

Pre-AP Chemistry/Chemistry
Unit #9—Stoichiometry

Moles to Mass AND Mass to Moles



1. Calculate the molar mass for each compound in the chemical reaction. SHOW ALL WORK, ALL UNITS, ALL LABELS.

2. If there are 1.45 moles of oxygen gas:

- A. How many grams of ammonia are needed for the reaction?

- B. How many grams of nitrogen gas are produced for the reaction?

- C. How many grams of water are produced for the reaction?

3. If they are 22.6 grams of water,

- D. How many moles of nitrogen gas are produced for the reaction?

- E. How many moles of ammonia gas are needed for the reaction?

- F. Calculate the number of moles of oxygen gas needed for the reaction.