**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_Date\_\_\_\_\_\_\_\_**

**Physical Science Semester Review #1**

**Matter & States of Matter**

Concept Questions

1. What is the difference between a pure substance and a mixture?
2. What is the difference between compounds and elements?
3. What is the difference between heterogeneous and homogenous mixtures?
4. Which cannot be broken down at all: compounds, elements, heterogeneous mixtures, homogeneous mixtures.
5. Which can be broken down physically: pure substances or mixtures?
6. What does the kinetic molecular theory say?
7. What is the difference between a chemical property and physical property?
8. Give an example of a physical property and chemical property?
9. What is the difference between a chemical change and physical change?
10. Give an example of a physical change and chemical change.
11. What is density?
12. Which floats: less dense or more dense?
13. Solids have \_\_\_\_\_\_\_\_\_\_ shape and \_\_\_\_\_\_\_\_\_\_\_\_ volume.
14. Liquids have \_\_\_\_\_\_\_\_\_\_\_\_ shape and \_\_\_\_\_\_\_\_\_\_\_\_\_ volume
15. Gases have \_\_\_\_\_\_\_\_\_\_\_\_\_\_shape and \_\_\_\_\_\_\_\_\_\_\_\_ volume
16. Plasmas have \_\_\_\_\_\_\_\_\_\_\_\_shape and \_\_\_\_\_\_\_\_\_\_\_ volume
17. Which state of matter moves the fastest? Slowest?
18. What is thermal expansion?
19. Which state of matter breaks into charged particles?
20. Which states of matter can be fluids?
21. What did Archimedes contribute to states of matter and fluids?
22. What did Pascal contribute to fluids?
23. What did Bernoulli contribute to fluids?
24. What does Boyle’s Law relate?
25. What does Charles Law relate?
26. What does Gay-Lussac’s Law relate?

*Math Questions*

1. An object has a density of 50 g/mL and mass of 5 g. Find volume.
2. An object has a mass of 100 g and a volume of 20 mL. Find Density.