

## 9

## 1.

	1	2	3	4	5	6	7	8	9	10
	4	3	1	2	4	4	4	4	1	1

- 10

## 2.

1.

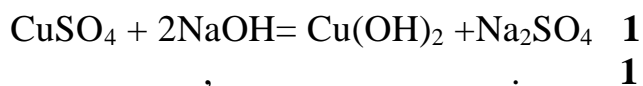
$$250 \cdot 0,16 = 40, n = 40/160 = 0,25 \quad ( \quad ) \quad \mathbf{1}$$

2.

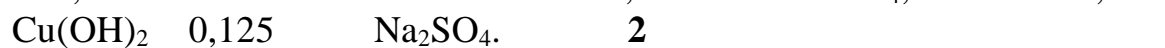
$$20 \cdot 0,5 = 10 \quad .$$

$$10/40 = 0,25 \quad ( \quad ) \quad \mathbf{1}$$

3.



4. 0,25



5.

$$0,25 - 0,125 = 0,125 \quad \text{CuSO}_4 \quad 20$$

$$17,75 \quad (142 \cdot 0,125) \quad \mathbf{2}$$

6.

$$= m_{\text{p-pa}} \text{CuSO}_4 + m_{\text{p-pa}} \text{NaOH} - m = 250 + 20 - 12,25 = 257,75$$

**1**

7.

$$W \text{CuSO}_4 = 20/257,75 = 0,078 \quad W \text{Na}_2\text{SO}_4 = 17,75/257,75 = 0,069 \quad \mathbf{1}$$

- 10

**3.**

1. 173,4 **1**
2. 26,6 + 173,4 = 200 . **1**
3.  $\text{NaCl} + \text{AgNO}_3 = \text{NaNO}_3 + \text{AgCl}$  **1**  
 $\text{KCl} + \text{AgNO}_3 = \text{KNO}_3 + \text{AgCl}$  **1**
4. 57,4/143,5 = 0,4 ( ) **1**
5. , . . 0,4 . **1**
6. (0,4 - ) **1**
7. 58,5 / 74,5 / **1**
8. 58,5 + 74,5(0,4 - ) = 26,6  
= 0,2 . **1**
9. 11,7 , 14,9 **1**  
 $W \text{ NaCl} = 11,7/200 = 0,0585$   $W \text{ Cl} = 14,9/200 = 0,0745$  **1**

- 11

**4.**

- 1).  $\text{Na}_2\text{S} + \text{Pb}(\text{NO}_3)_2 = \text{PbS} \downarrow + 2\text{NaNO}_3$
- 2).  $2\text{PbS} + 3\text{O}_2 = 2\text{PbO} + 2\text{SO}_2$
- 3).  $\text{PbO} + 2\text{HNO}_3 = \text{Pb}(\text{NO}_3)_2 + \text{H}_2\text{O}$
- 4).  $\text{Pb}(\text{NO}_3)_2 + 2\text{NaOH} = \text{Pb}(\text{OH})_2 + 2\text{NaNO}_3$
- 5).  $\text{Pb}(\text{OH})_2 + 2\text{NaOH} = \text{Na}_2\text{PbO}_2 + 2\text{H}_2\text{O}$
- 6).  $\text{Na}_2\text{PbO}_2 + 2\text{HCl} = \text{Pb}(\text{OH})_2 \downarrow + 2\text{NaCl}$
- 7).  $\text{Pb}(\text{OH})_2 = \text{PbO} + \text{H}_2\text{O}$
- 8).  $\text{PbO} + \text{H}_2 = \text{Pb} + \text{H}_2\text{O}$

- 8

**5.**

- $$\text{Na}_2\text{SO}_4 + \text{BaCl}_2 = \text{BaSO}_4 \downarrow + 2\text{NaCl} \quad 1$$
- $$(\text{NH}_4)_2\text{SO}_4 + \text{BaCl}_2 = \text{BaSO}_4 \downarrow + 2\text{NH}_4\text{Cl} \quad 1$$
- $$(\text{NH}_4)_2\text{SO}_4 + 2\text{NaOH} = 2\text{NH}_3 \uparrow + 2\text{H}_2\text{O} + \text{Na}_2\text{SO}_4 \quad 1$$
- $$\text{Al}(\text{NO}_3)_3 + 3\text{NaOH} = \text{Al}(\text{OH})_3 \downarrow + 3\text{NaNO}_3 \quad 1$$
- $$\text{Al}(\text{OH})_3 + 3\text{NaOH} = \text{Na}_3\text{AlO}_3 + 3\text{H}_2\text{O} \quad \text{Na}[\text{Al}(\text{OH})_4] \quad 1$$

- 8 (3 - , 5 - )