SOLUBILITY CALCULATION

Solubility is a property of substances that indicates the highest quantity of a substance (solute) that can be dissolved in a particular scope (dissolvent). As we know, water is the best dissolvent, and it dissolves most part of substances, but in what quantity?

Objective: in this task we will calculate the solubility of some substances (sugar and salt) in water.

Foundation: dissolvents cannot undo solutes in infinite quantities, but they get to dissolve a certain quantity of them. When a dissolvent cannot dissolve more quantity of a solute the dissolution is saturated.

To know what substance (sugar or salt) has a greater solubility we will try to find out what solute quantity it accepts until it gets its saturation point which will indicate its solubility.

Hypothesis: indicate what quantity you think will be dissolved in 50 ml of water:

Substance	Quantity
Sugar	
Salt	

Material: • wáter

- Salt
- sugar
- precipitated glass

Test tube

- Probeta
- spoon
- watch glass
- scale

Procedure:

•Bring to volume 5o ml of water in a precipitated glass

- Calculate, with the scale and the watch glass, the quantity of sugar that a spoon contains
- Add, slowly, sugar spoons and mix until it gets dissolved until the solute doesn't dissolve (remains in the bottom of the glass)
- Write down the number of sugar spoonfuls dissolved
- Calculate the total mass of sugar dissolved
- Repeat the steps with salt
- Compare the results with the hypothesis