

Mavzu: Kislotalarning olinishi va xossalari

Toshkent shahar Uchtepa tuman 229-maktab
kimyo fani o'qituvchisi Narbayeva F.K.



« Bilimlar hovuzchasi »



Kislotalarni guruhlarga
ajrating!

« Ortiqchasini toping! »

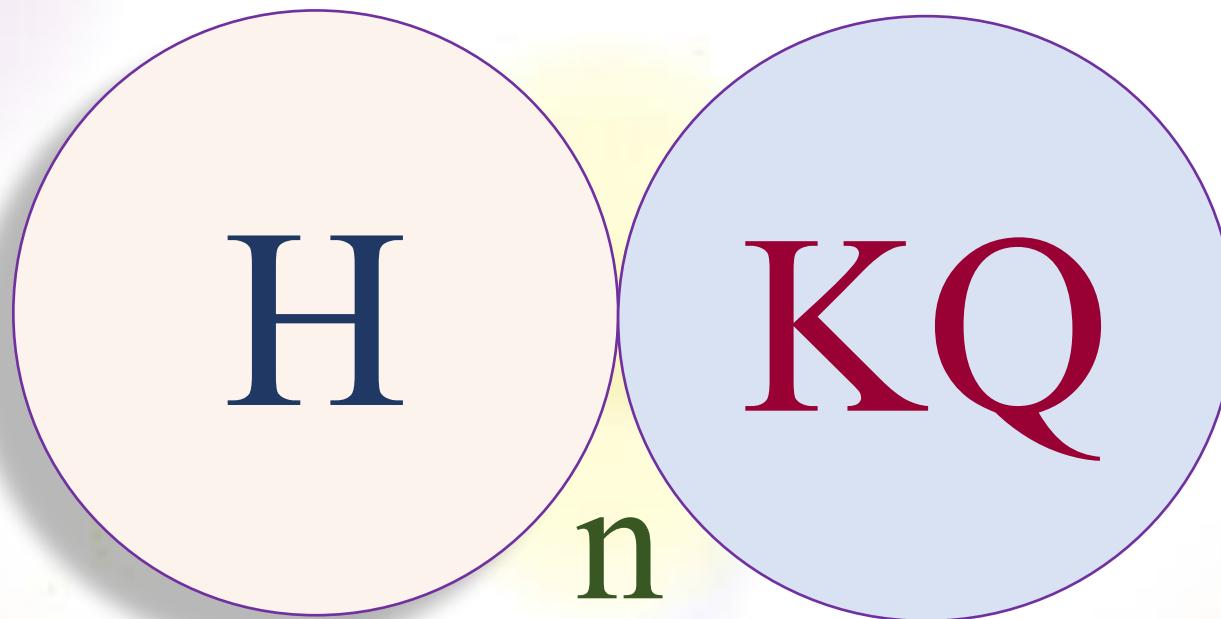
- HCl , HNO_3 , HNO_2 , H_2SiO_3
- HNO_3 , H_2CO_3 , H_2SO_4 , H_2S
- HBr , H_2CO_3 , HCN , HCl



Sizning fikringiz?

