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# Infographic Contest Winner

## MIXTURES? THE TYPES AND HOW TO TELL

Conceived by Aaron Herrera & Emerald Rawls

Hello! My name is Drippy, and I'm here to tell you about mixtures. While this topic may seem simple, there are actually many different outcomes from mixing things together. Four, to be specific: solutions, suspensions, colloids, and emulsions. But don't worry. With my help, identifying and understanding these four types will be easy as  $\pi$ !

**SOLUTION**

- Completely dissolved to the atomic level.
- Can't see the mixed particles with our eyes or a microscope.
- Can't be filtered or separated without heat or a chemical reaction.

EXAMPLE: Salt water

**SUSPENSION**

- Mixture of solid particles dispersed in a liquid.
- Can be separated by filtering the mixture.

EXAMPLE: Quicksand

**COLLOID**

- Has small particles that don't settle out.
- May be transparent or cloudy.
- Light spreads out when shone through mixture.

EXAMPLE: Milk

**EMULSION**

- Type of colloid where dispersion is helped by an emulsifier.
- Forced mixture.

EMULSIFIERS are molecules that look like this:

EXAMPLE: Mayonnaise

One side loves water, the other side hates it.

Thank you to all the students, teachers and chemistry enthusiasts who entered the ACS ChemClubs and ChemMatters infographic contest!

Check out the first of the four winners, as you learn more about the chemistry of mixtures. Congratulations to Aaron Herrera and Emerald Rawls, from Mapleton Expeditionary School of the Arts in Thornton, Colo.

Watch for the other winners in the next three issues.

**GOOD THINGS TO KNOW!**

Solute: the smaller part of the mixture that gets dissolved.

Solvent: the major part of the mixture that dissolves the solute.

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