

Conservation of Mass Vocabulary

- 7.PS1.4 - Use computational thinking to demonstrate that all atoms in the reactants are present in the products of a chemical reaction supporting the Law of Conservation of Mass.
1. **reactants** - a substance or molecule that participates in a chemical reaction; the ingredients that you start with
 2. **products** - a substance or molecule that is formed in a chemical reaction; the final output
 3. **Law of Conservation of Mass (Matter)** - the law that states that mass (matter) cannot be created or destroyed in ordinary chemical and physical changes
 4. **system** - a group of multiple parts that must interact or connect with each other to work as a team and perform a specific job or creates something new; when one part of a system changes, it can affect the other parts and the whole system; examples of system include the human body, a bicycle, the solar system, a toaster, or a cell.
 5. **open system** - a system where both matter and energy can escape; an example is a pot of boiling water without a lid
 6. **closed system** - a system where only energy can escape but the matter stays trapped inside; an example is a pot of boiling water with a lid
 7. **independent variable** - what scientists change; can be thought of as the cause; always goes in the first column of the data table and on the x-axis
 8. **dependent variable** - what the scientists measure (the data you collect); can be thought of as the response; it is never in the first column of the data table and it is on the y-axis