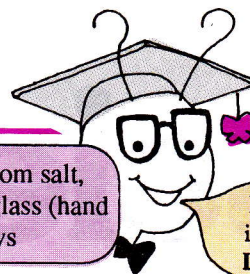




Weekly Lab

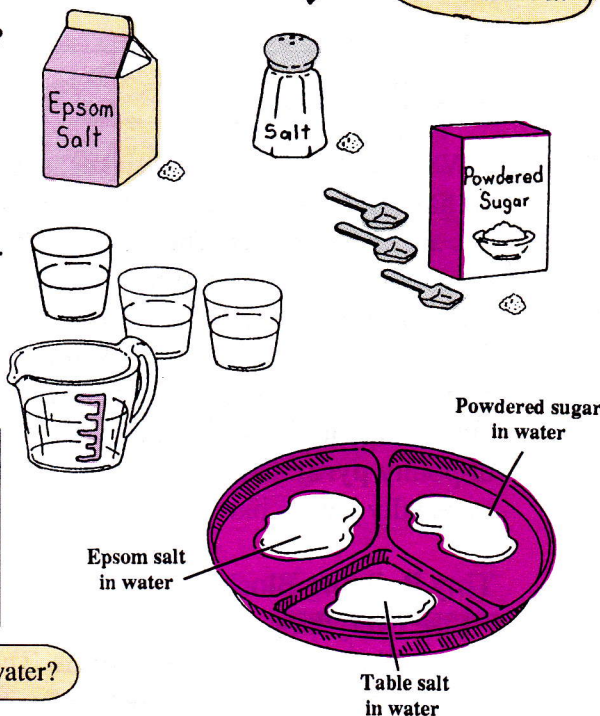


Put your plate in a safe place. Don't move it!

You need: 185 ml (about 3/4 cup) of warm water, 3 Tbls. of powdered sugar, 1 1/2 tsp. of Epsom salt, 1 1/2 Tbls. of regular table salt, measuring cup, 3 small cups, spoons, magnifying glass (hand lens), dark colored plastic plate (with 3-sections), toothpicks, mini-marshmallows

Experiment A: What kinds of crystals will form from these materials?

- Step 1:** Observe the powdered sugar and the 2 salts with your hand lens.
- Step 2:** Pour 60 ml (1/4 cup) of water into each of the 3 cups. Add the powdered sugar to the first cup. **Stir well.**
- Step 3:** Next, pour the Epsom salt into the second cup of water. **Stir well.**
- Step 4:** Then pour the table salt into the third cup of water. **Stir well.**
- Step 5:** Pour each of these into a different section of your plate in a **thin layer.**



Look at your plate tomorrow. Look at your plate in 2 days. Use your magnifying lens. What do you observe?

Draw the crystals you see.

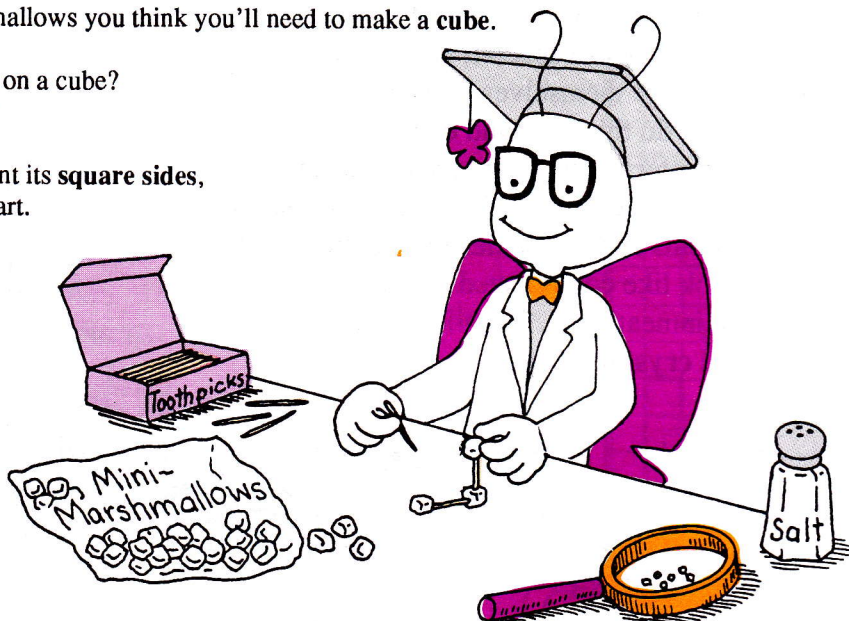
Powdered sugar	Epsom salt	Table salt

What do you think happens to the sugar and salts when you add them to the water?

Experiment B: Salt crystals are cubes. Let's construct a cube with toothpicks and miniature marshmallows.

- Step 1:** **Guess** how many toothpicks and marshmallows you think you'll need to make a **cube**.
- Step 2:** Write your **guesses** on the chart.
- Step 3:** Now **guess** how many **squares** there are on a cube? How many **edges**? How many **corners**? Write your **guesses** on the chart.
- Step 4:** After you've constructed your cube, count its **square sides**, **edges**, and **corners** and complete the chart.

How many ... ???		
	GUESSES	REAL #
toothpicks		
marshmallows		
squares		
edges		
corners		



Bonus: Now construct a "huge cube" that is made up of 8 cubes put together. Make a new chart and fill in your guesses for the same questions. See how well your guesses compare to the real answers.