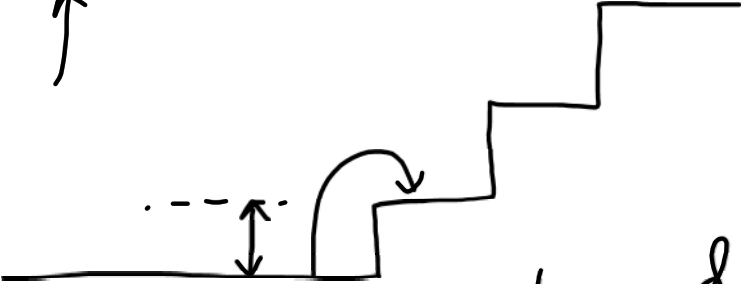


CP - Nov 30

CLT - Take Data and  
calculate Power used  
on stairs

$$W = F \times d$$


if you weigh 500N and  
the step is .2m high, then

$$W = F \times D = 500N \times .2m = 100Nm$$

100J

Take your weight,  
 divide by 2.2 to  
 get your mass.

$$\frac{\text{weight}}{2.2} = \text{--- Kg}$$

$$W = mg = \text{--- Kg} \times 9.8 = \text{--- N}$$

$$\begin{aligned}
 W &= F \times d && 2 \times 2.25\text{m} \\
 &= \text{Weight} \times 4.5\text{m} \\
 &= 623.6\text{N} \times 4.5\text{m} \\
 \text{work} &= \underline{2806.36\text{ Nm}} \\
 &= \frac{2806\text{ Nm}}{20\text{ s}} = \boxed{140.32\text{ Watts}} \\
 &1 \text{ lightbulb} - 60\text{w} \\
 &\begin{array}{r}
 \times \\
 \hline
 3600\text{S}
 \end{array} = 60\text{w} \\
 &\times = 60\text{w} \cdot 3600\text{S} \\
 &216,000\text{ Nm} \\
 &\frac{216,000\text{ Nm}}{\text{J}} = \text{--- M}
 \end{aligned}$$