## Unit Conversions Revisited

Name - $\qquad$
1.) If one mole of a gas has a volume of $22.4 L$, how many moles are there in $25.0 L$ of gas?
2.) How many seconds must an electrical current of $35 \frac{\text { coulombs }}{s}$ flow in order to deliver 200.0 coulombs of charge?
3.) The density of mercury metal is $13.622 \frac{\mathrm{~g}}{\mathrm{~mL}}$. What is the mass of 3.55 mL of the metal?
4.) The density of table salt is $2.16 \frac{\mathrm{~g}}{\mathrm{~mL}}$. What is the mass of 100 mL of this solid?
5.) A particle moves through a gas at a speed of $0.015 \frac{\mathrm{~km}}{\mathrm{~s}}$. How far will it move in 5.5 s ?
6.) A solution contains 61.33 g of barium nitrate per 1 L . How many grams of barium nitrate are contained in 2.70 L of this solution?

