## Matter and Mass

Matter is anything that has mass and volume.

- Define *mass*.
  - o What equipment is used to measure mass?
  - What base unit is used to measure mass?
  - o How does mass differ from weight?
- Define volume.
  - What lab equipment is used to measure volume?
  - O What base unit is used to measure volume?

What does the <u>Law of Conservation of Mass</u> state?

Sodium chloride is formed by reacting solid sodium metal with chlorine gas according to the following chemical equation.

$$2 \text{ Na} + \text{Cl}_2 \rightarrow 2 \text{NaCl}$$

What are the <u>reactants</u> in this reaction?

What are the <u>products</u> in this reaction?

If the reaction begins with 46.0 g of sodium and 71.0 g of chlorine, what mass of sodium chloride will be formed?

If an 11.50-g sample of sodium reacts with chlorine to form 29.25 g of sodium chloride, what is the mass of chlorine that reacted?