

Rešitve**1. NALOGA**

- 1.1 $\text{Ca}(\text{HCO}_3)_2$, kalcijev hidrogenkarbonat $2 \times 1,0 T$
 1.2 Kalcijev karbonat (ali magnezijev karbonat) $1,0 T$
 1.3 CO_2 $1,0 T$
 1.4 Raztopljene pline iz zraka/vsaj dva plina poimenovana z imenom ali formulo $1,0 T$

Skupaj: 5,0 T**2. NALOGA**

- 2.1 PRAVILNA $1,0 T$
 2.2 NEPRAVILNA $1,0 T$
 lonska vez je...(ali ... je vezni elektronski par med atomoma različnih nekovin).
 2.3 NEPRAVILNA $1,0 T$
 Atomi kovin... atomom nekovin.
 2.4 PRAVILNA $1,0 T$
 (pri nepravilnih trditvah se točko dodeli le, če je trditev ustrezno popravljena)

Skupaj: 4,0 T**3. NALOGA**

- 3.1 B $2,0 T$
 3.2 Z, Č, Č, Z $4 \times 1,0 T$

Skupaj: 6,0 T**4. NALOGA**

- 4.1 Butan $2,0 T$
 4.2 $\begin{array}{c} \text{H}_2\text{C} - \text{CH}_2 \\ | \quad | \\ \text{H}_2\text{C} - \text{CH}_2 \end{array}$ ali $\begin{array}{c} \text{H}_2\text{C} - \text{CH}_2 \\ \diagdown \quad / \\ \text{CH} \\ | \\ \text{CH}_3 \end{array}$ $2,0 T$

Skupaj: 4,0 T**5. NALOGA**

- 5.1 Snov je kislina. $1,0 T$
 5.2 Kislina je močna. $1,0 T$
 5.3 $\text{H}_2\text{SO}_4(\text{aq}) + \text{Ba}(\text{OH})_2(\text{aq}) \rightarrow \text{BaSO}_4(\text{s}) + 2\text{H}_2\text{O}(\text{l})$ $2,0 T$
 (1 T zapis pravilno urejene enačbe; 1 T ustrezna agregatna stanja snovi)

Skupaj: 4,0 T**6. NALOGA**

- A $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$ $1,0 T$
 B $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$ $1,0 T$
 C $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{-O-CH}_3$ $1,0 T$
 Č $\text{C}_6\text{H}_5\text{COOCH}_2\text{CH}_2\text{CH}_2\text{CH}_3$ $1,0 T$

Skupaj: 4,0 T

7. NALOGA

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|-----|---|-----------|
| 7.1 | izotopi | 1,0 T |
| 7.2 | elektronov 16, nevtronov 18 | 2 x 0,5 T |
| 7.3 | 6 | 1,0 T |
| 7.4 | vrstno število (ali število protonov in število elektronov) | 1,0 T |

Skupaj: 4,0 T**8. NALOGA**

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|-----|---|-------|
| 8.1 | $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$ | 1,0 T |
| 8.2 | $\text{NH}_3 + \text{HNO}_3 \rightarrow \text{NH}_4\text{NO}_3$ | 1,0 T |
| 8.3 | $2\text{C}_6\text{H}_5\text{COOH} + \text{Ca}(\text{OH})_2 \rightarrow \text{Ca}(\text{C}_6\text{H}_5\text{COO})_2 + 2\text{H}_2\text{O}$ | 1,0 T |
| 8.4 | $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$ | 1,0 T |
| | $2\text{AgCl} \rightarrow 2\text{Ag} + \text{Cl}_2$ | 1,0 T |
| 8.5 | $\text{UF}_4 + 2\text{Ca} \rightarrow \text{U} + 2\text{CaF}_2$ | 1,0 T |

Skupaj: 6,0 T**9. NALOGA**

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|-----|---|----------------|
| 9.1 | $\begin{array}{l} \text{H}_2\text{C}-\text{O}-\text{CO}-(\text{CH}_2)_7-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}=\text{CH}-(\text{CH}_2)_4-\text{CH}_3 \\ \\ \text{HC}-\text{O}-\text{CO}-(\text{CH}_2)_7-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}=\text{CH}-(\text{CH}_2)_4-\text{CH}_3 \\ \\ \text{H}_2\text{C}-\text{O}-\text{CO}-(\text{CH}_2)_7-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}=\text{CH}-(\text{CH}_2)_4-\text{CH}_3 \end{array}$ | 1,0 T |
| 9.2 | V tekočem agregatnem stanju.
Utemeljitev: ker so maščobne kisline nenasičene | 0,5 T
0,5 T |
| 9.3 | $\text{C}_{18}\text{H}_{31}\text{O}_2\text{Na}$ (ali $\text{C}_{17}\text{H}_{31}\text{COO}^-\text{Na}^+$ ali $\text{C}_{17}\text{H}_{31}\text{COONa}$) | 1,0 T |
| 9.4 | B | 1,0 T |

Skupaj: 4,0 T**10. NALOGA**

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|------|---|-------|
| 10.1 | kisik | 2,0 T |
| | Utemeljitev:
$176,124 - (8 \times 1,008) - (6 \times 12,011) = 95,994$
$20 - 6 - 8 = 6$
$95,994/6 = 15,999$
(2 T le, če je utemeljitev) | |
| 10.2 | $N(\text{vitamina C}) = 1,7 \times 10^{21}$ molekul
(izračun množine 1 T; izračun števila molekul 1 T) | 2,0 T |

Skupaj: 4,0 T**Vse skupaj: 45,0 T**