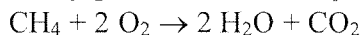


## Stoichiometry Practice #2

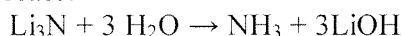
Name \_\_\_\_\_

- 1) How many grams of water are produced by the combustion of 5.5 grams of CH
- <sub>4</sub>
- ?



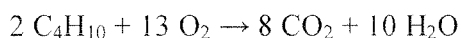
$$5.5 \text{ g CH}_4 \times \frac{1 \text{ mol CH}_4}{16 \text{ g CH}_4} \times \frac{2 \text{ mol H}_2\text{O}}{1 \text{ mol CH}_4} \times \frac{18 \text{ g H}_2\text{O}}{1 \text{ mol H}_2\text{O}} =$$

- 2) How many grams of lithium hydroxide can be produced when 3.8 grams of lithium nitride react?



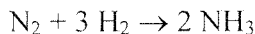
$$3.8 \text{ g Li}_3\text{N} \times \frac{1 \text{ mol Li}_3\text{N}}{34.7 \text{ g Li}_3\text{N}} \times \frac{3 \text{ mol LiOH}}{1 \text{ mol Li}_3\text{N}} \times \frac{23.9 \text{ g LiOH}}{1 \text{ mol LiOH}} =$$

- 3) How many grams of carbon dioxide are produced when 1.8 grams of butane are burned?



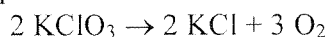
$$1.8 \text{ g C}_4\text{H}_{10} \times \frac{1 \text{ mol C}_4\text{H}_{10}}{58 \text{ g C}_4\text{H}_{10}} \times \frac{8 \text{ mol CO}_2}{2 \text{ mol C}_4\text{H}_{10}} \times \frac{44 \text{ g CO}_2}{1 \text{ mol CO}_2} =$$

- 4) How many grams of NH
- <sub>3</sub>
- can be produced when 3.5 grams of H
- <sub>2</sub>
- react?



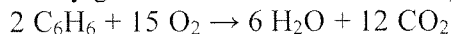
$$3.5 \text{ g H}_2 \times \frac{1 \text{ mol H}_2}{2 \text{ g H}_2} \times \frac{2 \text{ mol NH}_3}{3 \text{ mol H}_2} \times \frac{17 \text{ g NH}_3}{1 \text{ mol NH}_3} =$$

- 6) How many grams of O
- <sub>2</sub>
- are produced when 3.1 grams of potassium chlorate decompose?



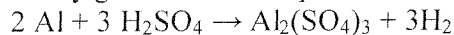
$$3.1 \text{ g KClO}_3 \times \frac{1 \text{ mol KClO}_3}{122.5 \text{ g KClO}_3} \times \frac{3 \text{ mol O}_2}{2 \text{ mol KClO}_3} \times \frac{32 \text{ g O}_2}{1 \text{ mol O}_2} =$$

- 7) How many grams of carbon dioxide are produced when 5 grams of benzene is burned?



$$5 \text{ g C}_6\text{H}_6 \times \frac{1 \text{ mol C}_6\text{H}_6}{78 \text{ g C}_6\text{H}_6} \times \frac{12 \text{ mol CO}_2}{2 \text{ mol C}_6\text{H}_6} \times \frac{44 \text{ g CO}_2}{1 \text{ mol CO}_2} =$$

- 8) How many grams of H
- <sub>2</sub>
- are produced when 17 grams of aluminum react?



$$17 \text{ g Al} \times \frac{1 \text{ mol Al}}{27 \text{ g Al}} \times \frac{3 \text{ mol H}_2}{2 \text{ mol Al}} \times \frac{2 \text{ g H}_2}{1 \text{ mol H}_2} =$$