Chapter 2 Study Guide NB p. _____

Name: _____ Single/Science

1. List 5 physical properties of matter.

2. List 5 chemical properties of matter.

3. Describe the difference in a physical & chemical change.

4. Define each:
   Solid—
   Liquid—
   Gas—

5. List 6 properties of matter that can be used to identify a substance.

6. Describe 3 physical methods of separating mixtures.

7. Complete:

Term	Definition	Example	Gains or loses energy?
Melting			
Freezing			
Condensation			
Evaporation			
Boiling			
Sublimation			
Deposition			

8. Match the following examples with the appropriate process (use the terms in #7 as your word bank). Also, write an "L" in the left margin if the process involves losing energy & an "G" if it involves gaining energy.
    a. Melted candle wax cools & hardens—
    b. Ice cubes in the freezer shrink or disappear—
    c. A puddle of water dries up slowing in the sunlight—
    d. Heated water forms bubbles of water vapor inside it—
    e. Water in a freezer becomes an ice cube—
    f. Ice becomes liquid water—
    g. Ice becomes water vapor—
    h. Water vapor becomes water droplets—
    i. Grass wet with dew slowly dries in the morning sun—
    j. As a solid heats up, its particles gain enough energy to move away from each other—
    k. A piece of dry ice (frozen carbon dioxide) gets smaller at room temperature—

9. State whether each is a physical or chemical change:
    a. Rolling a ball of clay into a flat shape—
    b. Shredding a piece of paper—
    c. Baking a loaf of bread in the oven—
    d. Cooking a scrambled egg—
    e. Melting an aluminum can—
    f. Nails rusting—
    g. Silver tarnishes—
    h. Apples ripen—
    i. Dead tree leaves decompose—
    j. Burning leaves—
    k. Grape juice stains a shirt—
    l. Atomic bonds break & new bonds form—
    m. Dissolving salt in water—

10. Calculate density:
    a. 24 mg & 48 L b. 14 mL & 42 g c. 98 g & 20 mL

11. Observe the following graph and answer the questions:
    a. Which has the highest melting point?
    b. Which has the lowest melting point?
    c. What is the difference in the melting points of lead and aluminum? Be specific; write a numeral for your answer.
    d. Which are frozen at room temperature?