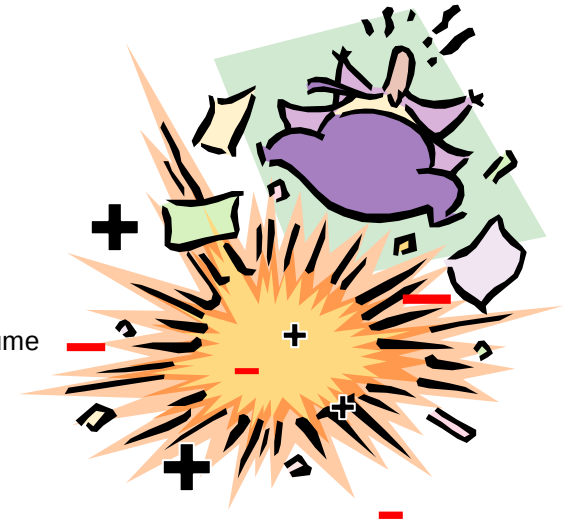
NAME: PERIOD: DATE:

**Phases and Phase Changes Classwork**

PART ONE MATCHING: You may use a choice once, more than once, or not at all. You may even put more than one choice in a space.

Your choices are:

A. solid B. liquid C. gas D. plasma



1. _____ particles are in a repeating pattern
2. _____ has no definite shape and no definite volume
3. _____ the particles flow around each other
4. _____ the particles are in fixed positions
5. _____ has no definite shape, but does have a definite volume
6. _____ made up of “exploded” gas particles
7. _____ particles fly freely and have space in between them
8. _____ particles are packed loosely together
9. _____ has a definite shape and a definite volume
10. _____ the particles can only vibrate

PART TWO MATCHING: You may use a choice once, more than once, or not at all. You may even put more than one choice in a space.

Your choices are:

A. boiling B. condensation C. melting D. sublimation

E. freezing F. evaporation

11. _____ when a solid changes to a liquid
12. _____ when a gas changes into a liquid
13. _____ energy is lost (the particles are losing energy)
14. _____ a liquid is changing into a gas
15. _____ ice cream on a hot day

PART THREE: MULTIPLE CHOICE: Answer these questions. Choose the best answer.

16. Which is **not** true about plasma...
A. is made of exploded gas particles
B. does not have a definite shape or volume
C. can go back to a gas by losing energy (cooling down)
D. both A & B

17. During evaporation…
A. the liquid particles become more energized and become gas particles
B. gas particles are created
C. both A & B
D. none of these

18. The Kinetic Theory of Matter says…
A. “All particles are made of energy and are constantly in motion.”
B. “All matter is made of particles that have a tiny amount of energy.”
C. “All matter is made of tiny particles that are constantly in motion.”
D. “All theories are made of tiny words that constantly have meaning.”

19. Dry ice changes into a fog is an example of…
A. melting
B. a solid changing in to a liquid
C. sublimation
D. condensation

20. Which of the following is an amorphous solid?
A. liquid nitrogen
B. silly putty
C. gasoline
D. plywood

21. Deposition is when…
A. a liquid changes into a gas
B. a solid changes into a liquid
C. a solid changes into a gas
D. none of these

22. The higher the temperature of an object…
A. the more motion energy the particles of that object have
B. the faster the particles of that object are moving
C. both A & B
D. none of these

23. Thermal expansion…
A. is how a thermometer works
B. is a way that particles in a substance get larger
C. increases the mass of an object as the object gets hotter
D. none of these