- 1. A rigid cylinder contains a sample of gas at STP. What is the pressure of this gas after the sample is heated to 410 K?
 - A) 1.0 atm
- B) 0.50 atm
- C) 0.67 atm
- D) 1.5 atm
- 2. When a sample of gas is cooled in a sealed, rigid container, the pressure the gas exerts on the walls of the container will decrease because the gas particles hit the walls of the container
 - A) less often and with less force
 - B) less often and with more force
 - C) more often and with less force
 - D) more often and with more force

- 3. A 100.-milliliter sample of helium gas is placed in a sealed container of fixed volume. As the temperature of the confined gas increases from 10.°C to 30.°C, the internal pressure
 - A) decreases
- B) increases
- C) remains the same
- 4. As the pressure on a given sample of a gas increases at constant temperature, the mass of the sample
 - A) decreases
- B) increases
- C) remains the same