

1. The smallest part of an element that can exist as an element is a(n) \_\_\_\_\_

2. What would happen to the speed of the motion of the particles in a gas as it is cooled?

\_\_\_\_\_

3. The \_\_\_\_\_ says:

- Matter is made of small particles
- The particles are in constant motion
- There is a large amount of space between the particles
- The particles collide with each other and transfer energy

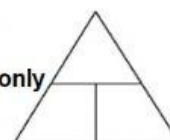
4. To find the mass you would use a \_\_\_\_\_

5. The variable that you (the experimenter) change is the \_\_\_\_\_

6. The variable that you (the experimenter) measure is the \_\_\_\_\_

7. What is the formula for density? **Density=**  $\frac{\text{Mass}}{\text{Volume}}$  **Letters only** Fill in the triangle.

**Letters only**



8. Classify each as an 'E' Element, 'C' Compound, or 'M' Mixture.

- a. \_\_\_\_\_ C6H12O6 Listen
- b. \_\_\_\_\_ Air
- c. \_\_\_\_\_ O – Oxygen
- d. \_\_\_\_\_ Two of more substance NOT chemically combined or in a specific ratio
- e. \_\_\_\_\_ Pure Water H2O
- f. \_\_\_\_\_ Two or more substances combined in a specific ratio
- g. \_\_\_\_\_ Table Salt NaCl
- h. \_\_\_\_\_ Two or more substances combined physically
- i. \_\_\_\_\_ NaHCO3
- j. \_\_\_\_\_ A substance that cannot be broken down into any other substance

9. When you add enough heat to a solid it will change phase to a \_\_\_\_\_

10. Fill out the chart:

State of matter	Definite Shape (Y/N)	Definite Volume (Y/N)
Solid		
Liquid		
Gas		