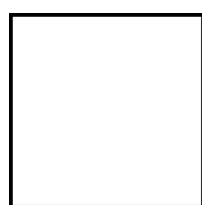
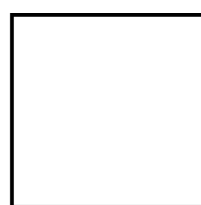


Part I– Atomic Theory

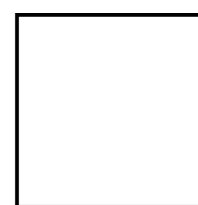
- Which statements are *consistent* with Dalton’s atomic theory as it was originally stated? Explain why the inconsistent statements are wrong.
 - All titanium atoms are identical.
 - Calcium and magnesium atoms have the same mass.
 - Potassium and bromine atoms combine in a 1:1 ratio to form potassium bromide.
 - Neon and Hydrogen are the same.
- Below are three boxes labeled solid, liquid, and gas. Fill in those boxes with circles which represent atoms, to show the arrangement of atoms in those states.



Solid

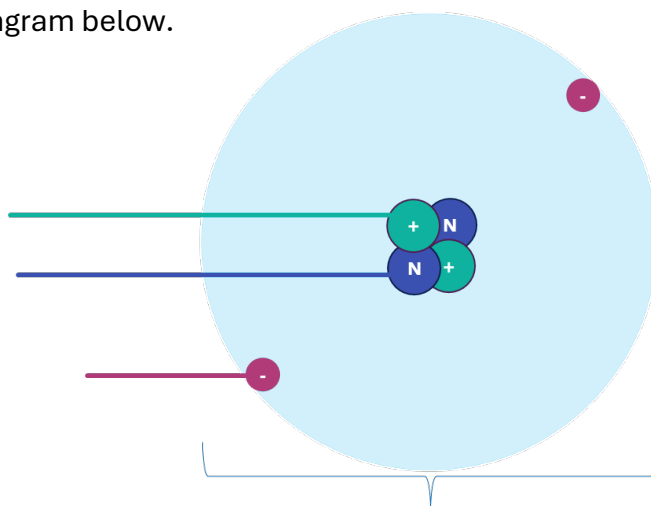


Liquid



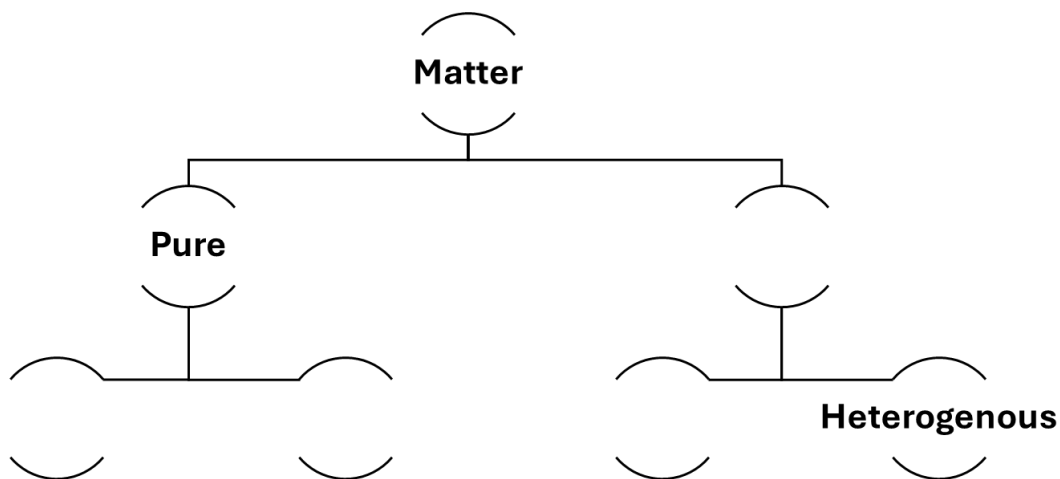
Gas

- Label the diagram below.



Part II— Classifying Matter

4. Fill in the blanks of the chart below. Provide an example beside each category.



5. For part **a**, the correct atomic number for each given element. For part **b**, provide the correct element for the given atomic number.

a.

Nitrogen _____

Helium _____

Cobalt _____

Silver _____

Iodine _____

b.

11 _____

45 _____

67 _____

21 _____

55 _____

6. Classify each example as a pure substance or a mixture. If it is a pure substance, classify it as an element or a compound. If it is a mixture, classify it as homogenous or heterogenous.

a. Dry Ice	b. Soil with rocks in it
c. A piece of chocolate	d. Table salt
e. Carbonated water	f. Helium in a balloon
g. A diamond	h. Italian salad dressing