

Writing Balanced Chemical Equations

The Law of Conservation of Mass: During a chemical reaction, the total mass of the reactants is equal to the total mass of the products.

Word Equations

Hydrogen + oxygen → water

Skeleton Equation – change the names into formulas



Balanced Equation – Add coefficients in front of the formulas following the law of conservation of mass



Guidelines:

1. Write the skeleton equation, and make sure that you have written the formula for each molecule correctly.
2. Balance the atoms that occur in the largest number on either side of the equation first. Leave H, O and other elements until the end.

3. Balance polyatomic ions of both sides of the equation as a unit.
4. Balance other uncombined atoms and elements such as Na and Br₂
5. Balance H and O atoms.
6. **CHECK YOUR ANSWER.** Remember that your coefficients should be in lowest terms.