Guided Reading Chapter 8 Section 3

1. What are the “phases of matter?”

2. Draw the molecular diagram of a solid. What is a solid?

3. Draw the molecular diagram of a liquid. What is a liquid?

4. Draw the molecular diagram of a gas. What is a gas?

5. What are intermolecular forces?

6. A “competition” always exists between _____ and intermolecular forces.

7. Different substances have different melting points because the intermolecular forces _____.

   a) exist b) vary c) increase d) decrease

8. Why does the graph in figure 8.14 show a flat line during the phase change?

9. When a solid changes directly to a gas it is called _____.

   a) condensation b) evaporation c) sublimation d) freezing

10. At what temperature does matter break apart and change into plasma?

11. Man-made plasma is created when an electrical current is passed through a _____ like _____.

12. Complete the following table to demonstrate your knowledge of the different phases of matter.

Phase	Energy	Characteristics	Temperature	Intermolecular Force
Solid		Holds shape and doesn't flow		weakest
	Molecules move around			
Gas			high	strong
	Atoms break apart		highest	