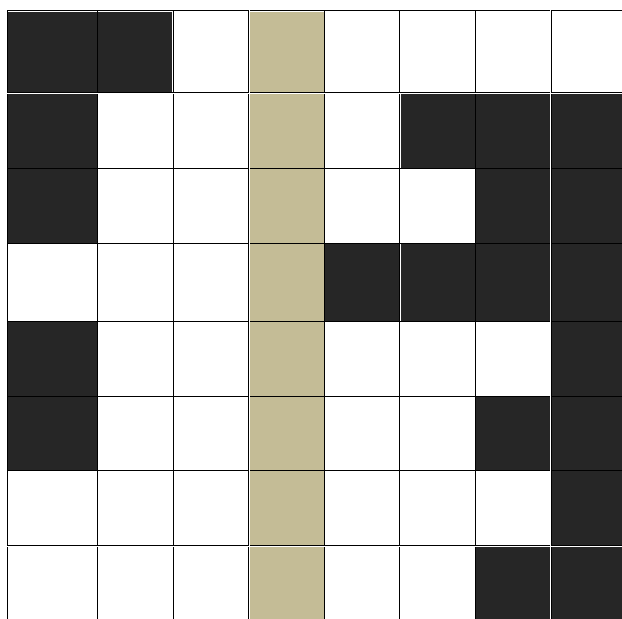


1. .

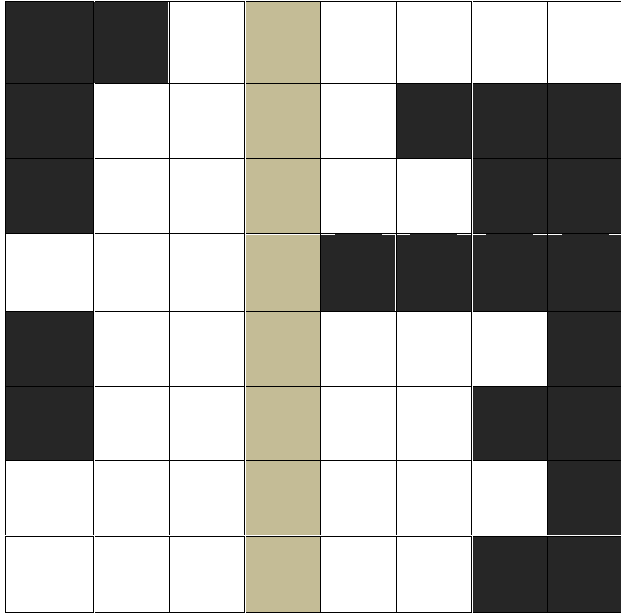
1. , - : Ba, K, Cu, Cd, Co, Pb, Cr, Hf.



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3.

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| 1. | : |
| 1) | 2 |
| 2) | 2 |
| 3) | 2 |
| 4) | 2 |
| 5) | 2 |
| 6) | 2 |
| 7) | 2 |
| 8) | 2 |
| 2. - | 2 |

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| 3. | 2 |
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2. 0,49 0,26.
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 2. .
 3. .
 : 3,33 .

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| () | |
| 1. $m,$ - 0,49 m, - 0,26 m. | 2 2 |
| 2. : $n = m / M$; $n() = m() / M()$; $n() = 0,49m / 16 ()$; $n(\text{Si}) = m(\text{Si}) / M(\text{Si})$; $n(\text{Si}) = 0,26 m / 28 ()$. | 2 2 |
| 3. : $N(\text{O}) : N(\text{Si}) = n(\text{O}) : n(\text{Si})$; $N(\text{O}) : N(\text{Si}) = 0,49m / 16 : 0,26 m / 28 = 0,031m : 0,0093 m = 3,33 : 1$. | 2 4 |
| 4. : $n() = N(\text{O}) / N(\text{Si}) = 3,33 : 1 = 3,33$ | 1 |
| 5. : $\text{Si} + \text{O}_2 = \text{SiO}_2$ | 1 |
| 6. : $\text{Si} + 2\text{NaOH} + \text{H}_2 = \text{Na}_2\text{SiO}_3 + 2\text{H}_2$ | 4 |
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| 2. | : | | 1 1 1 1 |
| 3. | : | | 1 1 1 |
| 1. | | | 6 |
| 2. | | | 8 |
| 3. | (II) | | 6 |
| | | | 20 |

4.

: NaOH, H₂SO₄, HCl, Na₂CO₃, BaCl₂, AgNO₃

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|---|-----------|
| () | |
| 1. $2\text{NaOH} + \text{H}_2\text{SO}_4 = \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$ - | 1 |
| 2. $\text{NaOH} + \text{HCl} = \text{NaCl} + \text{H}_2\text{O}$ - | 1 |
| 3. $2\text{HCl} + \text{Na}_2\text{CO}_3 = 2\text{NaCl} + \text{CO}_2 + \text{H}_2\text{O}$ - | 2 |
| 4. $\text{Na}_2\text{CO}_3 + \text{H}_2\text{SO}_4 = \text{Na}_2\text{SO}_4 + \text{H}_2\text{O} + \text{CO}_2$ - | 2 |
| 5. $\text{H}_2\text{SO}_4 + \text{BaCl}_2 = \text{BaSO}_4 + 2\text{HCl}$ - | 2 |
| 6. $\text{Na}_2\text{CO}_3 + \text{BaCl}_2 = \text{BaCO}_3 + 2\text{NaCl}$ - | 2 |
| 7. $2\text{AgNO}_3 + \text{BaCl}_2 = \text{Ba}(\text{NO}_3)_2 + 2\text{AgCl}$ - | 2 |
| 8. $2\text{AgNO}_3 + \text{Na}_2\text{CO}_3 = \text{Ag}_2\text{CO}_3 + 2\text{NaNO}_3$ - | 2 |
| 9. $2\text{AgNO}_3 + 2\text{NaOH} = \text{Ag}_2\text{O} + 2\text{NaNO}_3 + \text{H}_2\text{O}$ - | 2 |
| 10. $\text{AgNO}_3 + \text{HCl} = \text{HNO}_3 + \text{AgCl}$ - | 2 |
| 11. $2\text{AgNO}_3 + \text{H}_2\text{SO}_4 = \text{Ag}_2\text{SO}_4 + 2\text{HNO}_3$ - | 2 |
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5.

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 4. ?
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 18. « »?
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| 3. | | ? | 1 |
| 4. | | ?, | 1 |
| 5. | | () | 1 |
| 6. | | () | 1 |
| 7. | | | 1 |
| 8. | | | 1 |
| 9. | »? | « | 1 |
| 10. | | « ». | 1 |
| 11. | | , | 1 |
| 12. | ? | Al ₂ O ₃ - | 1 |
| 13. | | (IV) -NO ₂ | 1 |
| 14. | | (IV)- SiO ₂ | 1 |
| 15. | ? | | 1 |
| 16. | ? | - | 1 |
| 17. | ? | | 1 |
| 18. | « | »? | 1 |
| 19. | | , | 1 |
| 20. | | | 1 |
| | | | 20 |