| Name   | Date   |
|--------|--------|
| Period | Number |

## **Unit 3-1 Physical & Chemical Changes**

Changes in matter can be physical or chemical. A <u>physical change</u> occurs when there is a change in the shape, color or state of matter. The matter you started with is the SAME matter that you ended with.

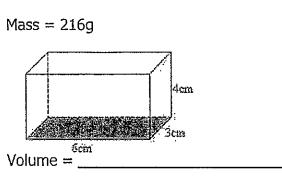
A <u>chemical change</u> occurs when there are changes occurring involving chemical reactions. The matter you started with is DIFFERENT than the matter you ended with.

**Directions**: Write P for a physical change and a C for a chemical change.

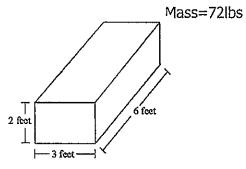
- 1. \_\_\_\_ glass breaking
- 2. \_\_\_\_ hammering wood together to build a playhouse
- 3. \_\_\_\_\_ a rusting bicycle
- 4. \_\_\_\_ melting butter for popcorn
- 5. \_\_\_\_\_ freezing chocolate covered bananas
- 6. \_\_\_\_ Separating sand from gravel
- 7. \_\_\_\_ burning toast
- 8. \_\_\_\_\_ spoiling food
- 9. \_\_\_\_ water evaporating from a pond
- 10.\_\_\_\_ fireworks exploding
- 11.\_\_\_\_ frying an egg :
- 12.\_\_\_\_ pouring milk on your cereal

## **REVIEW**

**<u>Directions:</u>** Calculate the volume and the density for each problem below. SHOW ALL WORK! Volume =  $L \times W \times H$  Density = mass/volume







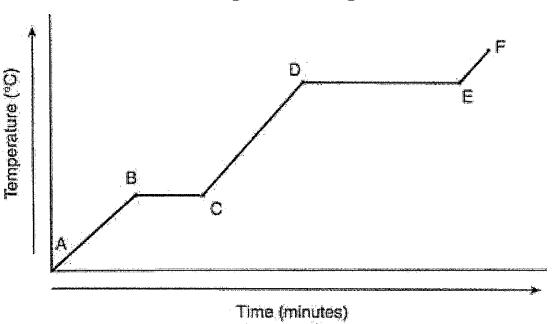
Volume \_\_\_\_\_

Density = \_\_\_\_\_

| Name |  |  |
|------|--|--|
|      |  |  |

Date \_\_\_\_\_

## **Melting and Freezing HW**



- 1) In the diagram above, what state of matter is A  $\rightarrow$  B?
- 2) In the diagram above, what state of matter is C  $\rightarrow$  D? \_\_\_\_\_
- 3) In the diagram above, what state of matter is E → F? \_\_\_\_\_
- 4) What phase change is occurring from B→ C? \_\_\_\_\_\_
- 5) What phase change is occurring from C→ B?
- 6) What is happening to the temperature from  $A \rightarrow B$ ?
- 7) What is happening to the temperature from B -> C? \_\_\_\_\_\_
- 8) What is happening to the temperature from C→ B? \_\_\_\_\_\_
- 9) What is happening to the temperature from B→ A? \_\_\_\_\_
- 10) As temperature increases, do particles spread out or move closer together?
- 11) As temperature decreases, do particles spread out or move closer together?
- 12) As temperature increases, do particles move faster or slower?
- 13) As temperature decreases do particles move faster or slower?
- 14) As we go left on the heating curve, do we gain (absorb) or lose energy?
- 15) As we go right on the heating curve, do we gain (absorb) or lose energy?