

Chapter
Review**Matter****Part A. Vocabulary Review**

Directions: Match the terms in Column I with the descriptions in Column II. Write the letter of the correct description in the blank at the left.

Column I

- _____ 1. matter
- _____ 2. element
- _____ 3. atom
- _____ 4. protons
- _____ 5. neutrons
- _____ 6. electrons
- _____ 7. isotopes
- _____ 8. solution
- _____ 9. compound
- _____ 10. mixture
- _____ 11. chemical properties
- _____ 12. mass number
- _____ 13. ion
- _____ 14. density
- _____ 15. physical properties
- _____ 16. solid
- _____ 17. plasma
- _____ 18. gas
- _____ 19. liquid
- _____ 20. atomic number

Column II

- a. atoms of an element with different atomic names but the same atomic number
- b. form of matter containing only one type of atom
- c. causes of iron changing to rust when it reacts with water
- d. the number of protons and neutrons in an atom's nucleus
- e. anything that has mass and takes up space
- f. particles in an atom's nucleus that do not have an electrical charge
- g. a building block of matter
- h. other name for homogenous mixture
- i. mass divided by volume
- j. an electrically charged atom
- k. density and state of matter
- l. water
- m. positively charged particles inside the nucleus of an atom
- n. negatively charged particles outside the nucleus of an atom
- o. sweetened tea
- p. state in which a substance completely fills its container
- q. state in which atoms are strongly attracted and do not change position
- r. the number of protons in an atom's nucleus
- s. the most common state of matter in the universe
- t. state in which matter flows as it takes the shape of a container

Chapter Review (continued)**Part B. Concept Review**

Directions: Answer the following questions using complete sentences.

1. How do you measure the density of an object?

2. What are two ways atoms can combine to form compounds?

3. Compare and contrast compounds and mixtures.

4. Carbon-12 has a mass number of 12 and an atomic number of 6. Tell which of the following atoms is an isotope of carbon-12. Explain your answer.

Atom A: 12 protons, 12 neutrons, 12 electrons

Atom B: 6 protons, 8 neutrons, 6 electrons

Directions: Identify each of the properties as either a chemical property or a physical property. Write **C** by chemical properties and **P** by physical properties.

- _____ 5. the sharing of electrons by elements to form compounds
- _____ 6. the density of a substance
- _____ 7. the solid state of water
- _____ 8. the effect of water on iron
- _____ 9. the size of a salt crystal
- _____ 10. the attraction of two ions