

1. The smallest portion of an atom that has little mass is its ?
a) molecule b) atom c) proton d) neutron e) none of these is correct
2. True or False? Each kind of element has a unique number of protons in its nucleus and this number is called the atomic number. a) true b) false
3. Covalent bonds
a) form only between non-identical atoms
b) involve the complete transfer of electrons from one atom to another
c) involve the sharing of electrons between atoms
d) a & c only
4. Which of the following properties of water is properly matched with its correct definition?
a) adhesion - the tendency of unlike molecules to repel each other
b) cohesion - tendency of like molecules to cling together
c) capillary action - the tendency of water to vaporize
d) surface tension - the hydrogen bonding of water in ice
e) choose this answer if not of these is correct
5. Which of the following statements about pH is(are) true?
a) pH is the log $[1/(H^+)]$ b) pH of 10 is neutral
c) pH of 1 is very acidic d) a & c only are correct
6. True or False Water's heat of vaporization, specific heat, cohesion, cohesion and capillary action result from its extensive hydrogen bonding between molecules. a) true b) false
7. True or False A buffer is a substance that resists changes in pH. a) true b) false
8. To be called "organic" a compound *must* contain
a) carbon b) carbon and oxygen c) nitrogen, oxygen & hydrogen d) none of the above
9. Which of the following is an example of a biological polymeric molecule ?
a) protein b) lipid c) carbohydrate d) a & c only
10. Glucose a) is a pentose sugar b) is a lipid c) is a hexose sugar d) is a polysaccharide
11. Cellulose and starch
a) are polymers of glucose b) are polypeptides c) are polysaccharides d) a & c only
12. A phospholipid molecule contains
a) a steroid b) two fatty acids c) two phosphate groups d) a & c only
13. The bond that links amino acids together to form a protein is called
a) an hydrogen bond b) a condensation bond c) a peptide bond d) a james bond