

Name

Density Demonstration Bottles Worksheet

Discussion Questions

1. Draw the two bottles. Label each with chemicals and colors in the correct place.

2. Water has a density of 1.0 g/mL. Approximate what the density of lamp oil might be. Give a reason for your guess.

3. The water and lamp oil layers do not mix because lamp oil is a hydrocarbon, which is nonpolar. Water, on the other hand, is a polar molecule. What does this say about the blue dye used in this demonstration? Why do you think that only the water was blue in one bottle, but only the lamp oil was blue in the other?