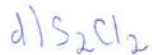
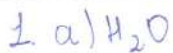


1 - маңсауыма



2. a) $M_r(MgO) = 24 + 16 = 40$

b) $M_r(PH_3) = 31 + 1 \cdot 3 = 34$

c) $M_r(Al_2(SO_4)_3) = 27 \cdot 2 + (32 + 16 \cdot 4) \cdot 3 = 54 + 96 \cdot 3 = 278$

d) $(Ca_3) M_r(Ca_3(PO_4)_2(OH)_2) = 40 + (31 + 16 \cdot 4) + (16 + 1) \cdot 2 = 40 + 188 + 17 \cdot 2 = 490$



$M_r(C_2H_4) = 12 \cdot 2 + 1 \cdot 4 = 28$

$w(C) = \frac{M_r(C)}{M_r(C_2H_4)} = \frac{12 \cdot 2}{28} \cdot 100\% = \frac{24}{28} \cdot 100\% = 86\%$



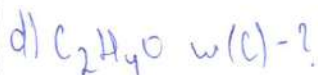
$M_r(CO) = 12 + 16 = 28$

$w(C) = \frac{12}{28} \cdot 100\% = 43\%$



$M_r(CaCO_3) = 40 + 12 + 16 \cdot 3 = 100$

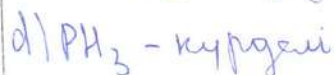
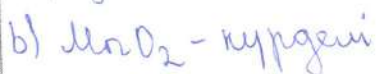
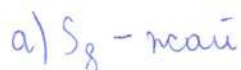
$w(C) = \frac{12}{100} \cdot 100\% = 12\%$



$M_r(C_2H_4O) = 12 \cdot 2 + 1 \cdot 4 + 16 = 44$

$w(C) = \frac{12 \cdot 2}{44} = \frac{24}{44} \cdot 100\% = 54\%$

4.



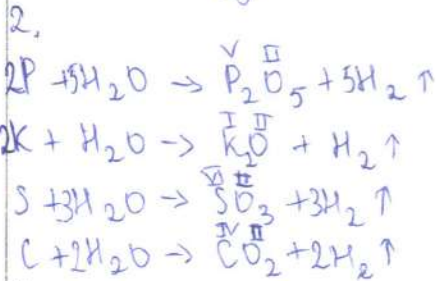
2-тапсырма.

1. Магний оксиді - MgO
Алюминий оксиді - Al_2O_3
Көміртегі (IV) оксиді - CO_2
Литий оксиді - Li_2O
Ванфосфор оксиді - P_2O_5

2. $NaCl$ - натрий хлориді
 $MgSO_4$ - магний сульфаты
 K_3PO_4 - калий фосфаты
 $CaCO_3$ - кальций карбонаты
 Al_2S_3 - алюминий сульфиді

3-тапсырма.

1. P_2O_5 - қосықондық, K_2O - негіздік, SO_3 - қосықондық, CO_2 - қосықондық.
 CaO - негіздік



4-тапсырма.

1. $w(\text{қант}) = ?$
 $m(\text{қант}) = 66,5 \text{ г}$
 $m(\text{сироп}) = 100 \text{ г}$

шешуі

$$w(\text{қант}) = \frac{66,5}{100} \cdot 100 = 66,5\%$$

жс: $w(\text{қант}) = 66,5\%$

2.

Бер:

$$V(\text{бір стакан лимонад}) = 400 \text{ мл}$$

$$P(\text{лимонад}) = 1 \text{ г/мл} = 0,001 \text{ кг/л}$$

Т/к

$$m(\text{қант}) = ?$$

шешуі

$$m = \rho \cdot V$$

$$m = 400 \cdot 1 = 400 \text{ (г)}$$

жауабы: $m(\text{қант}) = 400 \text{ г}$

3.

4.

Бер:

$$m_2(\text{сироп}) = 20 \text{ г}$$

$$m_1(\text{сироп}) = 100 \text{ г}$$

$$w(\text{қант}) = ?$$

шешуі

$$\frac{m_1 + m_2}{m(\text{қант})} = \frac{120}{400} \cdot 100 = 30\%$$

жс: $w(\text{қант}) = 30\%$