

Chemistry

Ch. 2 Study Guide

Read 39-42 and then answer the following:

1. _____ is defined as anything that has mass and occupies space.
2. Matter that has a uniform and definite composition is called _____.
3. Give an example of a substance that is an element. Compound. Mixture.
4. Give 7 examples of physical properties.
5. Be able to distinguish between the solid, liquid, and solid phases of matter.
6. What is a vapor?
7. List 7 words that signify a physical change:

Answer 5, 6, & 7 on p. 42.

Read p. 44-47 and then answer the following

8. Compare and contrast a homogeneous mixture and a heterogeneous mixture.
9. Homogeneous mixtures are more often called_____.
10. Any part of a system with a uniform composition and properties is called a _____.
11. Give an example of a 2-phase system.
12. How could a mixture of gold, sand, iron filings, and sugar be separated by physical means?
13. Of the 3 phases of matter, which 2 are considered to be the condensed phases?
14. Distillation takes advantage of the fact that the different parts of a mixture have different _____.
15. Study Fig 2.5. Where did the condenser get its name?

Answer 14, 15, & 16 on p. 47

Read p. 48-52 and then answer the following

16. A substance containing only one kind of atom is called an_____.
17. H_2O , CO_2 , NaCl , CF_4 , and $\text{C}_6\text{H}_{12}\text{O}_6$ are examples of compounds. What do they all have in common that makes them compounds?
18. A pure substance that can be broken down into different elements is called a _____.
19. What 3 elements are found in sugar?
20. Poisonous sodium and chlorine react to produce _____.
21. What is the color of gaseous chlorine? What is the color of sodium?

22. Study Fig. 2.8. a) A substance can either be a _____ or a _____.
b) Compounds can only be separated into elements by _____ means.
c) Mixtures can be separated into pure substances by _____ means.
23. Look at the symbols for the elements on the Periodic Table at the back of your book. Each symbol consists of either ____ or ____ letters. The first letter is always _____ case, and the second letter is always _____ case.

Answer 24, 25, & 27 on p. 52

Read p. 53-55 and then answer the following

24. During a _____ reaction _____ react to form _____ as one or more _____ change into new _____. During a chemical reaction the atoms in one substance(s) rearrange to form a new substance(s).
25. List 4 different chemical changes:
26. There are several clues to chemical change mentioned p 42. List all of them.
27. The _____ states that during _____ change _____ change _____ is neither created nor destroyed. Another way to state this law is that during chemical or physical change there is not change in they type and number of atoms present. **Atoms are conserved.**

Answer 32, 33, & 34 on p. 55

Answer 37, 40, 43, 47, 51, 53, 55, 57, 60-64, 66, 68, & 71 on p. 58-59