

1. One mole of  $N_2$  and three moles of  $H_2$  will produce \_\_\_\_\_.
  - a. 3 moles of  $NH_3$
  - b. 2 moles of  $N_3H_4$
  - c. 2 moles of  $NH_3$
  
2. In many chemical reactions, one of the reactants is completely consumed while one or more other reactants are \_\_\_\_\_.
  - a. only partially consumed
  - b. not consumed at all
  - c. are also completely consumed
  
3. Which ingredient is the limiting reactant in the raisin bread?
  - a. raisins
  - b. flour
  - c. salt
  
4. How many moles of  $NH_3$  can be produced from a mix of 4 mol  $N_2$  and 9 mol  $H_2$ ?
  - a. 2 mol  $NH_3$
  - b. 10 mol  $NH_3$
  - c. 6 mol  $NH_3$
  
5. What is the limiting reactant in question 4?
  - a. ammonia
  - b. hydrogen
  - c. nitrogen
  
6. The  $NH_3$  problem in question 4 was a \_\_\_\_\_ problem.
  - a. mole-mole
  - b. gram-gram
  - c. mole-STP
  
7. Limiting reactant means the reactant is \_\_\_\_\_.
  - a. in excess
  - b. erupting
  - c. depleted
  
8. The substances that are not completely consumed are the \_\_\_\_\_.
  - a. mole products
  - b. excess reagents
  - c. limiting reagents
  
9. Which reactant is limiting when 1 mol of  $Ca$  reacts with 1 mol of  $H_2O$  in the reaction  $Ca + 2H_2O \rightarrow Ca(OH)_2 + H_2$ ?
  - a. water
  - b. calcium
  - c. oxygen
  
10. The \_\_\_\_\_ in the balanced chemical equation essentially provide a recipe for the reaction.
  - a. coefficients
  - b. excess reagents
  - c. percent yield

### Answer Key

1. c	6. a
2. a	7. c
3. b	8. b
4. c	9. a
5. b	10. a