Matter

1. What is matter composed of?

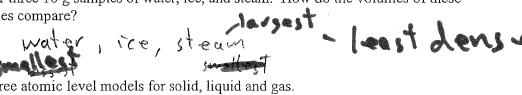
mass + volume

2. Why can't we see atoms with the naked eye?

ver, coll

3. How do the properties of a compound compare to the properties of the elements that make it? notalike very different

4. Consider three 10 g samples of water, ice, and steam. How do the volumes of these three samples compare?



5. Draw three atomic level models for solid, liquid and gas.







6. Classify the following as physical or chemical changes/properties.

A shirt scorches when you leave an iron on it. (...... The tires on your car seem to be getting flat in the cold weather. ρ , ρ . Your grandmother's silver tea set is turning black over time. (. C. Spray-on oven cleaner converts grease into a soapy material. C Acids produced by bacteria in plaque cause teeth to decay. \angle Sugar will char if overheated while making homemade candy. (Hydrogen peroxide fizzes when applied to a wound. $\boldsymbol{\zeta}$ Dry ice "evaporates" without melting as time passes. Coffee beans are processed in a grinder. Carbonated soda pop loses its fizz. A short-order cook fries an egg. (Water expands when frozen, decreasing its density.

7. Explain the difference between an element and a compound

Rain droplets high in the atmosphere form hail. ρ

one type of atom

zor more atoms band together

7_

8. Define pure substance and mixture.

enetype of Eleventer Compand 2 dormore substances

9. Classify the following as pure substance or mixture. If a mixture, then classify as homogeneous or heterogeneous.

A multivitamin tablet. M - home

The blue liquid in your car's windshield washer. M - homo-

A Spanish omelet. M- hetero

A diamond. P.S.

A jar of jelly beans M-hetelo

Tea Mi-homo

Saline solution m - home

Bag of m&m's M- Letero

10. Identify 10 hold items other than the ones listed on this homework assignment.

Substance 2 physical properties pure/homogeneous/heterogeneous

20