

CH 21

APPLICATIONS of 1-22-14 lecture

(8.)

$$(a) \# \text{ electrons} = \left(\frac{\# \text{ electrons}}{\text{atom}} \right) \cdot n \cdot N_A$$

$$n = \# \text{ moles} = \frac{.25 \text{ g}}{26.982 \text{ g/mole}}$$

$$N_A = 6.02 \times 10^{23} \frac{\text{MOLECULES}}{\text{mole}}$$

(10.)

(b.)

$$0.75 \text{ kg} \times N_A \times 20 \times (0.01) \cdot e$$

MOLAR MASS

$$\rightarrow 0.0418 \frac{\text{kg}}{\text{mole}}$$

PROTONS
ATOM

ATOMS

$$\text{charge} = q$$

$$(c) F = \frac{kq^2}{r^2}, r = (1.7 \text{ cm})$$

F is huge!