

Solve the following problems. Write the numerical answer on the blank space provided. Please show your work.

1. Calculate the number of moles of argon gas in sealed pressurized container at 170 K. The pressure is 10 bar and the volume is 10 L.

Answer _____

2. Calculate the molar kinetic energy of the argon atoms at 170 K.

Answer _____

3. Calculate the pressure of a cubic lead brick that has a mass of 11.34 kg. and dimensions of 0.1 m x 0.1 m x 0.1 m.

Answer _____