

1- A benzene ring is by a circle inside a hexagon, and we need to remember that one hydrogen atom is attached to each carbon atom.

1. represented 2. significant 3. concentrated 4. saturated

2- Acids also are electrolytes. Unlike salts, they are molecular compounds in the pure state but form ions when they

1. dissolution 2. disosiation 3. unsolved 4. dissolve

۳- "Notice that all nitrates and all common compounds of the Group 1 metals are soluble" means:

- توجه کنید که تمام نیتراتها و متداولترین ترکیبات فلزات گروه ۱، قابل حل هستند.
توجه کنید که تمام نیتراتها و فلزات گروه ۱ مرکب، قابل حل هستند.
توجه کنید که تمام نیتراتها و ترکیبات فلزی متداول گروه ۱، قابل حل هستند.
توجه کنید که تمام نیتراتها و ترکیبات متداول فلزات گروه ۱، قابل حل هستند.

4- In a precipitation reaction, when two strong electrolyte solutions are mixed, ----- forms.

1. a soluble solid product 2. an insoluble solid product
3. an insoluble liquid product 4. a half soluble solid product

5- What is the noun of the "concentrate" ?

1. Concentrated 2. Concentrately 3. Concentrator 4. Concentrative

6- Differences between mixtures and compounds are..... in the following table.

1. depicted 2. decanted 3. evaporated 4. summarized

7- One of the simplest separation techniques,, makes use of differences in density.

1. absorbtion 2. filtration 3. decanting 4. distillation

8- These measurements are usually made on small samples of matter, or pieces of the material we want to study.

1. representative 2. represent 3. procedure 4. preservation

9- The of metals gave them a new power over their environment, and treacherous nature became less brutal.

1. fosterage 2. enterprise 3. possession 4. emergence

10-Chemistry transformed medicine, substantially extended our life quality, and the foundations of genetic engineering.

1. concealed 2. provided 3. embarked 4. contributed

11-At this deeper microscopic level, chemistry these phenomena in terms of the rearrangements of atoms.

1. confines 2. composes 3. inherits 4. interprets

12-"possible explanations of the laws or the observations in terms of more fundamental concepts" is:

1. model 2. hypothesis 3. concept 4. theory

13-Homogeneous mixtures are also called

1. solutions 2. solvents 3. solutes 4. syrup

14-"Contemporary" means:

1. Very careful and precise 2. Follow or continue with a course of action
3. Become gradually visible 4. Belonging to or occurring in the present

۱۵-"At the dawn of human experience, our ancestors survived through knowledge acquired by the trial and error of everyday observation" means:

۱. در سپیده دم تجربیات بشر، نیاکان ما طی دانش بدست آورده از طریق حدس و تلاش از مشاهدات روزمره، ادامه بقا دادند
۲. در سپیده دم تجربیات بشر، نیاکان ما از طریق دانش بدست آورده از طریق حدس و خطا از مشاهدات روزمره، ادامه بقا دادند
۳. در پایان تجربیات بشر، نیاکان ما از طریق بدست آوردن دانش از طریق حدس و خطا از مشاهدات روزمره، ادامه بقا دادند
۴. در افول تجربیات بشر، نیاکان ما از طریق دانش بدست آورده از طریق حدس و خطا از مشاهدات روزمره، ادامه بقا دادند

16-Which term is used to denote the gaseous form of a substance?

1. vessel 2. liquid 3. vapor 4. fluid

17-An electric field is a function that affects

1. solid matters 2. moving particles
3. charged particles 4. gaseous substances

18-When a ball thrown up as it returns to earth, its kinetic energy rises and its potential energy zero again.

1. approaches 2. squeezes 3. stages 4. decreases

19- Which sentence is TRUE?

1. Acceleration is disproportional to applied force.
2. Kinetic energy results from motion.
3. Velocity has only direction.
4. Kinetic energy is the energy a body loses.

20-..... help crops absorb solar energy and convert it to the chemical energy of food that our bodies convert into other forms.

