

**Question 1**

Not yet answered

Marked out of 1.00

v2 (latest)

Time left 0:44:57

Hide

What is oxidation state of phosphorus in  $P_2O_5$ ?

**Select one:**

- a. +2
- b. -2
- c. +5
- d. -5

**Question 2**

Not yet answered

Marked out of 1.00

v1 (latest)

What is oxidation state of sulfur in  $Na_2SO_4$ ?

**Select one:**

- a. -2
- b. +6
- c. +5
- d. +4



**Question 3**

Not yet answered

Marked out of 1.00

v2 (latest)

What is oxidation state of oxygen in  $\text{Na}_2\text{O}_2$ ?

**Select one:**

- a. 2
- b. -1
- c. +4
- d. +5

**Question 4**

Not yet answered

Marked out of 1.00

v1 (latest)

What is oxidation state of Nitrogen in  $(\text{NO}_3)^-$ ?

**Select one:**

- a. +5
- b. +6
- c. +4
- d. -2



**Question 5**

Not yet answered

Marked out of 1.00

v1 (latest)

Of the following, which will most likely be an oxidizing agent: Ca, Ag<sup>+</sup>, K ?

**Select one:**

- a. K
- b. Ag<sup>+</sup>
- c. Al
- d. Ca

**Question 6**

Not yet answered

Marked out of 1.00

v2 (latest)

Of the following, which will most likely oxidized: F<sub>2</sub>, Cu<sup>2+</sup>, Na ,Ca<sup>2+</sup>?

**Select one:**

- a. Ca
- b. Na
- c. Cu<sup>2+</sup>
- d. Ca<sup>2+</sup>



**Question 7**

Not yet answered

Marked out of 1.00

v1 (latest)

For the following example identify oxidizing agent:  $4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$

**Select one:**

- a. neither
- b.  $\text{O}_2$
- c.  $\text{Al}^{+3}$
- d. both

**Question 8**

Not yet answered

Marked out of 1.00

v1 (latest)

For the following example identify oxidizing agent:  $4\text{P} + 5\text{O}_2 \rightarrow 2\text{P}_2\text{O}_5$

**Select one:**

- a.  $\text{Al}^{+3}$
- b.  $\text{O}_2$
- c. both
- d. neither



**Question 9**

Not yet answered

Marked out of 1.00

v1 (latest)

Which of the following transformations is a redox reaction?

**Select one:**

- a.  $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$
- b.  $4\text{P} + 5\text{O}_2 \rightarrow 2\text{P}_2\text{O}_5$
- c.  $\text{Cu(OH)}_2 \rightarrow \text{CuO} + \text{H}_2\text{O}$
- d.  $\text{AlCl}_3 + 3\text{NaOH} \rightarrow \text{Al(OH)}_3 + 3\text{NaCl}$

**Question 10**

Not yet answered

Marked out of 1.00

v1 (latest)

Express rate law for reaction:  $\text{S(s)} + \text{O}_{2(\text{g})} \rightarrow \text{S}_{\text{O}_2}$

**Select one:**

- a.  $V = k[\text{SO}_2]$
- b.  $V = k[\text{S}][\text{O}_2]$
- c.  $V = k[\text{O}_2]$
- d.  $V = k[\text{S}]$



**Question 11**

Not yet answered

Marked out of 1.00

v1 (latest)

A solution consists of two parts. What is the name of the part, that is dissolved?

**Select one:**

- a. solute
- b. solution
- c. solvent

**Question 12**

Not yet answered

Marked out of 1.00

v1 (latest)

Area of compound NaCl in water solution is?

**Select one:**

- a. basic
- b. acidic
- c. neutral



**Question 13**

Not yet answered

Marked out of 1.00

v1 (latest)

What does it mean, when a solution is supersaturated?

**Select one:**

- a. just enough solute
- b. too much solute
- c. not enough solute

**Question 14**

Not yet answered

Marked out of 1.00

v1 (latest)

Area of compound  $\text{AlCl}_3$  in water solution is?

**Select one:**

- a. acidic
- b. basic
- c. neutral



**Question 15**

Not yet answered

Marked out of 1.00

v1 (latest)

What is the rate law for the reaction:  $A + B + C \rightarrow D$

**Select one:**

- a.  $V=K[A][B][C]$
- b.  $V=K[A][B]^2$
- c.  $V=K[A]^2[B]$
- d.  $V=K[A][B]$

**Question 16**

Not yet answered

Marked out of 1.00

v1 (latest)

What is the rate law for the reaction:  $A(g) + 2B(g) \rightarrow D$

**Select one:**

- a.  $V=K[A][B]$
- b.  $V=K[A][B]^2$
- c.  $V=K[A]^2[B]$
- d.  $V=K[A][B][C]$



**Question 17**

Not yet answered

Marked out of 1.00

v1 (latest)

