

# Soap Bubble and Bottle Investigation

1. When representing the molecules that make up the air in the closed bottle system after cooling and after warming, how many dots should you draw? Why?
2. How did changing the temperature of the air in the closed bottle system affect the molecules that made up the air?
3. Use the above ideas to represent changes in the behavior of the molecules that made up the air in the closed bottle system when you cooled and warmed it. As you work on your models, consider the following elements:
  - the number of molecules that make up the air in each bottle system
  - the length of the arrows to represent the speed of the molecules that make up the air in each bottle system
  - the amount of space between the molecules that make up the air in each bottle system