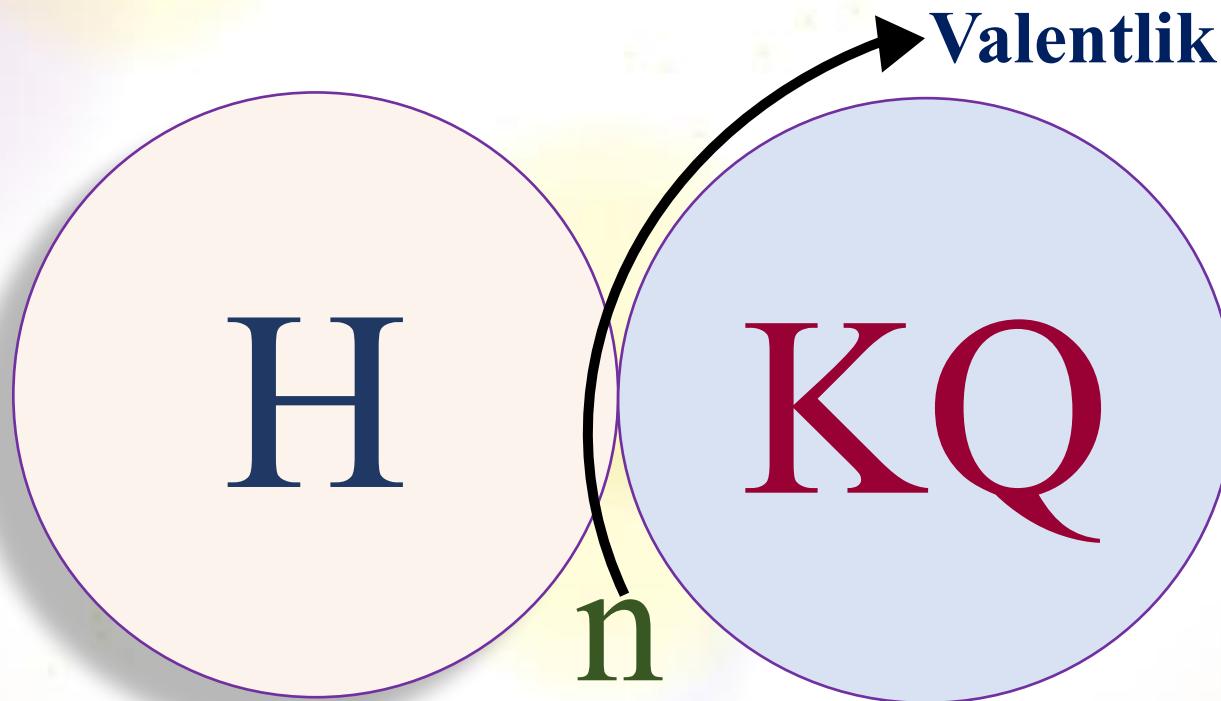


Kislotalarning tarkibi:



KQ – kislota qoldig'i

Kislotalarning tarkibi:

