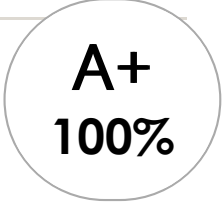


19 Multiple choice questions



A+
100%

1. the settling out of larger, insoluble particles over time
 - a. radical
 - b. **CORRECT: sedimentation**
 - c. heavy metals
 - d. photodissociation

2. the removal of one or more atoms from a molecule when it absorbs energetic electromagnetic radiation
 - a. **CORRECT: photodissociation**
 - b. sedimentation
 - c. polyatomic ion
 - d. photochemical smog

3. chemical compounds having identical chemical compositions and molecular formula but different arrangement of atoms in their molecules and different properties
 - a. pathogen
 - b. halon
 - c. **CORRECT: isomers**
 - d. radical

4. a halogenated alkane in which molecules such as methane or ethane have some of their hydrogen atoms replaced with halogens
 - a. potable
 - b. pathogen
 - c. radical
 - d. **CORRECT: halon**

5. means fit to drink
 - a. pathogen
 - b. **CORRECT: potable**
 - c. isomers
 - d. halon

6. metals with high atomic masses and densities; they are normally toxic to humans; examples are mercury, lead, cadmium, chromium and arsenic
- CORRECT: heavy metals**
 - potable
 - radical
 - isomers
7. a unit for determining the concentrations of substances that are present in very small amounts
- CORRECT: parts per million (ppm)**
 - polyatomic ion
 - photochemical smog
 - photodissociation
8. testing something to find out what chemical substances are in it
- CORRECT: qualitative analysis**
 - photochemical smog
 - quantitative analysis
 - heavy metals
9. when a hydrocarbon burns in a limited oxygen supply and the combustion products are carbon monoxide and carbon
- polyatomic ion
 - CORRECT: incomplete combustion**
 - ultraviolet radiation
 - photodissociation
10. a mineral required in minute quantity in an adequate human diet or for the optimum growth and yield of plants
- radical
 - CORRECT: trace element**
 - pathogen
 - halon

11. the quantity of suspended matter in water, such as silt or clay, that may make it look muddy or discoloured; it is measured by the ability of a light beam to pass through a water sample
- CORRECT: turbidity**
 - halon
 - toxicology
 - radical
12. a molecule or atom; free radicals are molecules or atoms that have one unpaired electron and hence an unused valence; most are very reactive and short-lived, such as the O radical
- CORRECT: radical**
 - isomers
 - halon
 - toxicology
13. a brown smog produced when, under the influence of ultraviolet light, nitrogen oxides and reactive hydrocarbons in the atmosphere react with oxygen to form PAN (peroxyacetylnitrate, $\text{CH}_3\text{CHOONO}_2$) and ozone
- polyatomic ion
 - toxicology
 - CORRECT: photochemical smog**
 - photodissociation
14. an ion consisting of a group of atoms, such as CO_3 , NH_4 or PO_4
- photodissociation
 - toxicology
 - CORRECT: polyatomic ion**
 - pathogen
15. testing something to find out how much of each substance is present
- heavy metals
 - photochemical smog
 - CORRECT: quantitative analysis**
 - qualitative analysis

16. the science dealing with poisons, their effects on people, antidotes and detection
- a. halon
 - b. **CORRECT: toxicology**
 - c. isomers
 - d. radical
17. high-energy, electromagnetic radiation emanating from the sun with a wavelength range between 200 and 2000m
- a. incomplete combustion
 - b. sedimentation
 - c. **CORRECT: ultraviolet radiation**
 - d. photodissociation
18. a diagram showing the electrons in the outer shell of an atom or group of atoms in a molecule or ions; each electron is shown as a dot
- a. isomers
 - b. heavy metals
 - c. **CORRECT: lewis structure**
 - d. sedimentation
19. a disease-causing organism
- a. **CORRECT: pathogen**
 - b. isomers
 - c. halon
 - d. potable