

Stoichiometry & Dosage Calcula

- Stoichiometry is the use of quantitative relationships between substances that are involved in chemical reactions which determine the amount of the reactants or the products (Bauer, Birk, & Marks, 2019).

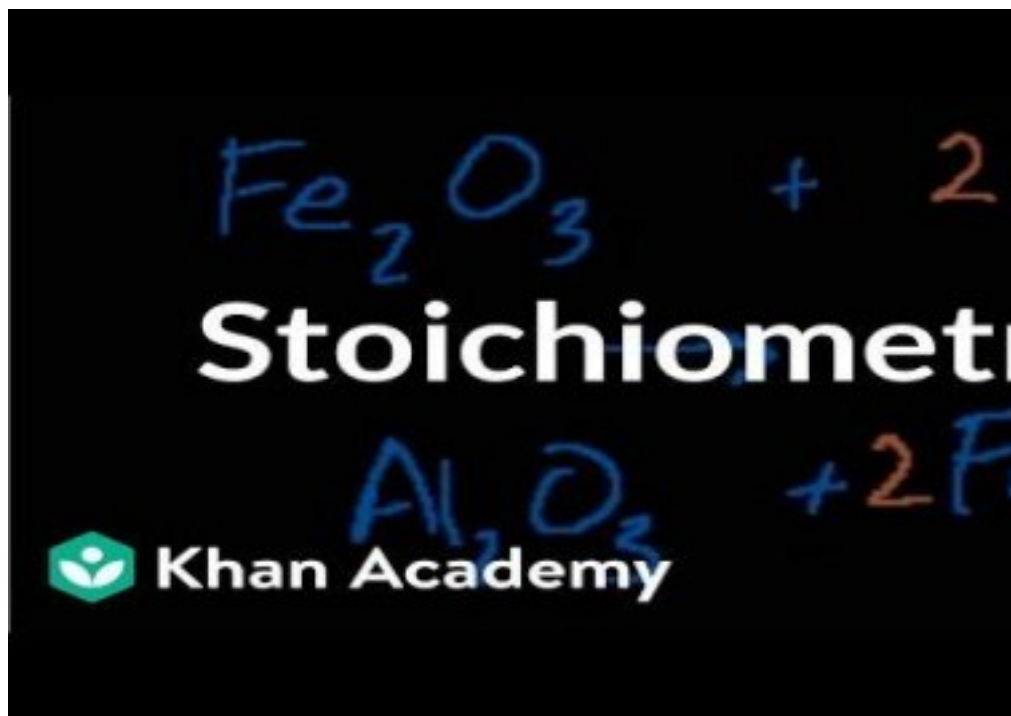
Stoichiometry - the process of determining the amounts of substances in a chemical reaction (Bauer, Birk, & Marks, 2019).

- It is used to relate the reactants and products by using calculations and balanced equations (Bauer, Birk, & Marks, 2019).

- By knowing the amount of a reactant or a product, it is possible to determine the amount of another reactant or product in the same reaction and balance the equation (Bauer, Birk, & Marks, 2019).

- Stoichiometry calculations deal with the mass or volumes of products and reactants.
- To solve stoichiometry problems it is important to master balancing equations, converting between grams and moles, calculating molar mass, and calculating mole ratios.
- Stoichiometry is the study of mass relations, where one or more substances undergo a physical change or a chemical change.
- After doing the calculations and conversions the equation must be balanced.
- After the equation is balanced, it is important to determine the mole relationship between the reactants and products in the chemical equation (Bauer, Birk, & Marks, 2019).

Stoichiometry Tutorial



- **Steps to balancing Stoichiometry:**

- **Identify each element in the equation. The number of atoms for each element m**

the same on each side to be balanced.

- The net charge must be the same on each side of the equation.
- Start with the elements in one compound and change the number of the coefficient until the atoms are equal on each side.
- Once you balance one element, then you must balance the rest before checking work (Bauer, Birk, & Marks, 2019).

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Unbalanced:



Balanced: