

Peep Solubility

(Secondary Science)



Objective:

TLW test the solubility of Peeps by using different solvents.

Advance Preparation:

To six different beakers add 250 mL of a solvent as listed below.

- Beaker 1- room temperature water
- Beaker 2- 70% isopropyl alcohol
- Beaker 3- acetone
- Beaker 4- 0.1 M HCL
- Beaker 5- 0.1 M NaOH
- Beaker 6- 1 g of meat tenderizer in water

Take a package of marshmallow Peeps and separate 6 of them.

Materials:

marshmallow Peeps

6 beakers

safety goggles for chemical use

Substances for Testing:

room temperature water

alcohol

acetone

sulfuric acid

sodium hydroxide

meat tenderizer

Procedure:

1. Ask the students what they think that Peeps are made of and what they think will happen to a Peep if you put it in water.
2. Briefly explain all other substances that will be tested.
3. Have students predict what they think will happen to a Peep in each beaker.
4. Place 1 Peep in each beaker.
5. Have students make observations about every 20 minutes over a span of about an hour. However, your first observation should be after about 5 minutes.

Data Table



Write your predictions under the PREDICTED column before actually testing the Peeps. After you have marked your predictions, test the Peeps solubility, and record your observations under the OBSERVED column.

Beaker	Predicted	Observed

Conclusion: Justify the observations by looking at the contents of a Peep. Did anything dissolve a Peep, and if so, why?