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| **Meno** |  |

**Úloha 1 (40 b)**

**Úloha A) (8 b)**

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**Úloha B) (9 b)**

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**Úloha C) (2 b)**

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|  | **N2 +** |  | **H2** → |  | **NH3** |

**Úloha D) (5 b)**

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|  | NH4Cl+ |  | NaOH → |  |

**Úloha E) (10 b)**

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|  | NH3 + |  | O2 → |  | NO + |  | H2O |
|  | NO + |  | O2 → |  | NO2 |
|  | NO2 + |  | O2 + |  | H2O → |  | HNO3 |

**Úloha F) (6 b)**

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**Úloha 2 (41 b)**

**Úloha A) (10 b)**

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**Úloha B) (15 b)**

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| **vzorec** | **názov** |
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| **vzorec** |
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| **vzorec** | **systémový názov** |
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| **vzorec** | **systémový názov** |
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**Úloha C) (16 b)**

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| **obsah v mg/l:** | **Budiš** | **Zlatá studňa** | **Magnesia** | **Rajec** |
| **vápenatých** |  |  |  |  |
| **sodných** |  |  |  |  |
| **draselných** |  |  |  |  |
| **horečnatých** |  |  |  |  |

**Úloha 3 (24 b)**

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| **systémový názov** | **vzorec** |
| hydroxid zinočnatý |  |
|  | H2SO4 |
| siričitan chromitý |  |
|  | H5IO6 |
| oxid železitý |  |
|  | KNO3 |
| fluorid sodný |  |
|  | H2SiO3 |
| kyselina jodistá |  |
|  | TiO2 |
| sulfid strieborný |  |
|  | Li2CrO4 |
| kyselina chlorovodíková |  |
|  | NH4Cl |
| manganistan draselný |  |
|  | ZnS |
| kyselina trihydrogenfosforečná |  |
|  | Al(OH)3 |
| peroxid vodíka |  |
|  | CO |
| amoniak |  |
|  | HF |
| hydrogenuhličitan vápenatý |  |
|  | Na2O |

**Úloha 4 (30 b)**

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|  |  |  |  |  | **2.** |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | **3.** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **4.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | **5.** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **6.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **8.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **9.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  | **10.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **11.** |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **12**. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **13.** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | **14.** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **15.** |  |  |  |  |  |  |  |  |  |  |  |

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| **riešenie tajničky** |  |

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| **názov katiónu** | **značka** | **sfarbenie plameňa** |
|  | Li+  |  |
| sodný |  |  |
|  | Ba2+ |  |
| vápenatý |  |  |
|  | K+ |  |
| cézny |  |  |
|  | Rb+ |  |

**Úloha 5 (15 b)**

**Úloha A) (7 b)**

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**Úloha B) (8 b)**

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| **vysvetlenie** |  |

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| **rovnica** |  |
| **názvy produktov** |  |  |

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| **triviálny názov** |  |