

NAME:

HONORS CHEMISTRY

SECTION:

TAKE-HOME LAB: MOLECULAR MIXING

You **must** complete this take-home lab with a parent or guardian in order to receive credit.

1. Add 1 cup of water to a tall clear glass
2. Add $\frac{1}{4}$ cup of vegetable oil. Observe for 1 minute.

3. To the left-hand side, hold the tip of the dropper 1 inch from the top of the liquid. Add 1 drop of food dye to this mixture. Observe for 1 minute.

4. To the right-hand side, hold the measuring spoon 1 inch from the top of the liquid. Add $\frac{1}{4}$ tsp of table salt to your mixture. Observe for 1 minute.

5. Repeat steps 3 and 4 as necessary and observe.

6. Your parent/guardian explanation of this lab:

Parent Initials _____

7. Give your explanation all of the observations using the following terms: like dissolves like, polar, non-polar, density, diffusion, surface tension, homogeneous/heterogeneous mixture, hydrogen bonding, ion-dipole attraction, cohesive/adhesive forces, saturated solution

Extra Credit: (Answer on the back)

Does the color of the food dye make a difference in the observations?

Add 10 drops of dish detergent and stir. Observe and explain.