

18.1 and 18.3 Quiz: Three States of Matter/Changes of State (40 points)

Matching - place the CAPITAL letter of the correct answer choice in the space provided (10 pts):

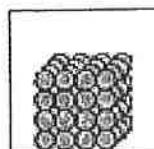
- ___ 1. A change in which energy is gained by a substance as it changes state
- ___ 2. The change of state from a solid to a liquid
- ___ 3. The change of a substance from one physical form to another
- ___ 4. The pressure inside the bubbles of a boiling liquid
- ___ 5. The change of state from a solid directly to a gas
- ___ 6. The change of state from a liquid to a gas
- ___ 7. The change of a liquid to a vapor throughout the liquid
- ___ 8. A change in which energy is removed from the substance as it changes state
- ___ 9. The change of state from a gas to a liquid
- ___ 10. The change of state from a liquid to a solid

- A. change of state
- B. melting
- C. evaporation
- D. boiling
- E. condensation
- F. sublimation
- G. freezing
- H. vapor pressure
- I. exothermic
- J. endothermic

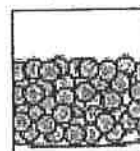
11. Identify each phase of matter in the diagrams below by placing the name of the phase on the line below the diagram (3 pts):



A. _____



B. _____

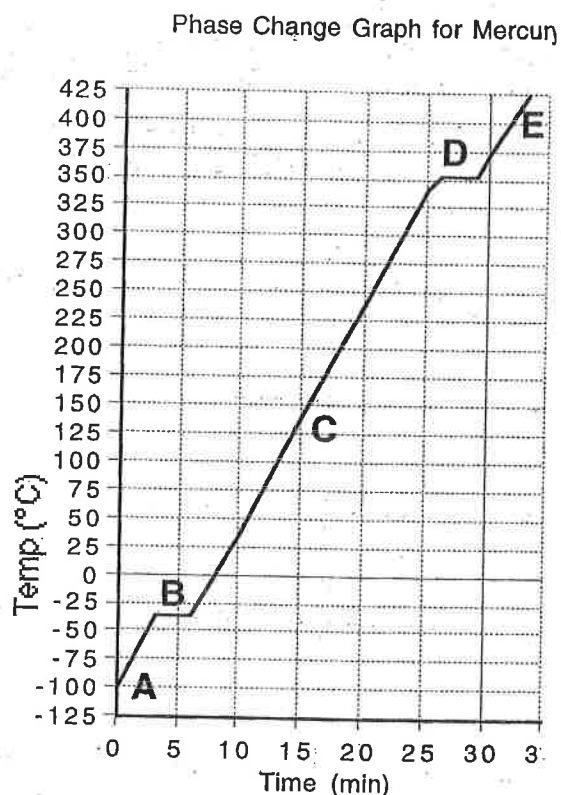


C. _____

12. Complete the chart below as indicated. Use CAPITAL letters for each option provided. Please note the meaning of the letter may be different for each row (15 points)

	Solid	Liquid	Gas
Volume (D=definite, N=not definite)			
Shape (D=definite, N=not definite)			
Distance Between Particles (S=small, M=medium, L=large)			
Speed of Particles (S=slow, M=medium, F=fast)			
Freedom of Motion of Particles (L=least, S=some, M=most)			

13. Refer to the graph below to answer the following questions (12 pts):



- Use a letter(s) to tell which section(s) of the graph represent(s) only one phase of matter.
- Which section(s) of the graph represent(s) more than one phase of matter?
- What is the boiling point of mercury? Don't forget the units!!
- What is the freezing point of mercury? Don't forget the units!
- What phase(s) is/are present at section D?
- Heat is being added at section D of the graph, yet the temperature of the graph is not changing. What is happening to the heat at section D?

Pledge: _____