Chemistry I **Name _____**
Unit 2 Self-Assessment – Score yourself

For each unit Learning Goal listed below there is a sample question or problem. ***Rank your confidence level for each Goal on the 1-5 scale provided AND explain why you are or are not confident.***

ESM1.1(C) - I can use particle models to explain macroscopic observations of solids, liquids, gases, as well as the behavior of particles when temperature is altered.

Explain each state of matter (Solids, liquids, and gases) in terms of how they behave on a "human scale" (macroscopic). Comment on the mass, volume, and shape they take both when hot and cold.

My confidence (circle one): **1** **2** **3** **4** **5**
Not confident Very confident

Why:

ESM1.2(C) - I can model, using particle diagrams and words, the differences between solids, liquids, and gases in terms of energy, motion, arrangements, and attractions.

Draw a particle diagram of a solid, liquid and gas. Use particle movement to describe how and why each state of matter behaves the way it does.

My confidence (circle one): **1** **2** **3** **4** **5**
Not confident Very confident

Why:

ESM1.3(I) - I can predict and explain the relationships between pressure (P), temperature (T), volume (V), and amount of gas (n), and how changing these variables affect the other variables.

Describe the effect of changing V, n, or T on Gas Pressure. (If V, n, or T goes up or down what happens to the Pressure? What do we call the relationship of each set of variables?) Explain (in terms of the collisions of particles) why the change has the effect you predicted.

My confidence (circle one): **1** **2** **3** **4** **5**
Not confident Very confident

Why:

ESM1.4(I) - I can compare and contrast scientific theories and scientific laws.

Define a scientific theory and a scientific law. How are they the same and how are they different. Give an example of each.

My confidence (circle one): **1** **2** **3** **4** **5**
Not confident Very confident

Why:

ESM1.5(A) - I can use data to predict the new P, V, T, or "n" in an Initial-Final-Effect Table, and convert to the appropriate units of temperature and pressure when needed.

Suppose that 25.0 mL of a gas at 725 mm Hg and 20˚C is converted to STP (760 mm Hg, 273 K). What would be the new volume?

	P	**T**	**V**	**n**
Initial				
Final				
Effect				

My confidence (circle one): **1** **2** **3** **4** **5**
Not confident Very confident

Why: