

Chapter 2

Use with Text Pages 38-47

ENRICHMENT**Using SI Units****A Layered Solution****Materials**

- food coloring
- table salt
- 5 small jars with lids
- tall jar or graduated cylinder
- water
- balance scale
- drinking straws or pipettes

Procedure

1. Into each of 5 labeled jars place salt and water in the amounts identified in this chart. Add 2 drops of food coloring to each jar.

Jar	Grams of salt	mL of water	Food coloring
1	16	60	blue
2	12	60	green
3	8	60	yellow
4	4	60	1 yellow, 1 red
5	0	60	red

2. Seal each jar securely with its lid. Shake well to dissolve all salt.
3. Using a straw or pipette, carefully transfer about 20 mL of the solution from Jar 1 to

the tall jar or graduated cylinder. Then using the straw or pipette, carefully layer 20 mL from Jar 2 on top of the 20 mL from Jar 1 that is already in the tall jar. (Add the layer by running the solution down the side of the tall jar.)

4. Then carefully layer 20 mL of Jar 3 on top of the 20 mL from Jar 2.
5. Next add 20 mL from Jar 4 on top of the 20 mL of Jar 3.
6. Finally, add 20 mL from Jar 5 to the top of the 20 mL from Jar 4.

Observations

Make a colored drawing of your layered solutions.

Conclude

1. Explain why it is possible to make this layered solution. _____

