06-06 Conduction *Name: _____*

Objective:

- Observe conduction in different materials.

Materials:

- Beaker (or cup)
- Wooden spoon
- Plastic spoon
- Metal (stainless steel) spoon
- Butter
- 3 beads
- Boiling water

Procedure:

1. Put a small pat of butter on the curved end of each spoon.
2. Stick a bead to each pat of butter.
3. Set the spoons in the beaker with the butter side up. The handles will be downward.
4. Boiling water will be poured in the beaker. Predict the order that the butter will melt. _____
5. Have the teacher pour some boiling water in your beaker.
6. Observe the butter on the spoons. When it melts, the bead will slide down the spoon.
7. What is the order that the butter melts? _____
8. Look at table 14.3 in your textbook.
    a. What is the conductivity of stainless steel? _____
    b. Is steel a conductor or insulator? _____
    c. What is the conductivity of wood? _____
    d. Is wood a conductor or insulator? _____
    e. Would the conductivity of plastic be higher or lower than steel? _____
    f. Would the conductivity of plastic be higher or lower than wood? _____
    g. Is plastic a conductor or insulator? _____