

Unit Conversion Worksheet

KEY

$$\#1. 5.5 \text{ mol} \times \frac{6.02 \times 10^{23} \text{ atoms}}{1 \text{ mole}} = \boxed{3.3 \times 10^{24} \text{ atoms}}$$

$$\#2. 25.0 \text{ L} \times \frac{1 \text{ mole}}{22.4 \text{ L}} = \boxed{1.12 \text{ mole}}$$

$$\#3. 7.0 \text{ g} \times \frac{1 \text{ mole}}{28 \text{ g}} = \boxed{0.25 \text{ mole}}$$

$$\#4. 200.0 \text{ coulombs} \times \frac{1 \text{ sec}}{35 \text{ coulombs}} = \boxed{5.7 \text{ sec}}$$

$$\#5. 4 \times 10^{-8} \text{ kPa} \times \frac{1 \text{ atm}}{101.3 \text{ kPa}} = \boxed{4. \times 10^{-10} \text{ atmos}}$$

$$\#6. 3.20 \times 10^4 \text{ troy ounces} \times \frac{0.031 \text{ kg}}{1 \text{ troy ounce}} = \boxed{995 \text{ kg}}$$

$$\#7. 5.0 \times 10^{-4} \text{ s} \times \frac{1 \text{ ms}}{10^{-3} \text{ s}} = \boxed{0.50 \text{ ms}}$$

$$\#8. 15100 \text{ kJ} \times \frac{1 \text{ mol}}{5450 \text{ kJ}} = \boxed{2.77 \text{ mol}}$$

$$\#9. 0.05 \text{ micron} \times \frac{10^{-3} \text{ mm}}{1 \text{ micron}} = \boxed{5 \times 10^{-5} \text{ mm}}$$

$$\#10. 0.0358 \text{ mol} \times \frac{1 \text{ L}}{11.7 \text{ mol}} = \boxed{0.00306 \text{ L}}$$