Choose the alternative that best completes the statement or answers the question.

1. The mass number of an element can be easily approximated by adding together the number of ________ in an atom of that element.
   A. neutrons and electrons  B. isotopes  C. protons and electrons  D. protons and neutrons

2. The simplest chemical units of matter are

3. When electrons are transferred from one atom to another, and the two atoms unite as a result of the electrostatic attraction (e.g., as in NaCl), a(n) ________ bond is formed.
   A. polar covalent  B. nonpolar covalent  C. hydrogen  D. ionic

4. If electrons are unequally shared between two atoms (e.g., as in H₂O), a ____________ bond occurs.
   A. polar covalent  B. nonpolar covalent  C. hydrogen  D. ionic

5. Neon is an element with 10 electrons. How many would be on its outer shell?
   A. 2  B. 4  C. 6  D. 8  E. 10

6. A carbon atom has 4 electrons in its outer shell. As a result, it forms ____ covalent bonds with other atoms
   A. 2  B. 4  C. 6  D. 8  E. 10

7. A solution at pH 6 contains ____ than the same amount of solution at pH 8.
   A. 2 times more H⁺  B. 4 times more H⁺  C. 100 times more H⁺  D. 4 times less H⁺  E. 100 times less H

8. Two-thirds of our body weight comes from
   A. fat  B. protein  C. carbon  D. water  E. Doritos

9. An atom that loses an electron will
   A. become an anion.  B. become a cation.  C. remain neutrally charged.  D. become radioactive.

10. The rate and extent of chemical reactions may be influenced by
    A. catalysts  B. enzymes  C. temperature  D. concentration of reactants  E. all of the above