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THE BEHAVIOR OF GASES

Vocabulary Review

Match the correct vocabulary term to each numbered statement. Write the letter of the correct term on the line.

Column A

- _____ 1. At constant volume and temperature, the total pressure exerted by a mixture of gases is equal to the sum of the partial pressures of the component gases.
- _____ 2. The volume of a fixed mass of gas is directly proportional to its Kelvin temperature if the pressure is kept constant.
- _____ 3. The rate of effusion of a gas is inversely proportional to the square root of its molar mass.
- _____ 4. the contribution each gas in a mixture makes to the total pressure of that mixture
- _____ 5. a measure of how much the volume of matter decreases under pressure
- _____ 6. For a given mass of gas at constant temperature, the volume of the gas varies inversely with pressure.
- _____ 7. the tendency of molecules to move toward areas of lower concentration until the concentration is uniform throughout
- _____ 8. $\frac{P_1 \times V_1}{T_1} = \frac{P_2 \times V_2}{T_2}$
- _____ 9. the escape of a gas through a tiny hole in a container of gas
- _____ 10. 8.31 (L•kPa)/(K•mol)

Column B

- a. combined gas law
- b. ideal gas constant (R)
- c. diffusion
- d. compressibility
- e. Boyle's law
- f. partial pressure
- g. Dalton's law of partial pressures
- h. effusion
- i. Charles's law
- j. Graham's law of effusion