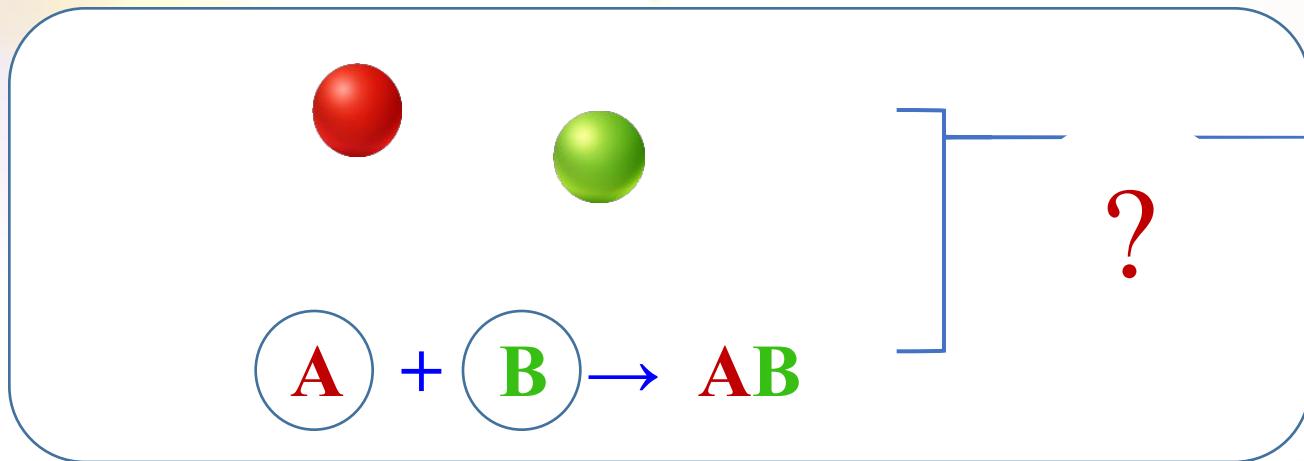


KQ – kislota qoldig'i

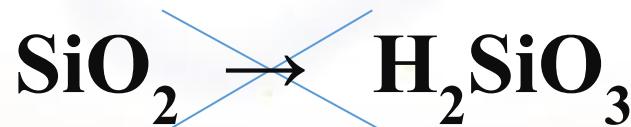
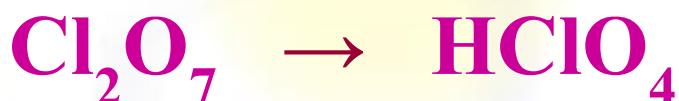
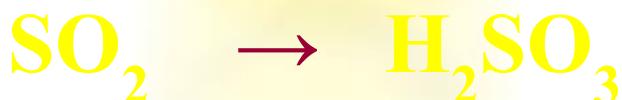
Mavzu rejasi:

- Kislotalarning olinishi;
- Kislotalarning fizik xossalari;
- Kislotalarning kimyoviy xossalari.

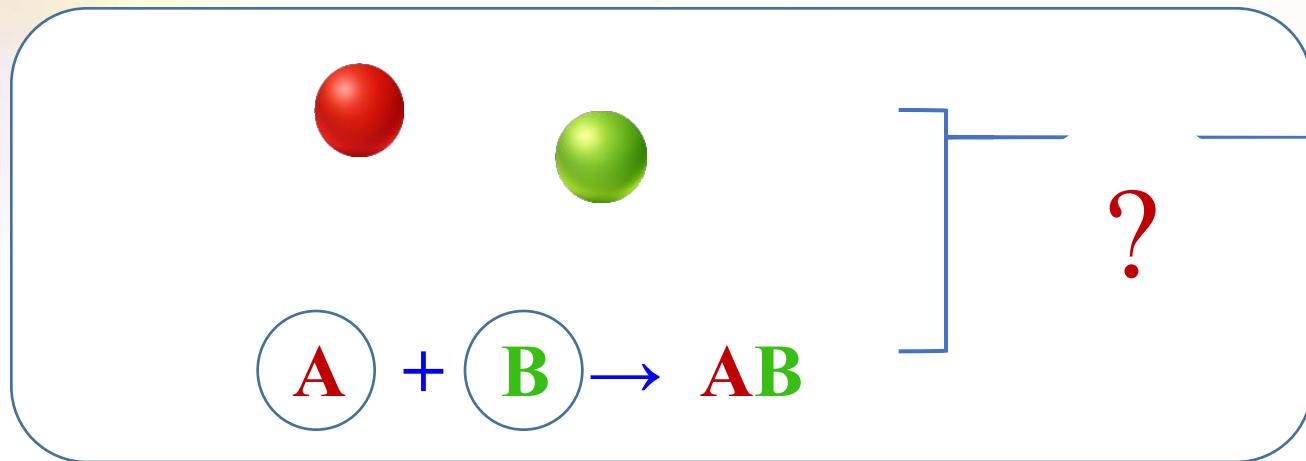
Kislotalarning olinishi



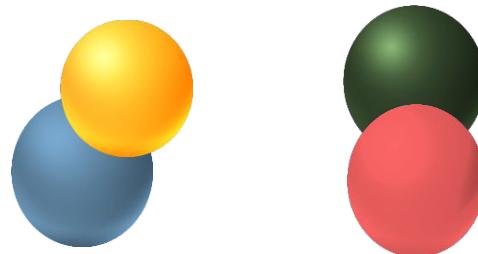
Kislotali oksidغا mos keladigan kislotalar formulasi



