

8th Grade Science

Introduction to Matter Book

Chapter One: The Properties of Matter

Section Two & Three: Physical Properties & Chemical Properties (pg 10-21)

Answer each of the following questions on a piece of notebook paper, in a complete sentence, restating the question in your answer. Failure to follow these rules will result in the student having to rewrite the assignment to earn their points.

1. Name four physical properties.
2. How is it possible for two objects of similar volume have different densities?
3. Which would you rather carry in your backpack all day, a pound of rocks or a pound of dry leaves? Why?
4. What will happen to an object placed in water if the object's density is less than water's density?
5. How is the density of an object found?
6. What determines if an object floats or sinks in water?
7. What is the density of an object that has a mass of 350g and a volume of 95cm cubed? Would this object float in water? Explain.
8. The density of an object is 5g/cm cubed and the volume of the object is 10 cm cubed. What is the mass of the object?
9. What physical property do the following substances have in common: water, oil, mercury and alcohol?

10. Explain how you would find the density of an unknown liquid if you have all of the laboratory equipment that you need.
11. What is flammability?
12. What is reactivity?
13. How do you tell a physical property from a chemical property?
14. What are characteristic properties?
15. What is a chemical property?
16. Describe two chemical changes.
17. Name six things that indicate a chemical change.
18. What is composition of an object?
19. What is electrolysis?
20. The temperature of an acid solution is 25 degrees Celsius. A strip of magnesium is added, and the temperature rises 2 degrees Celsius each minute for the first 3 minutes. After another 5 minutes, the temperature has risen two more degrees. What is the final temperature?
21. Identify two physical properties and two chemical properties of a bag of microwave popcorn before popping and after.