**Science Term 4 Study Guide:**

1. States of Matter:

-List the 3 states of matter. Draw a diagram that shows what molecules might look like in each state:

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-The process of changing from various states of matter has different names. What is it called when a substance changes:

from a gas to a liquid:

from a liquid to a gas:

from a solid to a liquid:

from a solid to a gas:

from a liquid to a solid:

1. Physical and Chemical properties and changes:

-What is a physical change? What are physical properties?

-List 3 ways to physically change a piece of paper:

-What is a chemical change? What are chemical properties?

-How can you chemically change a piece of paper:

-List the various evidence that can prove a chemical change:

III) Practice Questions:

1. A different chemical substance is formed when
   1. a cloth is cut
   2. a cup breaks
   3. a candle burns
   4. a piece of chalk falls apart
2. Which is an example of chemical change?
   1. paper being burned
   2. metal being melted
   3. a board being cut in half
   4. water being boiled
3. Jerome put water in the freezer and made ice. Which of the following happened?
   1. Water underwent a chemical change.
   2. Water changed from acidic to alkaline.
   3. Water molecules changed into atoms.
   4. Water physically changed from liquid to a solid.
4. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_occurs when a substance becomes a new substance.
5. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_takes place when a substance changes in size, shape, or form.
6. Tell if these are physical or chemical changes.
   1. a clay snake made from a ball of clay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. acid rain eating away stone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. a wooden log burning in a fire \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. an ice cube melting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. tearing paper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   6. a rotting apple \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   7. a gas is released \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   8. mixing vinegar and baking soda \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   9. placing sugar in tea \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   10. a bicycle left outside rusting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   11. a piece of bread that has been toasted \_\_\_\_\_\_\_\_\_\_\_\_\_\_

IV) Activity Reflection: Go through your science journal. List the activities we’ve done that show physical changes and the activities we’ve done that show chemical changes:

Physical Changes: Chemical Changes: