

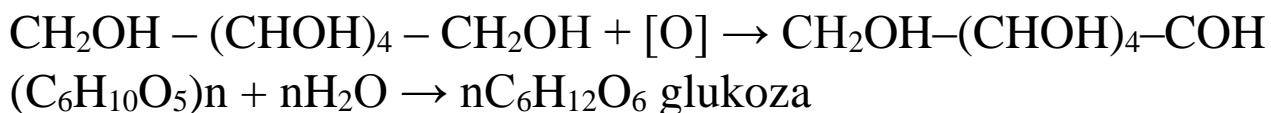
KIMYODAN REAKSIYALAR, MODDALARNING NOMI VA FORMULALARI.

OLIMLAR HAQIDA MA'LUMOT.

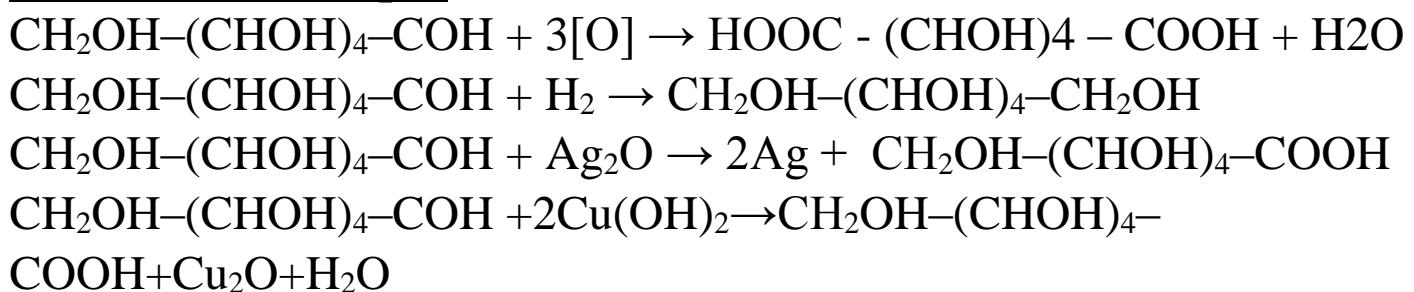


Углеводлар.

Олиниши.



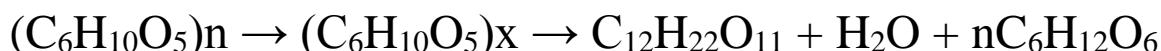
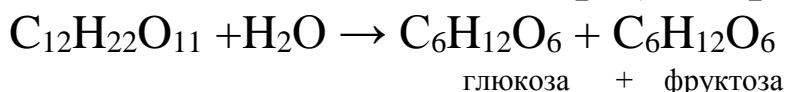
Кимёвий хоссалари.



Глюкозани бижгиши

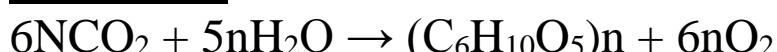
1. Сут кислотали бижгиш: $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 2\text{CH}_3 - \text{CHOH} - \text{COOH}$
2. Спиртли бижгиш: $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 2\text{C}_2\text{H}_5\text{OH} + 2\text{CO}_2$
3. Мой кислотали бижгиш: $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow \text{CH}_3 - (\text{CH}_2)_2 - \text{COOH} + 2\text{CO}_2 + 2\text{H}_2$
4. Лимон кислотали бижгиш: $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow \text{HOOC} - \text{CH}_2 - \text{COH}(\text{COOH}) - \text{CH}_2 - \text{COOH} + 2\text{H}_2\text{O}$

Углеводлар. (Сахароза ва крахмал).

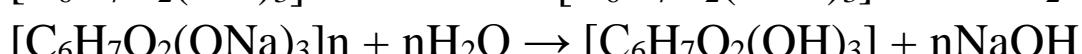
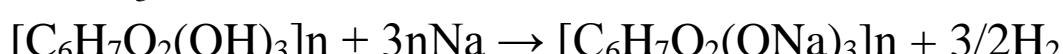
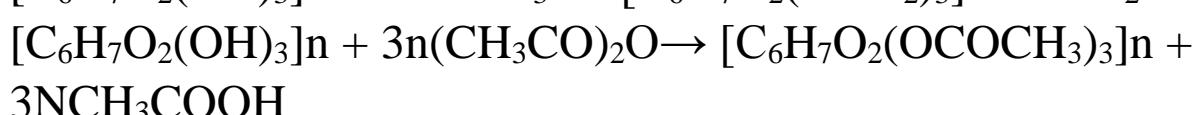
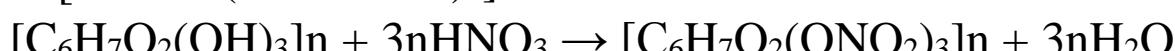
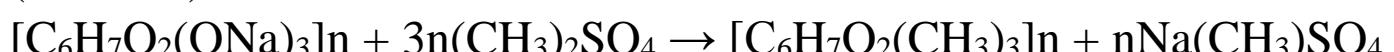


