## Bonding Lab

| Purpose:   | To use evaporation and polarity to identify liquids.   |                          |
|------------|--|--------------------------|
| Materials: | C <sub>3</sub> H <sub>6</sub> O, C <sub>3</sub> H <sub>7</sub> OH, filter paper, rubber band                                       |                          |
| Equipment: | Lab Pros, computers, stainless steel temperature probes.   |                          |
| Procedure: | Wrap filter paper around the end of a temperature probe and secure with a rubber band. Dip the probe into the liquid to be tested. |                          |
|            | Begin collecting data (temperature vs. time) and then remove the probe to let it "air dry."  |                          |
|            | Collect data for about 3 minutes or until the cooling stops  |                          |
| Write Up:  |  |                          |
| 1. Di      | raw the molecules below:   |                          |
|            | $C_3H_6O$  | $C_3H_7OH$               |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |
| 2. W       | Thich molecule is more polar?  |                          |
| 3. Fo      | or which liquid will the molecules be least attracted to each other  | ?                        |
|            |  |                          |
| 4. W       | ould the more polar, or less polar liquid evaporate faster?  |                          |
| 5. Ba      | ased on the results of the lab, write the formula for liquid A:  |                          |
|            |  |                          |
| 6. Ba      | ased on the results of the lab, write the formula for liquid B:  |                          |
| 7. Oı      | n the back of the page, describe how you determined your answer  | rs to questions 5 and 6. |