

Power

$$= \frac{W}{t} = \frac{\text{work}}{\text{time}} = \text{Watt} = \frac{J}{s}$$

$$\Rightarrow \text{work} = F \Delta x$$

$$\text{So Power} = \frac{F \Delta x}{t}$$

$$\frac{\Delta x}{t} = v$$

$$\text{So Power} = F \cdot v$$

Power Bill

$$\Rightarrow \text{kWh}$$

$$= \text{kilo watt} \cdot \text{hour}$$

$$\frac{\text{kJ}}{s} \cdot \text{hr}$$