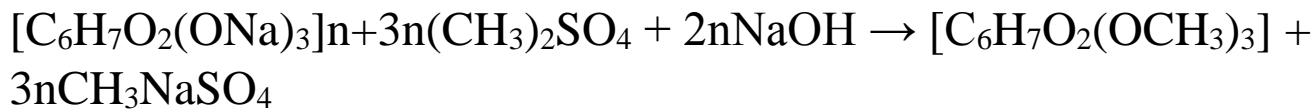
Целлюлоза

Олиниши.



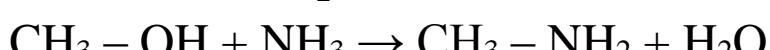
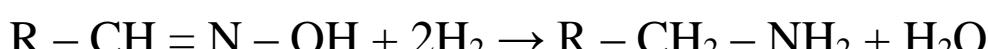
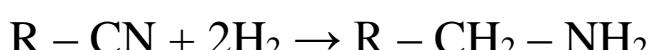
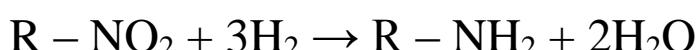
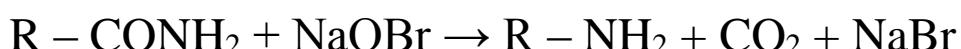
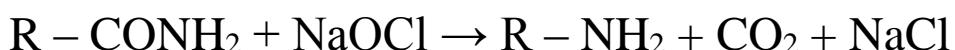
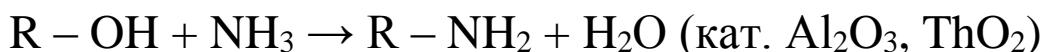
Кимёвий хоссалари.



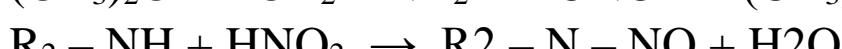
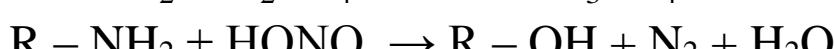
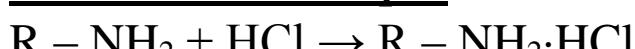


Аминлар.

Олинини.

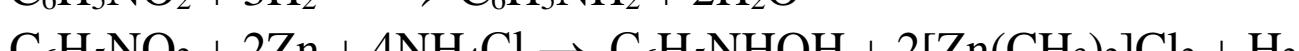
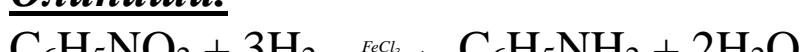


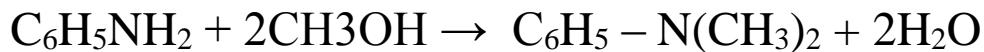
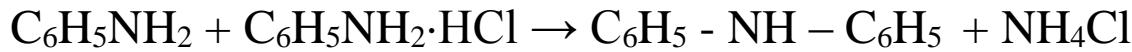
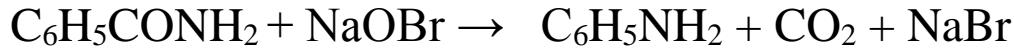
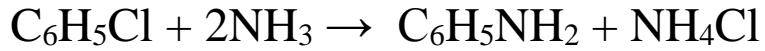
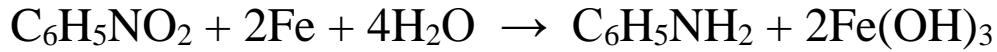
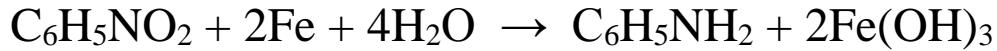
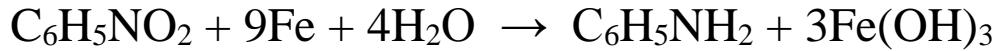
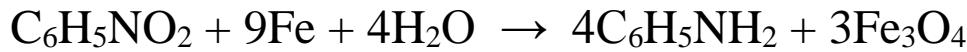
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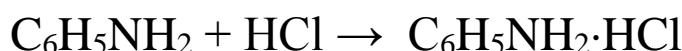
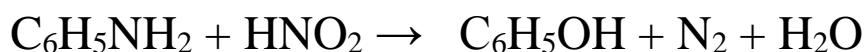
Ароматик аминлар.

