SIMPLE SOLUBILITY

SUPERNOVA
DALHOUSIE UNIVERSITY | HALIFAX, NOVA SCOTIA

EXPLORE THE CONCEPT OF SOLUBILITY BY TESTING DIFFERENT MATERIALS

MATERIALS

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3 clear glasses
1 tbsp salt
1 tbsp sugar
2 tbsp flour
300 mL water (100 mL per cup)

30 MINS

PROCEDURE

Step 1
Fill each cup with 100 mL of water. You will be testing the solubility of 3 different materials - sugar, salt and flour. Do you think these items will be soluble or insoluble? Why?

Step 2
Add the sugar to the first glass of water, and stir. Is the solution uniform (homogenous)? Is the mixture stable, without change overtime (ie settling to the bottom)? Are the solute and solvent molecules distinguishable?

Step 3
Add the salt to the next glass of water, and stir. Ask yourself the same questions in step two.

Step 4
Add the flour to the final glass of water, and stir. Ask yourself the same questions in step two.

YOU SHOULD HAVE FOUND THAT THE SUGAR AND SALT ARE SOLUBLE, WHILE THE FLOUR IS INSOLUBLE!

PURPOSE & SCIENCE OUTCOMES

- Solubility is the ability of a substance (called a solute) to mix/dissolve into a liquid (called the solvent) to form a solution.
- If a material can not dissolve in a liquid, then it is considered insoluble.
- A true solution is homogenous, stable over time, and has indistinguishable solute & solvent molecules.

ANY QUESTIONS? REACH OUT @SUPERNOVAATDAL