

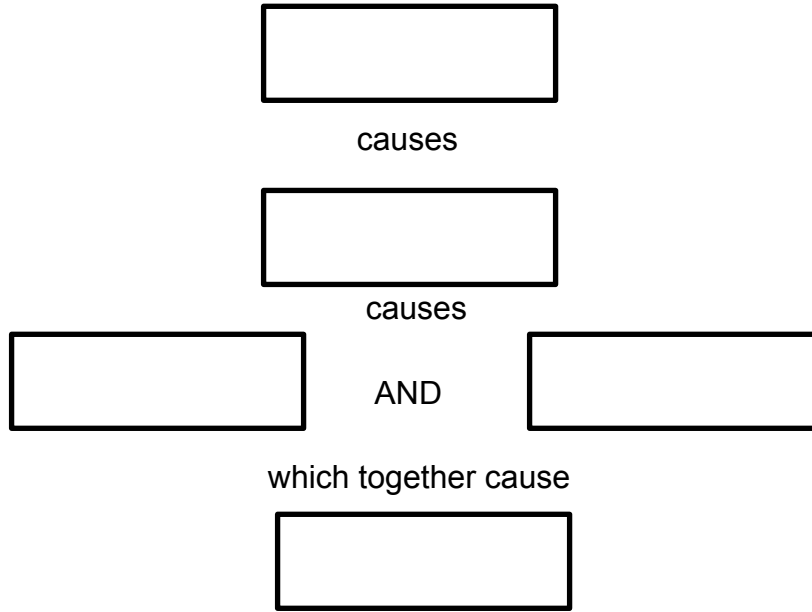
Name _____

ChemThink Gases Tutorial

1. What does the speed of atoms depend on? Describe the relationship between speed and each of these factors.
2. In a sample of one type of atom, do all the atoms move at the same speed? Why?
3. What is the equation for Pressure and what are the units for pressure?
4. When atoms are moving in a closed container what is creating the force on the sides of the container?
5. **Explain** how a change in temperature causes pressure to change and include an equation.
6. Draw the graph you observed of pressure vs. temperature. Is this a direct relationship or an inverse relationship?



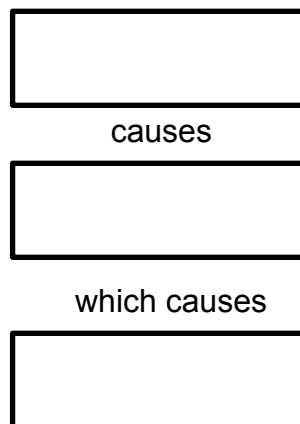
7. Fill the cause/effect relationship in the diagram of boxes you observed.



8. **Explain** how the number of atoms present causes pressure to change and include an equation?

9. Draw the graph you observed for pressure vs. number of atoms and describe if the relationship is direct or inverse.

10. Fill in the cause/effect relationship in the diagram of boxes you observed.



11. **Explain** how a change in volume causes pressure to change and include an equation?

12. Draw the graph for the relationship you observed for pressure vs. volume and describe if the relationship is direct or inverse.

13. Fill in the cause/effect relationship in the diagram of boxes you observed.

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14. What are the four variables that are used to describe a gas?

****Now go back and complete the Questions Set and when you have finished show the completed computer screen to your teacher.