The Universal Solvent: Water

1) Pour the salt in the cup of water labeled #1. Record your observations in the box below.

Notes on Water and Salt:

The solute is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The Solvent is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Is salt polar or nonpolar?

2) Pour the sugar in the cup of water labeled #2. Record your observations in the box below.

Notes on Water and Sugar:

The solute is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The Solvent is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Is sugar polar or nonpolar?

3) Pour the sand in the cup of water labeled #3. Record your observations in the box below.

Notes on Water and Sand:

The solute is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The Solvent is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Is sand polar or nonpolar?

4) Pour the alcohol in the cup of water labeled #3. Record your observations in the box below.

Notes on Water and alcohol:

The solute is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The Solvent is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Is alcohol polar or nonpolar?

4) Pour the oil in the cup of water labeled #3. Record your observations in the box below.

Notes on Water and oil:

The solute is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The Solvent is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Is oil polar or nonpolar?

Which substance is less dense: water or oil? How do you know?

Homework: Predict three more substances that will dissolve in water. Predict three substances that won’t dissolve in water. Research whether or not they would dissolve.