

# POM Lesson 14

## Mass, Volume, and Dissolving

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_ Table \_\_\_\_\_

### Getting Started (page 117)

1. Why is mass and not volume used to measure the amount of matter in an object?

### Inquiry 14.1 Mixing Alcohol and Water (page 119)

1-7. Complete Table 1 as you work through this inquiry

**Table 1 Predictions and Results for Inquiry 14.1**

Liquid	Volume of Liquids (mL)	Mass of Liquids and Cylinders (g)
Water	50.0	
Alcohol	50.0	
Predicted Measurements (water and alcohol)		
Actual Measurements (water and alcohol)		
Differences		

8. What type of mixture was formed when you mixed the water and the alcohol?

What happened to the volume?

What happened to the mass?

10. What conclusions can you reach?

## **Inquiry 14.2 Dissolving a Solid and Measuring Mass (page 120)**

2. Write your procedure below:

4. Record your results:

6. What can you conclude from your experiment.

## Reflecting On What You've Done (page 121)

- A. What have you discovered by doing these two inquiries?
- B. What happens to the mass of two types of matter when they are mixed together to form a solution (for example, when a solid is dissolved in a liquid)?
- C. Does the same rule apply to volume?
- D. How do your results compare with what you already know about what happens to the mass and volume of matter during phase change?