



Represented above are five identical balloons, each filled to the same volume at 25°C and 1.0 atmosphere pressure with the pure gases indicated.

- Q.1** Twelve hours after being filled, all the balloons have decreased in size. Predict which balloon will be the smallest. Explain your reasoning.
 (A) CO₂ (B) O₂ (C) He (D) N₂ (E) CH₄
- Q.2** Which balloon contains the gas that would be expected to deviate most from the behavior of an ideal gas ? Explain.
 (A) CO₂ (B) O₂ (C) He (D) N₂ (E) CH₄
- Q.3** Which gas molecules will have highest kinetic energy.
 (A) CO₂ (B) O₂ (C) He (D) N₂
 (E) All have equal energy
- Q.4** Which balloon contains the greatest mass of gas ? Explain
 (A) CO₂ (B) O₂ (C) He (D) N₂ (E) CH₄
- Q.5** Which gas molecules will have highest velocity.
 (A) CO₂ (B) O₂ (C) He (D) N₂ (E) CH₄