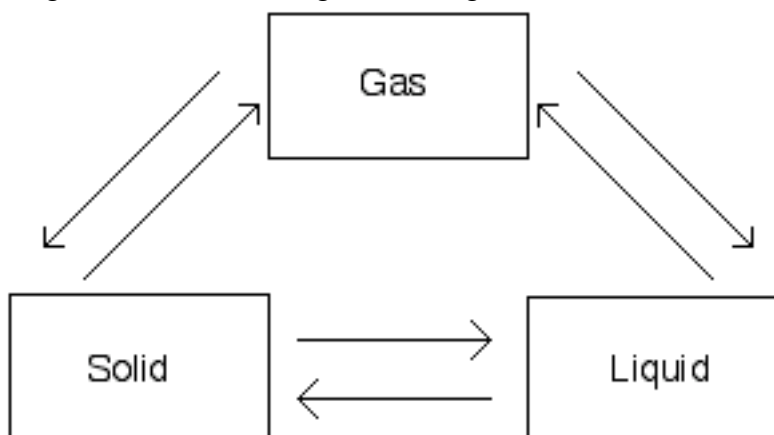


Worksheet # C55 Phase Changes, Freezing and Melting Points

1. The 4 States of Matter (complete the chart)

State	Has definite volume?	Takes the shape of its container?	Hot enough to lose its electrons?
Solid			
Liquid			
Gas			
Plasma			

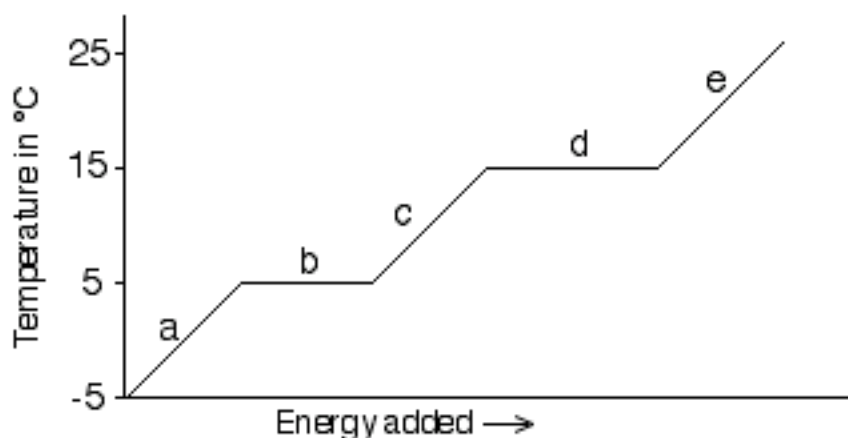
2. Complete the diagram below, naming the changes



3. Centigrade and Fahrenheit temperatures to memorize

	°C	°F
i. Freezing point of water:	_____	_____
ii. Standard room temperature:	_____	_____
iii. Normal body temperature	_____	_____
iv. Boiling point of water	_____	_____
v. Absolute zero	_____	_____
vi. Freezing point of mercury	_____	_____

4. Freezing and Boiling Point Graph



I. Answer the following questions using the chart above.

- _____ 1. What is the freezing point of the substance?
- _____ 2. What is the boiling point of the substance?
- _____ 3. What is the melting point of the substance?
- _____ 4. What letter represents the range where the solid is being warmed?
- _____ 5. What letter represents the range where the liquid is being warmed?
- _____ 6. What letter represents the range where the vapor is being warmed?
- _____ 7. What letter represents the melting of the solid?
- _____ 8. What letter represents the vaporization of the liquid?
- _____ 9. What letter(s) show a change in potential energy?
- _____ 10. What letter(s) show a change in kinetic energy?
- _____ 11. What letter represents condensation?
- _____ 12. What letter represents crystallization?

II. Adding to the chart:

1. Will adding a solvent to this substance raise or lower the melting point? _____
 - a. Use a dotted line to draw in the raised or lowered melting point on the above graph.
2. Will adding a solvent to this substance raise or lower the boiling point? _____
 - a. Use a dotted line to draw in the raised or lowered boiling point on the above graph.

III. One (well, one and a half) last question:

1. Is this substance water? _____ How do you know? _____
