

- ↑
greatest
electronegativity!

- 11.) Which notations represent different isotopes of the element sodium?
 (1) ^{32}S and ^{34}S
 (2) S^{2-} and S^{6+}
 (3) Na^+ and Na^0
 (4) ^{22}Na and ^{23}Na
- 12.) What can be explained by the Arrhenius theory?
 (1) the behavior of many acids and bases
 (2) the effect of stress on a phase equilibrium
 (3) the operation of an electrochemical cell
 (4) the spontaneous decay of some nuclei
- 13.) Any substance composed of two or more elements that are chemically combined in a fixed proportion is
 (1) an isomer
 (2) an isotope
 (3) a solution
 (4) a compound
- 14.) All atoms of uranium have the same
 (1) mass number
 (2) atomic number
 (3) number of neutrons plus protons
 (4) number of neutrons plus electrons
- 15.) Hydrocarbons are composed of the elements
 (1) carbon and hydrogen, only
 (2) carbon and oxygen, only
 (3) carbon, hydrogen, and oxygen
 (4) carbon, nitrogen, and oxygen
- 16.) Which compounds are classified as electrolytes?
 (1) KNO_3 and H_2SO_4
 (2) KNO_3 and CH_3OH
 (3) CH_3OCH_3 and H_2SO_4
 (4) CH_3OCH_3 and CH_3OH
- 17.) The isomers butane and methylpropane have
 (1) the same molecular formula and the same properties
 (2) the same molecular formula and different properties
 (3) different molecular formulas and the same properties
 (4) different molecular formulas and different properties
- 18.) The laboratory process in which the volume of a solution of known concentration is used to determine the concentration of another solution is called
 (1) distillation
 (2) fermentation
 (3) titration
 (4) transmutation
- 19.) All elements on the modern Periodic Table are arranged in order of increasing
 (1) atomic mass
 (2) molar mass
 (3) number of neutrons per atom
 (4) number of protons per atom
- 20.) The temperature of a sample of matter is a measure of the
 (1) average potential energy of the particles of the sample
 (2) average kinetic energy of the particles of the sample
 (3) total nuclear energy of the sample
 (4) total thermal energy of the sample
- 21.) Samples of four Group 15 elements, antimony, arsenic, bismuth, and phosphorus, are in the gaseous phase. An atom in the ground state of which element requires the least amount of energy to remove its most loosely held electron?
 (1) As
 (2) Bi
 (3) P
 (4) Sb
- ↑ lowest first ionization energy!*