Name_____

Date_____ Pd____

Unit 2 Worksheet 1

1. You decide to boil water to cook noodles. You place the pan of water on the stove and turn on the burner.
   a. How does the behavior of the water molecules change as the pan of water is heated?

   b. What about your answer to (a) would change if there were more water in the pan?

2. What property of matter best describes the way a typical alcohol thermometer works? Explain (in terms of energy transfer) why the alcohol level in the thermometer rises (or falls) when you place the thermometer in contact with both warmer (or colder) objects.

3. If you feel feverish, why can't you take your own temperature with your hand?

4. Your older brother announces that the lid to a jar of pickles from the refrigerator is "impossible" to loosen. You take the jar, hold the lid under the hot water from your sink's faucet for a few seconds, and calmly open the jar. Your brother, when faced with this blow to his pride, claims that he loosened it for you. What knowledge of materials have you applied in this situation that really explains how you were able to open the lid?

5. Describe how Anders Celsius devised the temperature scale that bears his name.

6. Which would feel warmer to the touch - a bucket of water at 50˚C or a bathtub filled with water at 25˚C? Which of these stores more energy? Account for any differences in your answers to these questions.