Олинини.



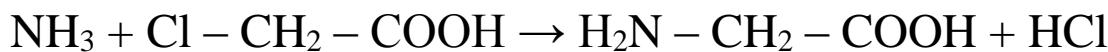
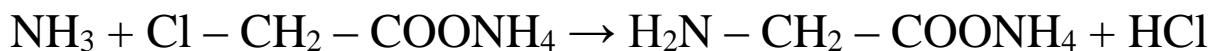


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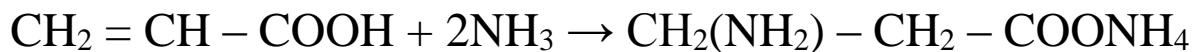
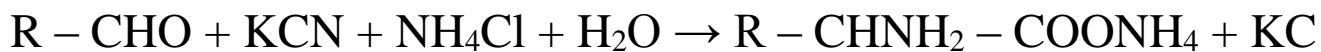


Аминокислоталар.

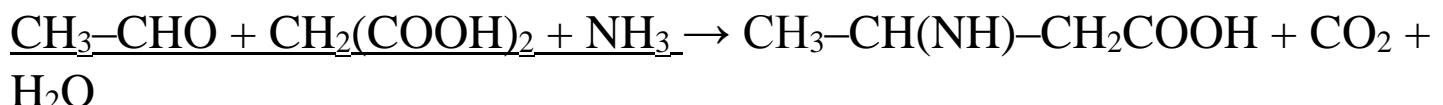
Олинини.



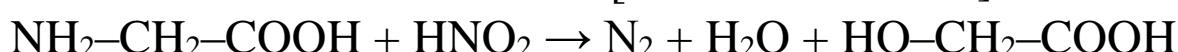
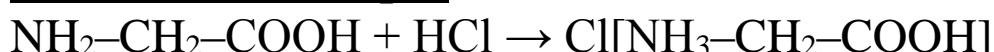
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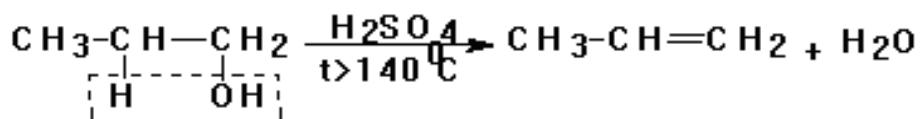
В.Д. Родинов усули бүйича малон кислотадан олиш:

