

### Variant 3

Choose one correct answer and write a number in the answer form to the right of the number of the corresponding assignment. For corrections, use the following cell on the right

**1. The number of electrons in an argon atom is equal to the number of electrons in the ion**

- 1)  $S^{2-}$                       2)  $Al^{3+}$                       3)  $Na^+$                       4)  $F^-$

**2. In which series are simple substances arranged in order of strengthening their metallic properties**

- 1)  $Be \rightarrow B \rightarrow C$                       2)  $Al \rightarrow Si \rightarrow H$                       3)  $Ca \rightarrow Mg \rightarrow Be$                       4)  $Na \rightarrow K \rightarrow Rb$

**3. The degree of oxidation of +5 phosphorus is manifested in the compound, the formula of which**

- 1)  $PCl_3$                       2)  $Ca_3P_2$                       3)  $P_2O_5$                       4)  $P_4$

**4. The compound with an ionic bond is**

- 1)  $KCl$                       2)  $H_2$                       3)  $H_2O$                       4)  $CS_2$

**5. The substance  $Ca(HCO)_3$  belongs to the following class of inorganic substances**

- 1) acid salt                      3) middle salt  
2) basic salt                      4) hydroxide

**6. Copper reacts with a dilute solution of each of the two substances**

- 1) hydrochloric acid and nitric acid                      3) sulfuric acid and hydrochloric acid  
2) nitric acid and silver nitrate                      4) hydrochloric acid and silver nitrate

**7. Barium oxide can react**

- 1)  $P_2O_5$                       2)  $FeO$                       3)  $N_2O$                       4)  $CO$

**8. The precipitate is formed when the solutions are drained off**

- 1) sodium carbonate and hydrochloric acid                      3) sodium hydroxide and barium nitrate  
2) sodium bromide and potassium hydroxide                      4) strontium chloride and sulfuric acid

**9. The transformation of  $Cu(OH)_2 \rightarrow CuSO_3$  corresponds to the interaction of  $Cu(OH)_2$  with**

- 1)  $H_2SO_3$                       2)  $SO_3$                       3)  $Na_2SO_3$                       4)  $K_2SO_3$

**10. In the reaction equation  $NO_2 + SO_2 \rightarrow SO_3 + NO$ , the oxidant is**

- 1)  $NO_2$                       2)  $SO_2$                       3)  $SO_3$                       4)  $NO$

**11. The reduced ionic equation  $Cu^{2+} + S^{2-} = CuS$  corresponds to the interaction**

- 1) copper sulphate and ammonium sulphide                      3) copper carbonate and ammonium sulphide  
2) copper hydroxide and hydrogen sulphide                      4) copper nitrate and hydrogen sulphide

**12. Alkynes include a substance of composition**

- 1)  $C_6H_6$                       2)  $C_6H_{12}$                       3)  $C_6H_{14}$                       4)  $C_6H_{10}$