1. Investigators
2. Releases
3. Industries
4. Fertilizers

21- The species that causes oxidation in a redox reaction is called the

۱. strong electrolyte
۲. reductant
۳. reducing agent
۴. oxidation agent

22- Which word is noun?

1. Abbreviate
2. Internal
3. Increment
4. Conclude

23- "There is no longer any doubt that atoms exist and they are the units that make up the elements."

Means:

دیگر شکی نیست که اتم ها وجود دارند و آنها واحدهای سازنده عناصرند.

هیچ انگیزه ای وجود ندارد که اتم ها ایجاد می شوند و آنها عناصر را تشکیل می دهند.

هیچ شک بزرگی وجود ندارد که اتم ها ایجاد می شوند و آنها عناصر را می سازند.

هیچ شک بزرگی وجود ندارد که اتم ها ایجاد می شوند و آنها عناصر را می سازند.

24- Two hundred years ago, Dalton pictured atoms as featureless like billiard balls.

1. bulbs
2. grids
3. spheres
4. lusters

25- A proton is nearly 2000 heavier than an electron; each proton has one unit of positive charge.

1. more
2. times
3. turns
4. subatomic

26- Which sentence is False?

1. In a chemical reaction atoms exchange partners to produce new substance.
2. Compared with the size of the nucleus the space occupied by the electrons is enormous.
3. Electrons have neither positive nor negative charge.
4. The units that make up the elements are called atoms.

27- Which word means fundamental ?

1. Transition 2. Essential 3. Converse 4. extreme

28- Mass spectrometers have been greatly developed since then, and they have become a very valuable part of the of chemical laboratories.

1. intelligent 2. equipment 3. vigorous 4. presence

29- The positive ions leave the chamber while accelerated by a strong electric fieldbetween two metal grids.

1. belonged 2. infered 3. applied 4. conducted

۳۰- "Right at the head of the periodic table" means:

۱. بالای سمت راست جدول تناوبی
۲. درست در رأس جدول تناوبی
۳. سمت راست بالایی جدول تناوبی
۴. دقیقاً بالایی جدول تناوبی

31- Which sentence is TRUE?

1. Copper is not malleable.
2. A nonmetal conducts electricity and is malleable and ductile.
3. The vertical columns of periodic table are called periods and are numbered from top to down.
4. A plot of the detector signal against the magnetic field is mass spectrum.

32-

As a gas is compressed, its molecules are to a smaller volume.

1. contracted 2. behave 3. confined 4. approach

33- Because pesticides have low overall, they tend not to be washed away by rain.

1. functionality 2. associated 3. polarity 4. dominated

34- "Immense" means:

1. Have a commanding influence over 2. Extremely large or great
3. Cause to begin 4. Gather together

۳۵- "When placed in a strong external magnetic field, however, the proton fields become aligned with it or against it." Means:

۱. هر گاه در میدان مغناطیسی قوی قرار گیرند، با این وجود، میدانهای پروتون در بالای آن میدان ویا در پائین آن قرار میگیرند.
۲. هر گاه در میدان مغناطیسی قوی قرار گیرند، با این وجود، میدانهای پروتون در طول آن میدان ویا در جهت آن قرار میگیرند.
۳. با این وجود قرار گرفتن در میدان مغناطیسی قوی، میدانهای پروتون در جهت آن میدان ویا در خلاف جهت آن قرار میگیرند.
۴. هر گاه در میدان مغناطیسی قوی قرار گیرند، با این وجود، میدانهای پروتون در جهت آن میدان ویا در خلاف جهت آن قرار میگیرند.

36- Scientists often look for ways of plotting experimental data in a manner that gives

1. hyperbola
2. straight lines
3. curves
4. isotherm

37- "Squeeze" means:

1. Firmly press from opposite or all sides
2. Unable to bend or be forced out of shape
3. Very thorough or vigorous
4. A way of dealing with something