Aidan Sharpe

1. $4502942 = 1691211 \text{ gal/day}$ $1891218 \text{ gal} \cdot 0.00454609 \text{ m}^3/\text{gal} = 8597.6 \frac{\text{m}^3}{\text{day}}$

$8597.6 \text{ m}^3/\text{day} \cdot \frac{1}{24} \text{ day/hr} = \boxed{358.24 \text{ m}^3/\text{h}}$

2. $t = 2\text{h}$ $2.3 \text{ kW} \cdot 2\text{h} = \boxed{4.6 \text{ kWh} = 16560 \text{ kJ}}$

3. $N_m = \frac{}{} = \frac{}{} = \frac{}{}$ $\omega_m = \text{kg} \cdot \text{m}^2/\text{s}^2 = \boxed{\frac{M \cdot L^2}{T^2}}$

4. $W = J/s = \frac{ML^2}{} \cdot \frac{\text{kg m}^2}{s^3} = K\left(\frac{m^2 s}{m}\right)$ $K = \frac{}{}$

$\boxed{K = \frac{\text{kg} \cdot \text{m}}{s^4}}$

5. $D = \frac{m}{V}$ $\boxed{DV = m}$

6. $\boxed{\ln(r) = \ln(10) + 0.05t}$
10.0 cells/h
0.05 h^{-1}

7. $\frac{16-11}{2-1} = 5$ $\boxed{C = 5t + 6}$

8. $\ln(q) = \ln(k) + \frac{1}{n} \cdot \ln(p)$

$\frac{mg}{g} = \ln(k) + \frac{1}{n} \cdot \ln(p)$ $n = \frac{m^2}{N}$ $k = \frac{mg}{g}$

$\boxed{n = 3.32 \text{ m}^2/\text{N}}$
$\boxed{K = 2.37 \frac{\text{mol gas}}{g}}$