What’s the Matter? Review Guide Self Assessment

Answer the following questions in complete sentences. You may work with your table partner if you are having trouble answering. This will also be used as your study guide for the test. You should be as detailed in your answers as possible!!!!

1. Describe how atoms of the same element are all alike, and how they have the same properties.
2. Describe Matter. List as many characteristics and categories that we can use to describe matter.
3. Explain the difference between an oxygen atom and an atom of copper. Think about the periodic table.
4. Describe the smallest particles that make up an element. Do these particles have even smaller pieces?
5. Explain the effect of heat on the motion of atoms through a description of what happens to particles during a change in phase. (ex. Liquid to a gas, or liquid to a solid.)
6. Define thermal energy and how the word expansion relates.
7. What is the difference between an Independent Variable and a Dependent Variable? Where can we find these 2 variables when conducting an experiment?
8. How does a molecule form?
9. Which step in the scientific method requires me to create a prediction of the problem or purpose?
10. Which part of the scientific method allows us to form a list of materials needed in order to successfully complete the experiment?
11. What is the difference between quantitative data and qualitative data?