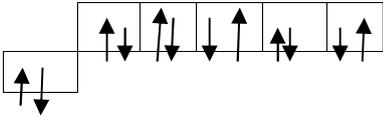


8

1.

	- (10) , $_{10}\text{N}$	1
(1)	$(^{20}\text{N}) = N+Z = 10+10=20$	1
	$(^{22}\text{N}) = N+Z = 12+10=22$	1
	$(\text{N}) = 20 \cdot 0,9 + 22 \cdot 0,1 = 18 + 2,2 = 20,2$	1
	$\text{N}^{+10})$ 2 8 $1s^2 2s^2 2p^6$ 	1
		5

2.

(1)	- Si.	1
	3	1
	- 1. - -	1
	- g - ,	3 1
	- Na - 3	1
(1)	(IV), (+4)	1
	Si_2 SiH_4	1
	- g l ₂ , 1	1
	- Na 1	1
		8

3.

	$\omega(\text{Hg}^{2+}) = m(\text{Hg}^{2+}) / m(\text{Hg})$ $m(\text{Hg}^{2+}) = \omega(\text{Hg}^{2+}) \cdot m(\text{Hg}) = 0,05 \cdot 20,5 = 1,025$	1
	$n(\text{Hg}^{2+}) = m(\text{Hg}^{2+}) / M(\text{Hg}^{2+}) = 1,025 / 201 = 0,005$	1
1 ³	$\frac{80 \cdot 10^{-3}}{1 \cdot 10^{-3}} = \frac{1,025 \cdot 10^{-3}}{10^{-3}} = 0,0128$	1
	$\frac{0,01}{1 \cdot 10^{-3}} = 0,0128 / 10^{-3}$	1
		4

4.

	$W(\text{Fe}) = m(\text{Fe}) / m(\text{Fe})$ $m(\text{Fe}) = W(\text{Fe}) \cdot m(\text{Fe}) = 0,051 \cdot 0,051 = 0,051$	1
	$m(\text{Fe}) = W(\text{Fe}) \cdot m(\text{Fe}) = 0,021 \cdot 0,021 = 0,021$	1
	$n(\text{Fe}) = m(\text{Fe}) / M(\text{Fe}) = 0,051 / 56 = 0,00091$	1
()	$n(\text{Fe}) = m(\text{Fe}) / M(\text{Fe}) = 0,021 / 24 = 0,000875$	1
()	$n(\text{Fe}) : n(\text{Fe}) = 0,00091 : 0,000875 = 1,04 : 1$	1
		5

5.

	$m_{\text{total}} = m_{\text{H}_2} + m_{\text{O}_2} + m_{\text{CO}_2} + m_{\text{H}_2\text{O}} + m_{\text{NaCl}} + m_{\text{H}_2\text{O}} = 18 + 22 + 54 + 10 + 20 = 124$	1
	$m_{\text{H}_2} = \omega \times m_{\text{total}} = 0,1 \times 18 = 1,8$	1
	$m_{\text{O}_2} = \omega \times m_{\text{total}} = 0,05 \times 22 = 1,1$	1
	$m_{\text{CO}_2} = \omega \times m_{\text{total}} = 0,08 \times 54 = 4,32$	1
	$\omega(\text{H}_2) = m_{\text{H}_2} / m_{\text{total}} = 1,8 / 124 = 0,0145 (1,45\%)$	1
	$\omega(\text{O}_2) = m_{\text{O}_2} / m_{\text{total}} = 1,1 / 124 = 0,0088 (0,88\%)$	1
	$\omega(\text{CO}_2) = m_{\text{CO}_2} / m_{\text{total}} = 4,32 / 124 = 0,0348 (3,48\%)$	1
	$\omega(\text{NaCl}) = m_{\text{NaCl}} / m_{\text{total}} = 10 / 124 = 0,0806 (8,06\%)$	1
	()	8