

# Kahoot!

## Unit Test 3-3

0 plays • 0 players

 A private kahoot

### Questions (27)

1 - Quiz

Which of the following changes to *atomic number* best characterizes *betadecay*?

20 sec



Decreases by two



Increases by one



Decreases by one



Unchanged



## 2 - Quiz

Which of the following is true of *gamma* radiation?

20 sec



It is a form of pure energy



It is a high energy electron



It is a nucleus of a helium atom



All of the above



## 3 - Quiz

Which form of radioactivity results in the *shallowest* penetration?

20 sec



Alpha



Beta



Gamma



Delta



## 4 - Quiz

**A sample of radioactive material is usually a little warmer than its surroundings because:**

20 sec



. It absorbs and releases energy from sunlight



. Its atoms are continuously being struck by particles



It is radioactive



It emits alpha and beta particles



## 5 - Quiz

**The primary hazard of radiation is**

20 sec



. Damage to living cells due to ionization



Damage to cells due to heating



Damage to living cells due to impurities



The creation of new isotopes in the body



## 6 - Quiz

**Element has half life of 1hr. If you start with a 1-gram sample at noon, how much of this element will be left a 4:00pm?**

20 sec



a. 0.5 grams



b. 0.25 grams



c. 0.125 grams



d. 0.0625 grams



## 7 - Quiz

**Radiative dates are based on**

20 sec



a. The ratio of unstable parent material and stable daughter product



b. Measuring the amount of unstable isotopes



c. Measuring the amount of atoms that decay per unit of time



None OF THESE



## 8 - Quiz

**Nuclear reactions might be considered better than chemical reactions for producing usable heat energy because:**

20 sec



A small amount of material is needed



No harmful by-products result



Very little energy is needed to start the reaction



All of the Above



## 9 - Quiz

**One of the most serious problems surrounding the use of nuclear power is:**

20 sec



a. Finding a way to dispose of spent fuel rods



b. High cost



c. Lack of Uranium



d. Initiating a chain reaction



## 10 - Quiz

**Which is a true statement regarding *fusion*?**

20 sec



a. It is the process in which the sun generates energy



b. It is the basis for nuclear energy in power plants



c. It occurs at lower temperatures than fission



All of the above



## 11 - Quiz

**Electrons with higher energy are located:**

20 sec



a. Farther from the nucleus



b. Closer to the nucleus



c. In the nucleus



d. At lower levels in the atom



## 12 - Quiz

**An atom absorbs energy as its electrons:**

20 sec



a. Move from low to high energy levels



b. Stay in a high energy level



c. Move from a high to low energy levels



d. Stay in a low energy level



## 13 - Quiz

**Hydrogen ions:**

20 sec



a. Are contributed to a solution by a base

b. Are represented as H<sup>+</sup>

c. Usually increase the pH value when added



All of the above



## 14 - Quiz

20 sec

**Hydroxide ions:**

a. Are contributed to a solution by a base



b. Are represented as OH-



c. Usually increase the pH value when added



All of the above



## 15 - Quiz

20 sec

**Solution #1 has a pH of 3. Solution #2 has a pH of 5. How many more H<sup>+</sup> ions does one solution have than the other?**



a. #1 has 10 times as many as #2



b. #1 has 100 times as many as #2



c. #2 has 10 times as many as #1



d. #2 has 100 times as many as #1





## 16 - Quiz

**As a polyatomic ion, *carbonate* bonds the element *Carbon* with which other?**

20 sec



a. Hydrogen



b. Nitrogen



c. Oxygen



d. None of the above



## 17 - Quiz

**The formula  $\text{SO}_3^{2-}$  represents which polyatomic ion?**

20 sec



a. Sulfate



b. Sulfite



c. Sulfide



d. Sulfur



18 - True or false

**Because 78% of the atmosphere is Nitrogen, most organisms, including humans, get the nitrogen they need by inhaling.**

20 sec



True



False



19 - True or false

**Many plants rely on both photosynthesis and cell respiration for survival**

20 sec



True



False



20 - True or false

***Decomposers* work by breaking down organic matter into its simpler components to be re-used.**

20 sec



True



False



21 - True or false

**Nitrogen Fixation is an important step in fertilizing plant growth**

20 sec



True



False



22 - True or false

**The *rock cycle* interacts with the *carbon cycle* by storing and releasing carbon.**

20 sec



True



False



23 - True or false

**A *primary consumer* would get its carbon from a *secondary consumer*.**

20 sec



True



False



24 - True or false

**When humans burn *fossil fuels*, the impact can be measured in the nitrogen cycle.**

20 sec



True



False



25 - True or false

**elements like carbon and nitrogen stored in humans never gets consumed by other organisms or return**

20 sec



True



False



26 - True or false

**Organic chemistry involves mostly *metallic elements* on the periodic table**

20 sec



True



False



27 - True or false

**Human cell energy reactions are nearly the same as a *combustion* engine**

20 sec



True



False

