Name: $\qquad$ Due Date: $\qquad$ Period: $\qquad$ Chapter 2, section 1 assessment

1. What are the characteristics of Matter?
2. Explain the difference between chemical and physical properties.
3. What is a pure substance?
4. Ice melts and liquid water freezes at $0^{\circ} \mathrm{C}$, liquid water boils and water vapor condenses at $100^{\circ} \mathrm{C}$. Is this an example of a chemical or physical property? Explain your answer.
5. When bread dough bakes, gasses are produced, creating the spaces (holes) in the bread. Is baking bread an example of a chemical or physical property? Explain your reasoning.
6. How are elements and compounds similar?
7. How are elements and compounds different?
8. Plants make a sugar compound with the chemical formula $\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}$. What elements make up this compound?
9. How does a heterogeneous mixture differ from a homogeneous mixture?
10. Explain why seawater is a mixture?
11. Suppose you stir a little baking soda into water until the water looks clear again. How could you prove to someone that the clear material is a solution, and not a compound?
12. Look at the following chemical formulas: $\mathrm{H}_{2} \mathrm{O}$ and $\mathrm{H}_{2} \mathrm{O}_{2}$. Do these formulas represent the same compound? Explain.

Name: $\qquad$ Due Date: $\qquad$

## Chapter 2, section 2 assessment

1. Define Mass
2. Why is mass more useful than weight for measuring matter?
3. Define volume
4. What measurements must you make to determine the density of a sample of matter?
5. How can you determine whether a solid substance is more or less dense than water?

Use the density triangle to complete the following density calculations.
6. A piece of metal has a volume of $38 \mathrm{~cm}^{3}$ and a mass of 277 g . Calculate it's density.

7. Iron has a density of $7.9 \mathrm{~g} / \mathrm{cm}^{3}$. Calculate the mass of $38 \mathrm{~cm}^{3}$ of Iron.

8. Lead has a density of $11.37 .9 \mathrm{~g} / \mathrm{cm}^{3}$. What would be the volume of 277 g . of Lead?


