

Chapter 3

Use with Section 2

ENRICHMENT

● Aqueous Solutions

Hunting for Aqueous Solutions

Aqueous solutions are all around us. In fact, it would be difficult for you to go anywhere without having them nearby in some form. As you learned in this section, aqueous solutions usually contain two parts, water and the solute. For this activity, you will be working with a parent or guardian to determine the solubility of different common kitchen items.

Materials   

- measuring cup (liquid)
- sugar
- salt
- baking soda
- flour
- cooking pot
- timer
- teaspoon
- spoon or stir stick

Procedure

1. Measure a cup of water and pour the water into the pot.
2. Stir in 1 teaspoon of sugar until it is completely dissolved.
3. Repeat step 2 until the sugar stops dissolving.
4. Record the number of teaspoons of sugar you added.
5. Put the pot on the stove and heat the solution until it is boiling, and then reduce the heat so that the solution is simmering.
6. Record the amount of time it took for the solution to begin to boil.
7. Repeat steps 2, 3, and 4.

Choose one of the other three ingredients and perform the same experiment.

1. Which ingredient was most soluble in the water at room temperature? At the boiling temperature?

2. Create a graph or table to display your results.

3. Which solution took the longest to boil? Why do you think it took longer?

4. Challenge Activity: Conduct this experiment using all four of the ingredients.