Matter Review

1.) What is matter?

2.) Directions: Complete the chart.

State	Volume (fixed or changeable)	Shape (fixed or changeable)	Compressible or not?	Arrangement of smaller particles (draw a picture)

3.) What are three facts we know about matter according to the kinetic theory?
a.

b.

c.

4.) Label the following as physical or chemical **properties.** Label "P" or "C".
a. flammability _____
b. bitter taste _____
c. solubility _____
d. reacts with water to form a gas _____
e. boiling point _____

5.) Label the following as physical or chemical **change**. Label "P" or "C".
a. sugar dissolves in water _____
b. iron rusts _____
c. ice melts _____
d. milk sours _____
e. water is heated and changes to steam _____

6.) I am making S'mores. The marshmallow has a mass of 5.2 g before it is roasted.
Using the Law of Conservation of Mass, explain what I should expect the mass
of the marshmallow to be after it is roasted.

7.) Label the following on the graph….
    A.) Where the solid, liquid, and gas phase is.
    B.) Both phase changes (name them as well!)
    C.) Where all the ice is completely melted.
    D.) Where boiling first begins.
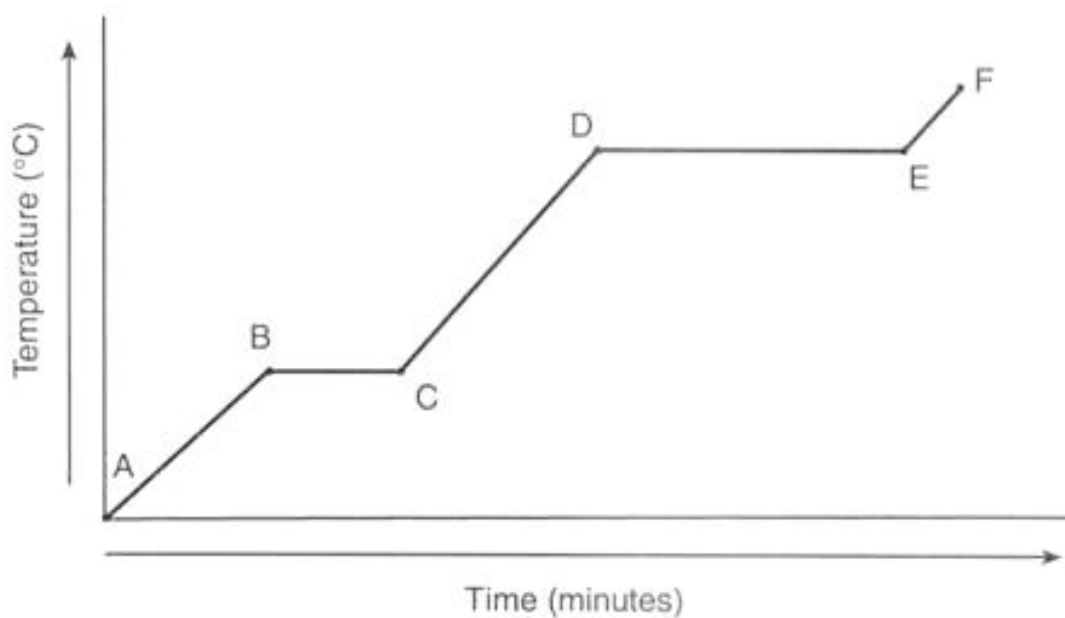
8.) Where on the diagram above is there a change in kinetic energy?

9.) When you go up the curve in the diagram above, are those endothermic or
    exothermic reactions? How do you know?

10.) Give one example of an exothermic and endothermic reaction.

11.) What does temperature measure (Don't say how hot or cold something is!!)?

12.) How is the movement of particles in a solid, liquid, and gas related to its' energy?

13.) Compare and contrast solutions by using the T-chart below.

Solutions	Suspensions	Colloids
1.	1.	1.
2.	2.	2.
Two Examples =	Two Examples =	Two Examples =

14.) Compare and contrast between pure substances and mixtures by using the chart below.

Pure Substances	Mixtures
1. What is it?	1. What is it?
2. What 2 categories are there?	2. What 2 categories are there?
3. Describe each category.	3. Can you give an example from each category?