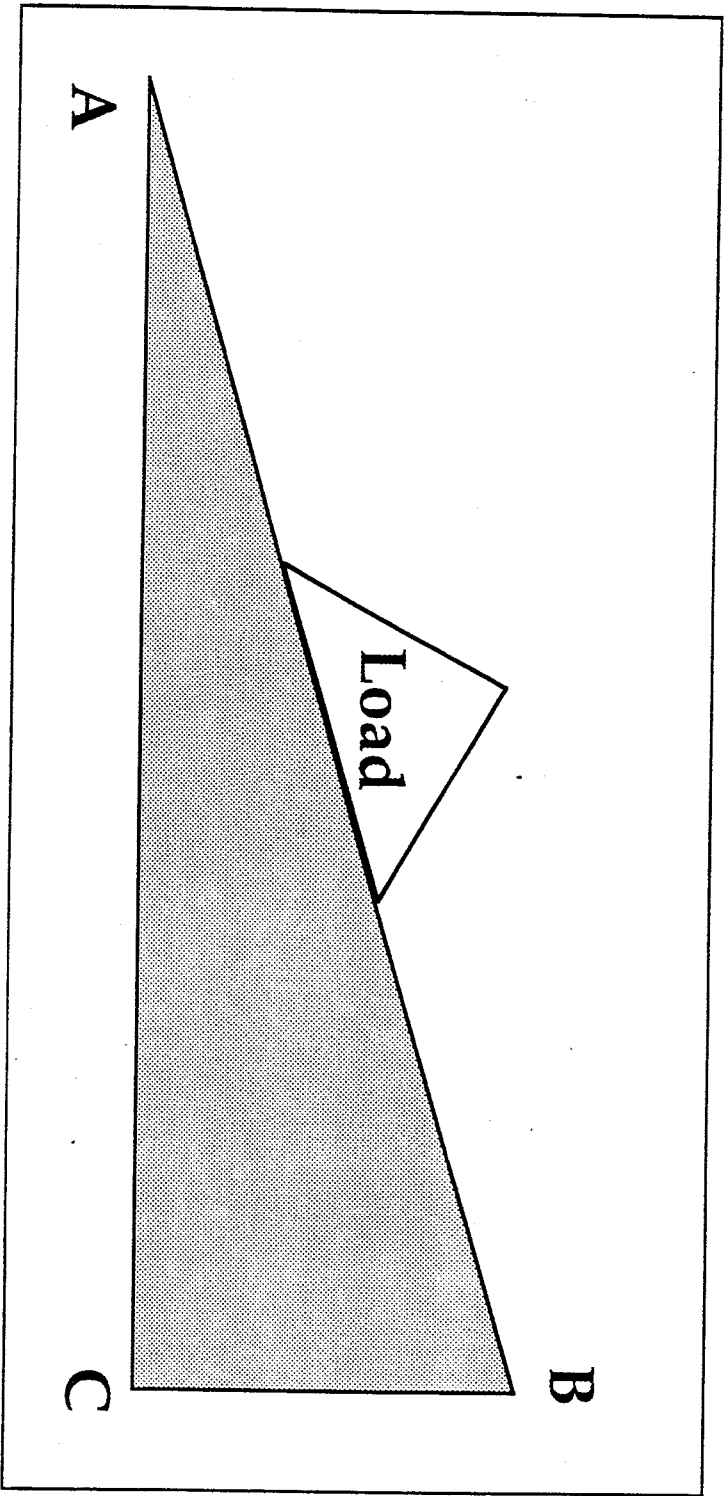


# Two Types of Levers



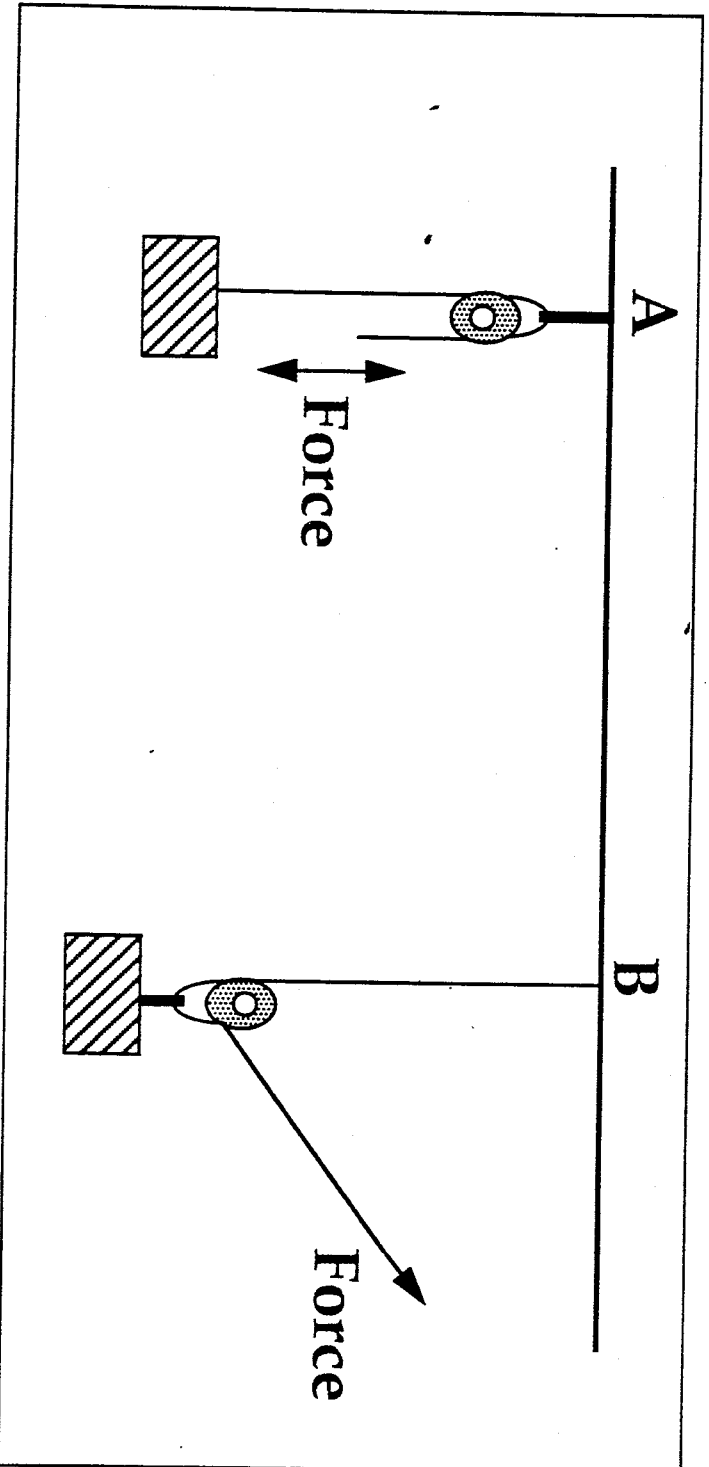
$$\frac{\text{Load}}{\text{Force}} = \frac{\text{BC}}{\text{AB}}$$

# *The Inclined Plane*



**The longer side AB in proportion to its height (side BC), the greater the mechanical advantage.**

# Mechanical Advantage



**System "A" offers no mechanical advantage, just a change of direction and gain in height. System "B" offers a mechanical advantage of 2:1, which means 100 lbs. of force will lift a 200 lb. load (ignoring friction).**

# Categories of Tools

- 1. Cutting**
- 2. Prying**
- 3. Pushing/Pulling**
- 4. Striking**

