

Solutions and Concentration

10th Grade

The vocabulary, and the formula that turns it into numbers.



A solution is a solute dissolved in a solvent. Concentration measures how much solute is present per unit of solution.

- Solute is what dissolves; solvent is what dissolves it.
- Molarity $M = \text{moles of solute} \div \text{litres of solution}$.
- Dilution: $M_1V_1 = M_2V_2$.
- Saturated means no more will dissolve at that temperature.
- Most solids dissolve better when hot; most gases dissolve better when cold.

LOOK FOR IT

0.5 moles of salt in 2 litres gives a 0.25 M solution.

Concentrated means a lot of solute per litre. Strong means fully dissociated. They are unrelated ideas.