

Worksheet

Mole Ratio

NAME: _____

Show all work and remember to use significant figures and units!

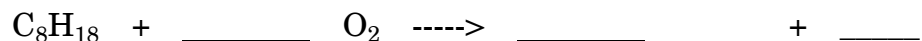
1. Predict the products and balance the equation for the reaction between sodium bicarbonate and hydrochloric acid.



2. If you use 3.2 moles of sodium bicarbonate in the reaction in question #1,
a. how many moles of HCl would be used?

b. how many moles of each product would be produced?

3. Predict the products and balance the equation for the following reaction.

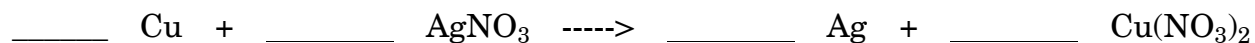


If you burn 4.33 moles of octane, C_8H_{18} .

a. how many moles of oxygen are required?

b. how many moles of each product are produced?

Given the following equation, answer questions 4-6 below.



4. Balance the equation.
5. If one mole of silver nitrate is consumed,
 - a. how many moles of silver are produced?

 - b. how many moles of copper nitrate are produced?

 - c. how many moles of copper are used?
6. If 2.64 moles of silver are produced,
 - a. how many moles of copper are consumed?

 - b. how many moles of silver nitrate are consumed?

 - c. how many moles of copper nitrate are produced?
7. Write a balanced equation for the combustion of methane, CH₄.
 - a. If you burn 4.00 moles of methane, how many moles of oxygen are required?

 - b. If you burn 3.19 moles of methane, how many moles of each product will be formed?

