

Matter Unit Test Study Guide

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Core: \_\_\_\_\_

Directions: Please use your notes and/or the textbook to complete each of the questions below to the best of your ability. Make sure to also review your notes and any hand-outs from class in preparation for this test. The questions below are only meant to serve as a guide. Even if not listed on this sheet, all material from the notes, hand-outs, and other in-class activities will be used in the making of the unit test. Good Luck!

Define the following vocabulary words:

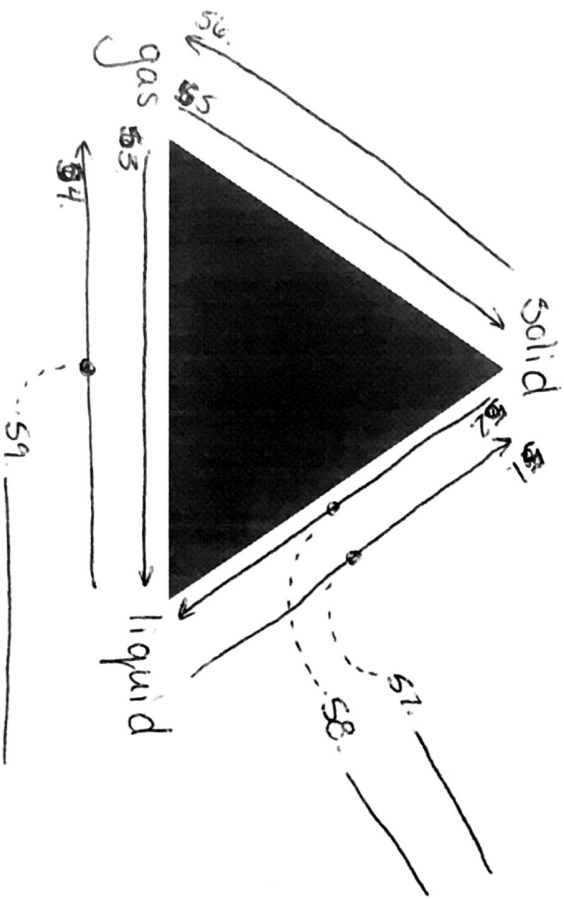
1. Atom \_\_\_\_\_
2. Thermal Energy \_\_\_\_\_
3. Boiling point \_\_\_\_\_
4. Freezing point \_\_\_\_\_
5. Element \_\_\_\_\_
6. Physical property \_\_\_\_\_
7. Malleable \_\_\_\_\_
8. Ductile \_\_\_\_\_
9. Melting point \_\_\_\_\_
10. Matter \_\_\_\_\_
11. Pure substance \_\_\_\_\_
12. Compound \_\_\_\_\_
13. Heterogeneous \_\_\_\_\_
14. Homogeneous \_\_\_\_\_
15. Mixture \_\_\_\_\_
16. Solution \_\_\_\_\_
17. Solute \_\_\_\_\_
18. Solvent \_\_\_\_\_
19. Colloid \_\_\_\_\_
20. Atomic mass \_\_\_\_\_
21. Atomic number \_\_\_\_\_
22. Periodic table \_\_\_\_\_
23. Molecule \_\_\_\_\_
24. Sublimation \_\_\_\_\_
25. Deposition \_\_\_\_\_
26. Condensation \_\_\_\_\_

27. Evaporation \_\_\_\_\_
28. What do we need to calculate to find out if an object is matter or not?
29. Explain how and when to use the volume formula (length X width X height):
30. Explain how and when to use the displacement method:
31. What is the difference between mass and weight?
32. What is density? Make sure to use the formula in your explanation.
33. What determines whether an object will float or sink?
34. What is a physical property of matter? Give at least 3 examples.
35. Describe what happens to the particles (atoms) of a gas when heat energy is taken away.
36. What is the difference between a solution, suspension, and a colloid?
37. Why is the periodic table so important?
38. What is the difference between an atom and an element?
39. Explain what happens when a solvent reaches its saturation point. (How do you know?)
40. What is the difference between heat and temperature?
41. Why do objects expand when heat is added to them and contract when heat is taken away?
42. Can cold be transferred to objects? Explain.
43. What is convection?

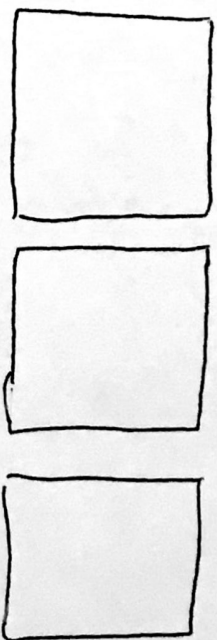
44. What is conduction?  
 45. What is radiation?

Read the following statements and decide if they are convection, conduction, or radiation and put the best answer on the line.

46. A huge rock in the sun at the state park gets hot on a sunny day: \_\_\_\_\_  
 47. Hot coffee is stirred with a spoon and the spoon gets hot: \_\_\_\_\_  
 48. The cause of weather systems on Earth: \_\_\_\_\_  
 49. You are in the top bunk of a bunk bed and you want to turn the air conditioner on while your friend on the bottom bunk is fine is caused by: \_\_\_\_\_  
 50. A house burns down. On the house beside it, all of the siding is twisted and warped by the heat. The heat was transferred to this house by: \_\_\_\_\_  
 51-60 Fill in the diagram below using the following terms: boiling point, freezing point, melting point, sublimation, evaporation, melting, deposition, freezing, condensation. Each word is worth one point.



60. Draw the atoms in each state of matter.



Describe how/why they change: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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