**Section 2 Review**

1. Definitions:
2. Molecule
3. Heat
4. Temperature
5. Kinetic Energy
6. Thermal Energy
7. Thermal Expansion
8. Convection
9. Conduction
10. Radiation
11. Draw the molecules of a a) solid

b) liquid

c) gas

1. What are the four parts of the particle theory? (Particle Model of Matter)
2. How can you melt an ice cube quickly?
What happens to the molecules as you melt the ice?
3. If heat is an energy that transfers from higher kinetic energy to lower kinetic energy, what is temperature measuring?
4. How does the size of a block of concrete change from fall to winter? Why?
5. What happens to the speed of molecules as more heat is added? Removed?
What happens to the space in between the molecules as heat is added? Removed?
6. How can a hot air balloon rise by simply heating the air in the balloon?
7. Explain and draw a diagram of a) conduction

b) convection

c) radiation

1. How does an oven cook brownies in a metal pan? (Remember that an oven produces both heat and radiation)
2. How does a pot of water boil on the stovetop? (a diagram would be helpful to explain your answer)
3. Why does air help keep in heat? (think about the position of the molecules in a gas)