

Phases

Name - _____

Part 1

1.) Classify each of the following as either a chemical change or a physical change.

a.) the formation of fog _____

d.) the rusting of iron _____

b.) burning of marshmallows _____

e.) mixing yellow and blue paint to make
green paint _____

c.) separating an alcohol-water mixture
into water and alcohol _____

f.) the sprouting of a seed _____

2.) Describe the changes in particle motion and arrangement for each of the six phase changes.

a.)

b.)

c.)

d.)

e.)

f.)

Part 2 - Give the following graphs a meaningful title, label the axes and indicate the phases present on each portion of the graph. No scale needs to be specified for the time axis.

3.) Benzene melts at 6°C and boils at 80°C . Plot a graph showing the temperature vs. time behaviour of benzene as its temperature is raised from 0°C to 100°C .



4.) Water freezes at 0°C and boils at 100°C . Plot a graph showing the temperature vs. time behaviour of steam as its temperature is lowered from 120°C to -20°C .



5.) Ammonium carbamate sublimates at 60°C . Plot a graph showing the temperature vs. time behaviour of ammonium carbamate as its temperature is raised from 0°C to 100°C .

