**6.P.2.1  
EQ #1: What is the kinetic theory of matter?  
EQ #2: What is the relationship between atoms and elements?  
EQ#3: How are atoms of one element similar to and different from atoms of other elements?**#1 Answer: The **kinetic theory of matter** states that all matter is made of small particles (atoms) that are in random motion and that have space between them. No matter what phase matter is in, it is made of separate, moving particles.  
  
Atoms interact differently in various states of matter:  
**S**olids – **S**mooshed together  
**L**iquid – **L**ooser  
**G**as – **G**igantic spaces in between#2 and #3: All atoms are made of protons, neutrons, and electrons. Atoms of one element have a different number of protons/electrons than the atoms of a different element. The number of protons determine what element the atom is and make them similar to or different than another element.