

4. Suppose solute **A** has a distribution coefficient of 1.0 between water and diethyl ether. Demonstrate that if 1.0 mL of a solution of 50 mg of **A** in water were extracted with two 0.25-mL portions of ether, a smaller amount of **A** would remain in the water than if the solution were extracted with one 0.50-mL portion of ether. Show your work!

5. This experiment requires you to extract an aqueous tea solution using solid phase extraction.

- a) Where should you discard the tea leaves?
- b) Where should you discard the aqueous tea solutions?
- c) Where should you discard the used SPE column? Why?

6. Where would you look to find the correct format for the labels on sample vials?
