1. $W = Fd$

2. $W = F\cos\theta d$

3. $P = \frac{W}{t}$

4. $3.6 \times 10^6 J$ $\quad 1kWh = 1000\left(\frac{J}{s}\right) 3600s$

1 Watt ↙ 1 hour ↙

kilo = ×1000

5. $F_{sp} = -kx$

6. $PE_g = mgh$

7. $PE_{sp} = \frac{1}{2}kx^2$

8. $KE = \frac{1}{2}mv^2$

9. $W_{Net} = \Delta KE$

10. $PE_0 + KE_0 = PE + KE$

11. $PE_0 + KE_0 + W_{nc} = PE + KE$

12. $\left(\frac{\text{Output Energy}}{\text{Input Energy}}\right) 100\%$