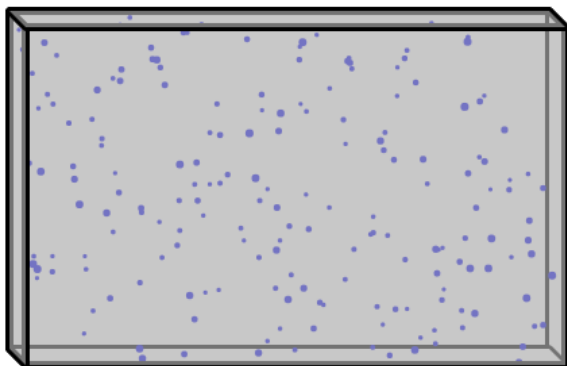


Temperature/Speed Problems

1: In the first problem, you are going to show that you can convert the temperature of a given Noble gas into an average KE and velocity. Tell the type of gas and the temperature for your problem. Show the calculation to turn temperature into kinetic energy and then the calculation to get speed from kinetic energy. Make sure you put your mass in kg so that your speed comes out in m/s.



2: In your second problem (Temperature Based on Speed), you will show that you can work the process in the other direction. You will be given the average speed and you must find the average kinetic energy of the particles and the temperature of the gas. Fill in your speed, your gas, and the mass of the gas in amu. Then show your calculation of average kinetic energy based on speed and then use that to find temperature. Show your work neatly below

