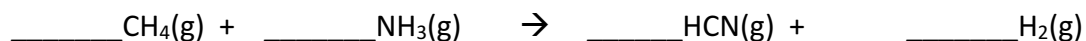


CHEM 1100 Dr. Stone Moles, Worksheet 2

1. List the pure elements that are diatomic molecules.
2. What is the molar mass of potassium carbonate?
3. What is the molar mass of potassium phosphate?
4. What is the mass of 2 moles of water?
5. How many moles of carbon dioxide are present in 56 grams of carbon dioxide?
6. How many moles are in 75.02 grams of methane (CH₄)?
7. Write the balanced equation for the reaction of methane(CH₄) with ammonia (NH₃) to produce hydrogen cyanide and hydrogen gas.



8. How many moles of oxygen are needed to react with all of the moles of methane to form carbon dioxide and water?
9. How many moles of water are produced when 2 moles of propane, C₃H₈ are burned in oxygen to form carbon dioxide and water?
10. What mass of oxygen is needed to react with 1 mole of methane?