Name:_____ Due Date:_____ Period:_____

**Chapter 2, section 3 assessment**

1. Define the law of conservation of mass

2. Explain the difference between an endothermic change and an exothermic change.

3. Identify three physical changes that could happen to a plastic spoon.

4. Identify the following processes as either a chemical or physical change:
   - Drying wet clothes
   - Cutting hearts out of paper
   - Lighting a match from a matchbook
   - Melting a crayon with a hairdryer
   - Browning bread in a toaster
   - Roasting chicken in the oven
   - Burning wood in a fireplace
   - Cutting your hair

5. List several forms of evidence that you could look for to determine a chemical change has occurred.

6. Why is electrolysis of water (see chart on page 2) a chemical change when boiling water to produce a vapor not?

7. What is tarnishing, and why is it a chemical change.

8. Explain why the mass of a rusted nail would be greater than the mass of the same nail before it rusted? Assume that all of the rust is still attached to the nail. (hint: the nail rusts when exposed to the air)

9. Define thermal energy

10. How could you tell that one glass of water has more thermal energy than another, identical glass?