Kislotalarning olinishi



Kislotalarning olinishi

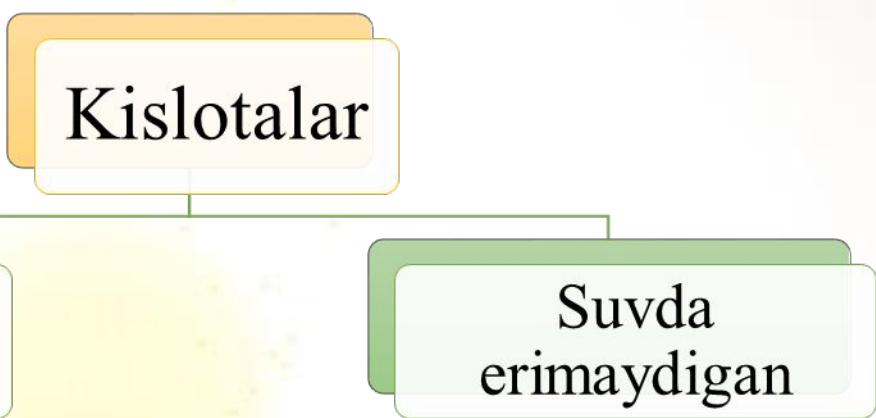
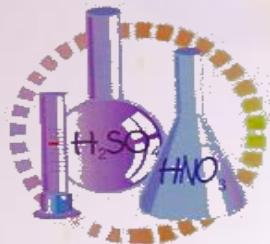


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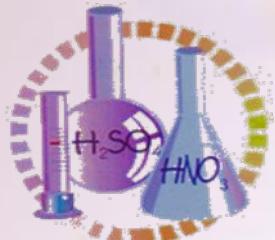


(Xlorid kislota)

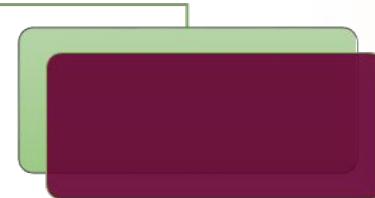
Kislotalarning fizik xossalari



Kislotalarning fizik xossalari



Kislotalar



Kislota bilan ishlaganda amal qilinadigan qoidalar

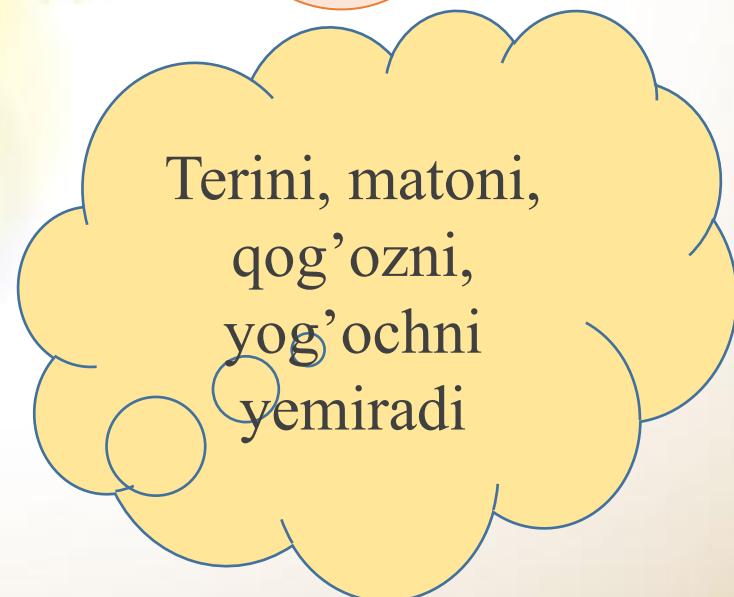


Kislota bilan ishlaganda amal qilinadigan qoidalar

- **Hidlamaslik!**
- **Tatib ko'rmaslik!**
- **Ko'zga tushishiga yo'l qo'ymaslik!**
- **Teriga tushishiga yo'l qo'ymaslik!**
- **To'kib qo'ymaslik!**

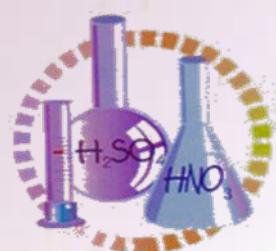


Shilliq
qavatning
kuyishiga olib
keladi



Terini, matoni,
qog'ozni,
yog'ochni
yemiradi

Kislotalarning kimyoviy xossalari



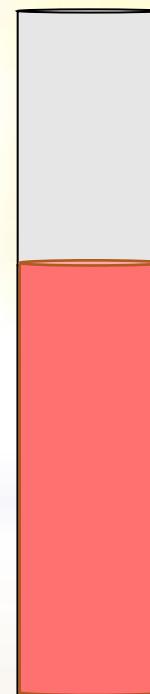
Indikator bilan kislotaning ta'siri.