Classify the following reaction:  $\text{Fe} + \text{CuSO}_4 \rightarrow \text{FeSO}_4 + \text{Cu}$

**Select one:**

- a. Decomposition
- b. synthesis
- c. redox
- d. precipitation

**Question 18**

Not yet answered

Marked out of 1.00

v1 (latest)

Express Equilibrium Constant for reaction:  $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightleftharpoons 2\text{NH}_3(\text{g})$ ;

**Select one:**

- a.  $K_c = [\text{NH}_3] / [\text{N}_2] \times [\text{H}_2]$
- b.  $K_c = [\text{NH}_3]^2 / [\text{N}_2] \times [\text{H}_2]$
- c.  $K_c = [\text{NH}_3] / [\text{N}_2] \times [\text{H}_2]^2$
- d.  $K_c = [\text{NH}_3]^2 / [\text{N}_2] \times [\text{H}_2]^3$



**Question 19**

Not yet answered

Marked out of 1.00

v1 (latest)

Express Equilibrium Constant for reaction:  $2\text{NO(g)} + \text{O}_2\text{(g)} \rightleftharpoons 2\text{NO}_2\text{(g)}$ ;

**Select one:**

- a.  $K_c = [\text{NO}_2]/[\text{NO}]^2 \times [\text{O}_2]^2$
- b.  $K_c = [\text{NO}_2]^2/[\text{NO}]^2 \times [\text{O}_2]$
- c.  $K_c = [\text{NO}_2]^2/[\text{O}_2]^2$
- d.  $K_c = [\text{NO}_2]^2/[\text{NO}]^2 \times [\text{O}_2]^2$

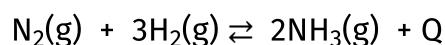
**Question 20**

Not yet answered

Marked out of 1.00

v1 (latest)

Consider the following exothermic reaction:



If the temperature of a gas mixture is increased, in which direction the equilibrium will shift?

**Select one:**

- a. No change
- b. From left to right
- c. From right to left



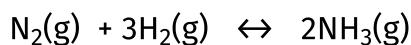
**Question 21**

Not yet answered

Marked out of 1.00

v1 (latest)

In the following reaction :



what would be effect of doubling the concentration of  $N_2$ ?

**Select one:**

- a. The rate of reaction drops by half
- b. The rate of reaction double
- c. The rate of reaction does not change
- d. The rate of reaction quadruples

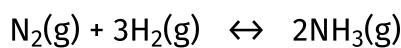
**Question 22**

Not yet answered

Marked out of 1.00

v1 (latest)

In the following reaction :



what would be effect of doubling the concentration of  $H_2$ ?

**Select one:**

- a. The rate of reaction double
- b. The rate of reaction increases 9 time
- c. The rate of reaction does not change
- d. The rate of reaction quadruples

**Question 23**

Not yet answered

Marked out of 1.00

v1 (latest)

Balance the following reaction:  $\text{MnO}_2 + \text{HCl} \rightarrow \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$

When the following equation is balanced, what is the coefficient for the hydrochloric acid?

**Select one:**

- a. 32
- b. 44
- c. 4
- d. 16

**Question 24**

Not yet answered

Marked out of 1.00

v1 (latest)

Consider reaction:  $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightleftharpoons 2 \text{NH}_3(\text{g})$

If the pressure of a gas mixture is increased, in which direction the equilibrium will shift?

**Select one:**

- a. No change
- b. From left to right
- c. From right to left



**Question 25**

Not yet answered

Marked out of 1.00

v1 (latest)

Consider reaction:  $\text{CO(g)} + \text{H}_2\text{O(g)} \rightleftharpoons \text{CO}_2\text{(g)} + \text{H}_2\text{(g)}$ ;

If the pressure of a gas mixture is increased, in which direction the equilibrium will shift?

**Select one:**

- a. From left to right
- b. From right to left
- c. No change

**Question 26**

Not yet answered

Marked out of 1.00

v1 (latest)

Calculate the number of moles of  $\text{H}_2\text{SO}_4$  in 50 cm<sup>3</sup> of a 0.50 mol dm<sup>-3</sup> solution.

**Select one:**

- a. 0,883
- b. 0.012
- c. 0.025
- d. 0.993



**Question 27**

Not yet answered

Marked out of 1.00

v2 (latest)

Find the masses of sodium chloride and water required to obtain 175 g of a 10 % solution

**Select one:**

- a. 88.3 and 86.7
- b. 25.5 and 149.5
- c. 99.3 and 96.7
- d. 17.5 and 157.5

**Question 28**

Not yet answered

Marked out of 1.00

v1 (latest)

Find the mass percentage of 6 g sodium hydroxide dissolved in 54 g of water.

**Select one:**

- a. 10%
- b. 6%
- c. 20%
- d. 14%

