**Chemistry**

**Unit 1 Assessment**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Underline the correct answer.

1. Chemical changes of matter are those in which:

a) Matter changes its shape, volume and density.

b) There are no changes in the structure of matter.

c) The material retains its thermal properties.

d) Change the properties and structure of matter.

1. Which of the following statements is correct?

a) The study of chemistry is irrelevant in my daily life.

b) The obtained technological products are chemically harmful.

c) The study of chemistry has favored technological development.

d) Chemical technology produces necessarily negative changes.

1. All these phenomena are chemical transformations, except:

a) Combustion.

b) Corrosion.

c) Photosynthesis.

d) Evaporation.

1. Speaking of chemical substances it is fundamental to determine if they are poisonous to living things or not according to:

a) Dose consumed.

b) Their nature: natural or synthetic.

c) Concentration.

d) Their acidity: acidic or alkaline.

1. Scientific models include the following characteristics except:

a) They are always valid; not arise according to the experimental evidence.

b) They are representations of reality with central aspects.

c) They are a simplified schematic of the phenomenon under study.

d) They are constructed based on the behavior of the variables of interest.

1. An example of a chemical model would be:

a) The water cycle (or hydrological cycle).

b) The origin of species evolution theory.

c) The periodic table of elements.

d) Kepler's laws of planetary motion.

1. In the following risks of drinking alcohol, what is the direct impact on health?

a) The possibility of being an object of ridicules at a party, meeting or bar against acquaintances or strangers.

b) The possibility of confusion, motor incoordination, liver damage or being in a coma.

c) The possibility of suffering or causing a car accident by decreasing a reflex response and overconfident.

d) The possibility to face vehicular traffic violations, administrative, criminal or even jail.

1. If we say that a level of carbon monoxide in the air of 1500 ppm is "immediately dangerous to life and health", we are referring to:

a) The toxicity of Co in the blood.

b) Co permeability in membranes.

c) Co viscosity in hemoglobin.

d) The concentration of Co in the air.

1. The alcohol concentration in an beverage is in degrees, and it is a measure of volume / volume. Thus, a drink such as vodka can have a graduation of 50°. This means that:

a) There are 50 *ml* of alcohol in 100 *ml* of vodka.

b) There are 50 *ml* of alcohol in 100 *g* of vodka.

c) There are 50 *mg* of alcohol in 100 *l* of vodka.

d) There are 50 *g* of alcohol in 100 *l* of vodka.

1. In the next state of aggregation, molecules or particles are strongly bound together by cohesion forces, and they have a definite volume and shape:

a) Gas.

b) Liquid.

c) Plasma.

d) Solid.

1. In the next state of aggregation, molecules or particles are slightly joined together by cohesion forces, and they have a definite volume and an indefinite form:

a) Gas.

b) Liquid.

c) Plasma.

d) Solid.

1. Sublimation is a transition state from:

a) Liquid to gas.

b) Solid to gas.

c) Liquid to solid.

d) Solid to liquid.

13. Mayonnaise is an example of:

a) Crystalline solid.

b) Colloidal gel.

c) Colloidal emulsions.

d) Colloidal foam.

14. Which of the following materials is an example of a suspension?

a) Tamarind water.

b) Hibiscus water.

c) Homogenized milk.

d) Refreshment gas.

15. Which of the following is a homogeneous mixture?

a) Vegetable soup.

b) Filing of iron and copper.

c) Caesar dressing.

d) Chamomile tea.

16. Heterogeneous mixtures are those:

a) That can be easily separated.

b) Whose components are distinguished at first glance.

c) That are separated by crystallization.

d) Whose components are not distinguished at first glance.

17. What method of separating mixtures would you use to separate a mixture of cooked pasta in hot water?

a) Evaporation.

b) Filtration.

c) Decanting.

d) Recovery.

18. The principle of mass conservation says that:

a) Energy is neither created nor destroyed; it is only turned into other forms.

b) Matter is indivisible, so it is preserved in a process of transformation.

c) Energy is neither created nor destroyed in all atomic processes.

d) The total mass of the reactants is equal to the total mass of products.

19. Distilled water is an example of:

a) Homogeneous mixture.

b) Dissolution.

c) Pure substance.

d) Alloy.

20. How would you separate the gas from the liquid in a soda?

a) By decantation.

b) By centrifugation.

c) By solubility difference.

d) By extraction or precipitation.

Unit 1 Assessment Answer Key

1. d
2. c
3. d
4. a
5. a
6. c
7. b
8. d
9. a
10. d
11. b
12. b
13. c
14. a
15. d
16. b
17. b
18. d
19. c
20. c