

Matter, Elements, Compounds, and Mixtures Study Guide Answers

1. mass
2. volume
3. meniscus
4. matter
5. weight
6. inertia
7. mL
8. cm^3
9. Record the amount of water in a graduated cylinder. Drop the rock in and record the new volume. Subtract the two volumes to get the volume of the rock.
10. $\text{volume} = \text{length} \times \text{width} \times \text{height}$
11. density
12. density is unique to each substance

13. it floats

14. g/cm^3

15. the densest liquid will be on the bottom

16. the bowling ball is denser

17. 1 g/cm^3

18. $D = \frac{m}{V}$ $D = \frac{10\text{g}}{10\text{cm}^3} = 1 \text{ g/cm}^3 \rightarrow \text{Float}$

19. Because the 150 g object has more mass

20. identity

21. its composition changes

22. chemical

23. reactivity with oxygen

24. physical

25. chemical

26. it combines the ingredients to form new substances

27. because it changes shape

- 28. because the salt returns if heated
- 29. No, because it is still a piece of wood
- 30. a pure substance that cannot be broken down
- 31. shiny, good conductor of electricity
- 32. dull, nonconductive
- 33. has properties of metals and nonmetals
- 34. compound
- 35. solvent
- 36. solution
- 37. solubility
- 38. oxygen
- 39. water
- 40. sugar water
- 41. mayonnaise