Basic Physical Science Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 6 Study Guide Period \_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does a chemist study?
2. Define properties.
3. Define density and explain why it is a property.
4. How are matter, mass, and volume related?
5. Describe the 3 states of matter in terms of volume and shape, and include the particle movement.  
   1. SOLID –
   2. LIQUID –
   3. GAS –
6. What are the four factors that affect the behavior of gases?
7. Temperature, # of particles, and volume all affect the pressure of a gas. What does it boil down to, though?
8. Explain why changing the temperature of a gas will affect the pressure.
9. Explain why changing the volume of a gas will affect the pressure.
10. Explain why the # of particles of a gas will affect the pressure.
11. Adding energy to a solid will make it a liquid. What is this process called? Why does it happen?
12. Adding energy to a liquid will make it a gas. What is this process called? Why does it happen?
13. What are the two types of vaporization? How are they different?  
      
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14. Draw a heating curve. Label the axes and line segments A through E.

What state of matter is at A? \_\_\_\_\_\_\_\_  
What is happening at A?

What state of matter is at B? \_\_\_\_\_\_\_\_  
What is happening at B?

What state of matter is at C? \_\_\_\_\_\_\_\_

What is happening at C?

What state of matter is at D? \_\_\_\_\_\_\_\_

What is happening at D?

What state of matter is at E? \_\_\_\_\_\_\_\_

What is happening at E?

1. Does the temperature change during a phase change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   Why or why not?