

Polarity and Solubility of Molecules



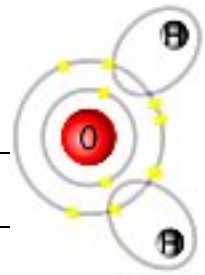
Directions:

Insert and install your Interactions: Foundations CD.

- a. Click the "Contents" button.
- b. Open the *Chemistry Level of Organization* file.
- c. Click on *Animations*.
- d. Work through *Polarity and Solubility of Molecules*.

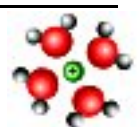
Introduction

1. Why is water the perfect medium to transport other molecules? _____

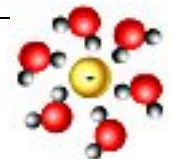


2. Explain why water molecules are *polar*. _____

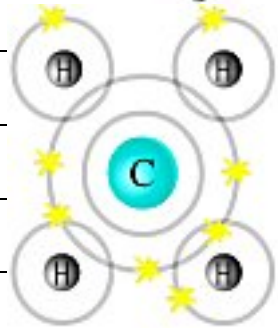
3. Explain how water molecules dissolve the following:
ionized or polar molecules - _____



organic molecules (carbohydrates, proteins, nucleic acids, ATP) - _____



4. Explain why nonpolar molecules do not dissolve in water. _____



5. Describe how lipids respond in water. _____



6. Explain the unique structure of phospholipid molecules and explain their importance in membrane structure.

