

## KEMIJA

1. Smjesa se sastoji od 20 g natrijevog klorida, 4 g joda, a ostalo je željezo u prahu.

Masa željeza čini 20% ukupne mase smjese. Izračunaj masu željeza u smjesi.

Prostor za računanje:

$$m(\text{NaCl}) + m(\text{I}_2) + m(\text{Fe}) = m(\text{smjese})$$

$$m(\text{Fe}) = 0,2 \cdot m(\text{smjese})$$

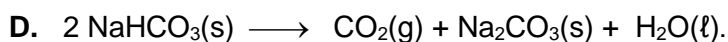
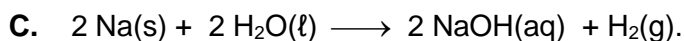
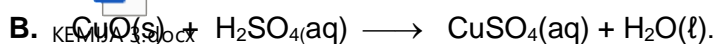
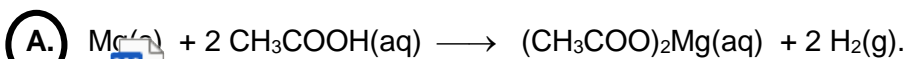
$$20 \text{ g} + 4 \text{ g} + 0,2 \cdot m(\text{smjese}) = m(\text{smjese})$$

$$m(\text{smjese}) = 30 \text{ g}$$

$$m(\text{Fe}) = 6 \text{ g}$$

Rezultat: **6 g**

2. Zaokruži slovo ispred one jednadžbe kemijske reakcije koja nije napisana u skladu sa zakonom o održanju mase?

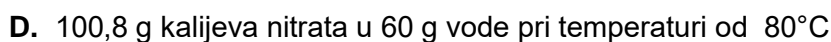
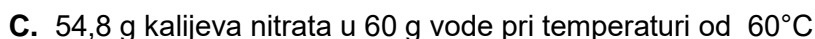
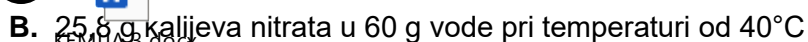
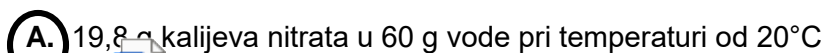


3. Tablica prikazuje ovisnost topljivosti kalijeva nitrata o temperaturi.

| temperatura / °C                 | 20 | 40 | 60  | 80  |
|----------------------------------|----|----|-----|-----|
| masa $\text{KNO}_3$ u 100 g vode | 33 | 63 | 108 | 172 |

Zaokruži točan odgovor.

Zasićena otopina nastati će otapanjem:



4. Koliko elektrona ima u pet formulskih jedinki kalijeveg karbonata?

A. 245

B. 250

**C. 340**

D. 350



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5. U epruveti smo zagrijavali bjelance iz jajeta s jakom lužinom, na unutarnji rub epruvete smo nakon nekog vremena pincetom prislonili komadić papira natopljen otopinom koja sadržava  $Pb^{2+}$ . Papirić natopljen otopinom koja sadržava  $Pb^{2+}$  je pocrnio. Ovom reakcijom dokazali smo prisutnost kojeg od navedenih elemenata u organskom spoju.

A. dušika

B. klora

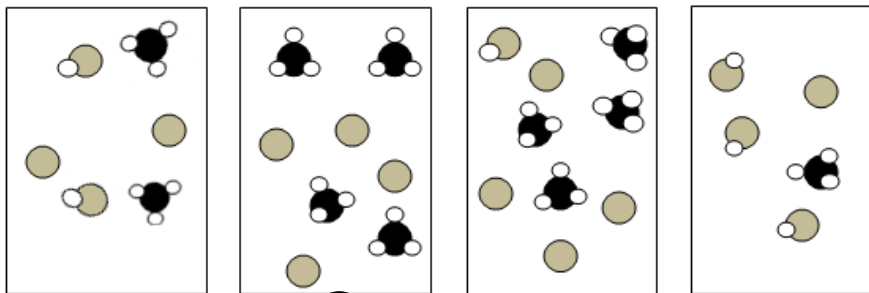
C. ugljika

**D. sumera**



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6. Koji crtež prikazuje vodenu otopinu klorovodične kiseline? Molekule vode nisu prikazane.



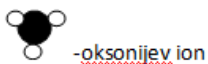
A

**B**

C

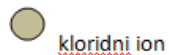
D

Legenda:

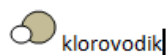


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kloridni ion



klorovodik