Kislotalarning kimyoviy xossalari

Lakmus



Metilzarg'aldog'i



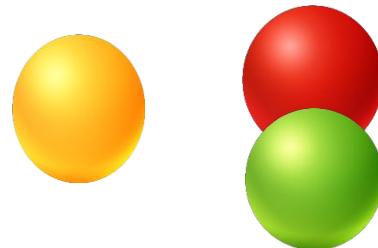
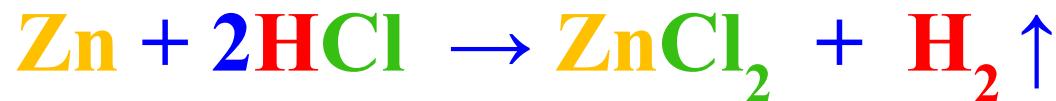
Fenolftalein



Kislotalarning kimyoviy xossalari

Metallarning faollik qatori

Li K Ba Ca Na Mg Al Zn Fe Sn Pb H Cu Hg Ag Pt Au



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Kislotalarning kimyoviy xossalari



“Yashirilgan” kislota nomini toping.



Turlar Murakkab moddalar	Asos	Kislota	Oksid
P_2O_5			
$Al(OH)_3$			
H_2SO_4			
$NaOH$			
HCl			

Jadvalni to'liring!



Indikator nomi	Neytral eritmadiagi rangi	Kislota eritmasidagi rangi
Lakmus	Binafsha	?
Fenolftalein	Rangsiz	?
Metil zarg‘ aldog‘ i	Zarg‘aloq	?

Jadvalni to'liring!



Indikator nomi	Neytral eritmadiagi rangi	Kislota eritmasidagi rangi
Lakmus	Binafsha	Qizil
Fenolftalein	Rangsiz	Rangsiz
Metil zarg'aldoq'i	Zarg'aldoq	Qizil

Jadvalni to'ldirin!

Quyidagi reaksiyalarni davom ettiring:

$\text{SO}_3 + \text{H}_2\text{O} = \dots$	$\text{H}_2\text{SO}_4 + 2\text{NaOH} = \dots$
$\text{H}_2 + \text{Br}_2 = \dots$	$\text{CaCl}_2 + \text{H}_2\text{SO}_4 \text{ (suyul.)} = \dots$
$\text{KCl} + \text{H}_2\text{SO}_4 = \dots$	$\text{H}_2\text{CO}_3 \rightarrow \dots$
$\text{BaO} + \text{HCl} = \dots$	$\text{Mg} + \text{HCl} = \dots$

Jadvalni to'ldirin!

Quyidagi reaksiyalarni davom ettiring:

$\text{SO}_3 + \text{H}_2\text{O} = \text{H}_2\text{SO}_4$	$\text{H}_2\text{SO}_4 + 2\text{NaOH} = \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
$\text{H}_2 + \text{Br}_2 = 2\text{HBr}$	$\text{CaCl}_2 + \text{H}_2\text{SO}_4 = \text{CaSO}_4 + 2\text{HCl}$
$\text{H}_2\text{CO}_3 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	$\text{KCl} + \text{H}_2\text{SO}_4 = 2\text{HCl} + \text{K}_2\text{SO}_4$
$\text{Mg} + 2\text{HCl} = \text{MgCl}_2 + \text{H}_2$	$\text{BaO} + 2\text{HCl} = \text{BaCl}_2 + \text{H}_2\text{O}$

Laboratoriya ishi

- ✓ Kislota olish;
- ✓ Neytrallanish
reaksiyasi;
- ✓ Kislotalarning
indikatorlar bilan
ta'siri.



Uyga vazifa:

- 120- betdagi savol va topshiriqlarga javob yozish;
- 117-120-betlarni o'qish ;



E'tiboringiz uchun rahmat!