1. At STP, which gas diffuses at the faster rate?

   A) H_2 B) N_2 C) CO_2 D) NH_3

2. Which gas diffuses most rapidly at STP?

   A) Ne B) Ar C) Cl_2 D) F_2

3. The table below lists four gases and their molecular mass.

Gas	MolecularMass (g/mol)
A	2
B	4
C	17
D	20

   Which gas diffuses at the slowest rate at STP?

   A) *A* B) *B* C) *C* D) *D*

4. At STP, which gas will diffuse more rapidly than Ne?

   A) He B) Ar C) Kr D) Xe

5. At STP, which of the following gases will diffuse most rapidly?

   A) Cl_2 B) NH_3 C) CO_2 D) N_2

6. Under the same conditions of temperature and pressure, which gas will diffuse at the *slowest* rate?

   A) He B) Ne C) Ar D) Rn

7. At the same temperature and pressure, which gas will diffuse through air at the fastest rate?

   A) H_2 B) O_2 C) CO D) CO_2

8. Which of the following gases would have the *slowest* rate of diffusion when all of the gases are held at the same temperature and pressure?

   A) N_2 B) NO C) O_2 D) CO_2

9. Which gas would diffuse most rapidly under the same conditions of temperature and pressure?

   A) gas *A*, molecular mass = 4
   B) gas *B*, molecular mass = 16
   C) gas *C*, molecular mass = 36
   D) gas *D*, molecular mass = 49

10. Which gas will diffuse at the fastest rate under the same conditions of temperature and pressure?

    A) O_2 B) N_2 C) F_2 D) H_2