

CHEM 122O Exam 1

Formulas

$$q = mC\Delta T$$

$$q = m\Delta H_{fus \text{ or } vap}$$

$$\ln P_{vap} = \frac{-\Delta H_{vap}}{R} \left(\frac{1}{T} \right) + \ln \beta$$

$$l = \sqrt{8}r$$

$$l = 2r$$

$$q = nC\Delta T$$

$$q = n\Delta H_{fus \text{ or } vap}$$

$$\ln \frac{P_2}{P_1} = \frac{-\Delta H_{vap}}{R} \left(\frac{1}{T_2} - \frac{1}{T_1} \right)$$

$$l = \frac{4}{\sqrt{3}}r$$

Constants

$$R = 8.314 \frac{J}{mol \ K}$$

$$R = 0.08206 \frac{L \ atm}{mol \ K}$$