

**Chapter
Review****Atoms, Elements,
Compounds, and Mixtures****Part A. Vocabulary Review**

Directions: Match each term in Column II with the correct definition in Column I. Write the letter of the correct term in the blank at the left.

Column I

- _____ 1. matter that is made up of only one kind of atom
- _____ 2. a negatively charged particle that is part of every kind of matter
- _____ 3. a positively charged particle that is present in the nucleus of all atoms
- _____ 4. uncharged particle in the nucleus of an atom
- _____ 5. region surrounding the nucleus in which the electrons move about
- _____ 6. the number of protons in the nucleus of an atom of an element
- _____ 7. atoms of the same element that have different numbers of neutrons
- _____ 8. the number of neutrons plus protons in the nucleus of an atom
- _____ 9. the mass of the mixture of the isotopes for an element
- _____ 10. two or more substances that are together, but not combined
- _____ 11. elements that make up about 97% of the human body
- _____ 12. elements that generally have a shiny or metallic luster
- _____ 13. a pure substance whose smallest unit is made of atoms of more than one element
- _____ 14. a sample of matter with the same composition and properties throughout
- _____ 15. elements that have characteristics of both metals and nonmetals

Column II

- a. neutron
- b. mass number
- c. atomic number
- d. element
- e. compound
- f. electron cloud
- g. electron
- h. substance
- i. isotopes
- j. nonmetals
- k. metals
- l. proton
- m. mixture
- n. atomic mass
- o. metalloids

Chapter Review (continued)

Part B. Concept Review

Directions: Correctly complete each sentence by underlining the best of the three choices in parentheses.

1. An element is made up of only one kind of (isotope, atom, plastic).
2. The periodic table lists (common molecules, compounds, elements).
3. Isotopes can have the same (mass number, atomic number, atomic mass).
4. Most elements are (metals, nonmetals, metalloids).
5. On the periodic table, metalloids are found (on the left side, on the right side, between the metals and nonmetals).
6. The Greeks named what they believed to be the tiniest particle of matter a(n) (proton, atom, cell).
7. Research using (television, atomic bombs, cathode rays) led scientists to believe that the atom could be broken down into smaller particles.
8. Atoms of the same element always have the same number of (neutrons, electrons, protons).
9. The elements in a (mixture, solution, compound) are always combined in the same proportion by mass.
10. The compound ammonia contains three atoms of hydrogen (H) for every atom of nitrogen (N), so the chemical formula for ammonia is (NH_3 , N_3H_3 , N_3H).
11. An example of a homogenous mixture is (vegetable soup, air, granite rock).
12. An electron cloud is shaped like a (cube, drop, sphere) with the nucleus at its center.

Directions: Study the following diagram. Then label the atom using the correct terms from the list.

electron

electron cloud

neutron

nucleus

proton

