## General Chemistry

Mr. MacGillivray
Quiz \#27:
Gas Stoichiometry
Solve the following problems, which refer to the chemical equation shown below. Show all work.
$\mathrm{C}_{3} \mathrm{H}_{8}(\mathrm{~g})+5 \mathrm{O}_{2}(\mathrm{~g}) \quad \Rightarrow \quad 3 \mathrm{CO}_{2}(\mathrm{~g})+4 \mathrm{H}_{2} \mathrm{O}(\mathrm{g})$

1. How many liters (at STP) of water vapor can be produced from the complete combustion of 10.0 g of propane gas $\left(\mathrm{C}_{3} \mathrm{H}_{8}\right)$ ?
2. Re-calculate the answer to \#1, assuming that the reaction is carried out at 100 degrees Celsius and 1.30 atm of pressure.
