

- A **solution** is a **mixture** where one substance dissolves in another. It looks like **one single liquid**, but it's made up of **two or more substances**.

**Example:**

- **Salt water** is a solution of **salt (solute)** in **water (solvent)**.
- **Solute** is the **substance that gets dissolved** in a liquid.

**Examples of solutes:**

- Salt in water
- Sugar in tea
- Ink in water

- **Solvent** is the **liquid that dissolves the solute**.

**Examples of solvents:**

- Water (most common solvent)
- Milk (for chocolate powder)
- Alcohol (used in perfumes)

**● What Makes a Good Solution?**

A good solution has:

- **A clear appearance** (you can't see the solute)
- Even distribution (solute spreads throughout)
- No residue or particles left behind

**● Types of Solutions (based on solubility)**

Type of Solution	Description	Example
<b>Saturated</b>	Cannot dissolve more solute	Salt water with too much salt
<b>Unsaturated</b>	Can dissolve more solute	Normal sugar water
<b>Dilute</b>	Less solute, more solvent	Few drops of juice in water

Concentrated	More solute, less solvent	Strong lemon juice
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● **Why is Water Called a Universal Solvent?**

Because it can **dissolve more substances** than any other liquid. It is used in **medicine, cooking, cleaning, and factories**.

● **How to Increase Solubility?**

To make solutes dissolve **faster**:

- **Stir** the mixture
- **Heat** the solution
- **Crush** the solute into smaller pieces

● **Uses of Solutions in Daily Life**

Use	Example
Cooking	Salt and spices dissolve in food
Medicines	Syrups are sugar + medicine solutions
Cleaning	Soap solution helps remove dirt
Drinks	Juice, tea, and coffee are solutions