

Stoichiometry



Stoichiometry

- _____ - measuring the amounts of substances involved in chemical reactions and relating them to one another

Steps

1. Write the _____ chemical equation
2. Start with your _____
3. Cross out until you get what you want
4. Check _____, _____, and _____ your answer

Conversion Factor

Moles A
Moles B

The #'s in from if A & B MUST come from the _____ chemical equation

Mole – Mole Relationship

- How many moles of Fe_2O_3 will I form from 5.0 mol of Fe?

Mass – Mole Relationship

- How many g of NaCl will be produced from 1.25 mol of chlorine gas reacting with sodium?

Mass – Mass Relationships

- Ammonium nitrate decomposes into dinitrogen monoxide gas and water. Determine that amount of water produced if 25.0 g of ammonium nitrate decomposes.

Another Example

- Determine the number of moles of carbon dioxide that can be formed from the combustion of 10.0 moles of C_3H_8 .