Complete each of the following problems. For numerical problems, you must show your work in order to possibly earn full credit.

1. Identify the following as either *chemical* or *physical* changes or properties. (2 pts. ea.)

    _____ a. Milk sours if left on the kitchen counter too long.

    _____ b. Frost forms on a cold window pane.

    _____ c. Sugar is a solid at room temperature.

    _____ d. Antacids often help an upset stomach.

2. Convert the following metric quantities. (4 pts. ea.)
    a. 36 nL = ? mL

    b. 1.8×10^{-10} kg = ? μg

3. When you exhale, you typically breathe out roughly 500 mL of air. If 1.0 L of exhaled air has a mass of 1,200 mg, how many breaths will it take to exhale 100 g air? (8 pts.)

Bonus: List one example of each of the following. There are many acceptable answers to each part. (2 points each)

    a. a chemical element: _____

    b. a chemical compound: _____