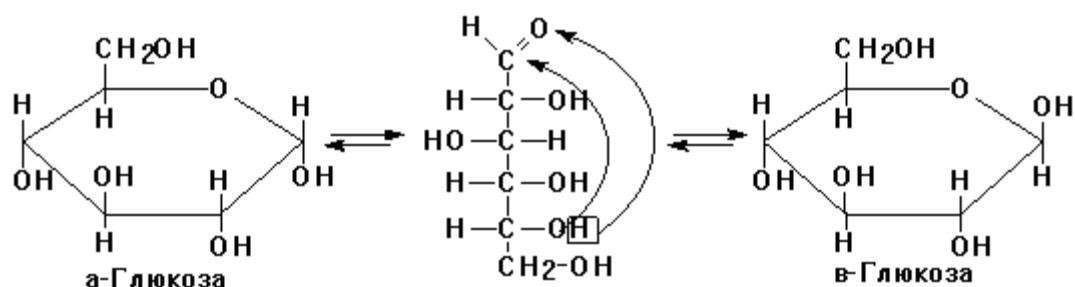
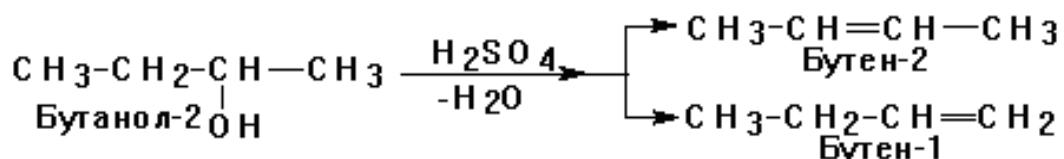
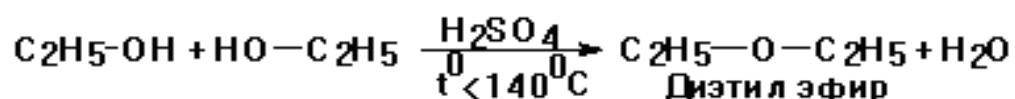
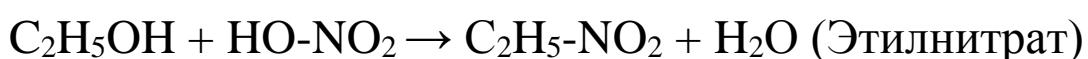
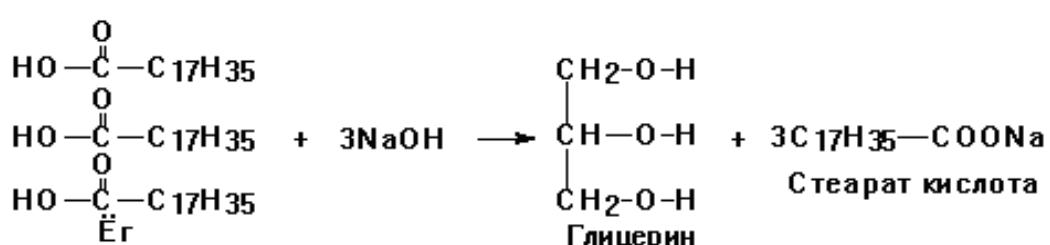
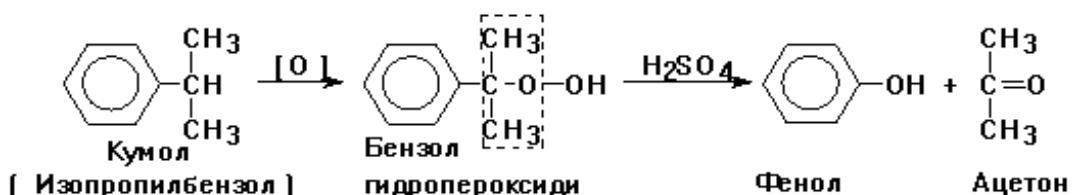
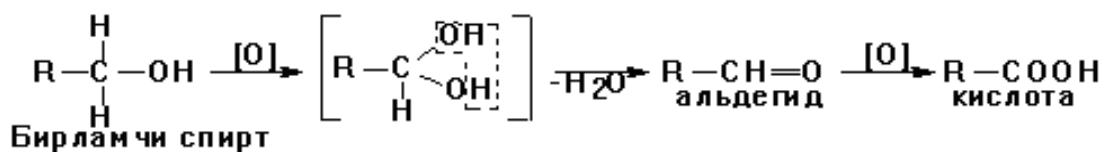


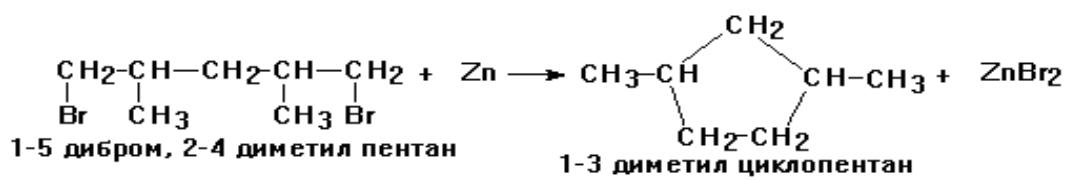
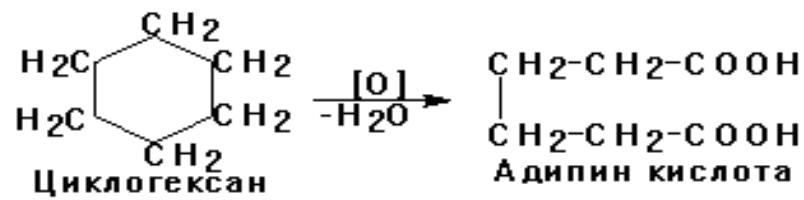
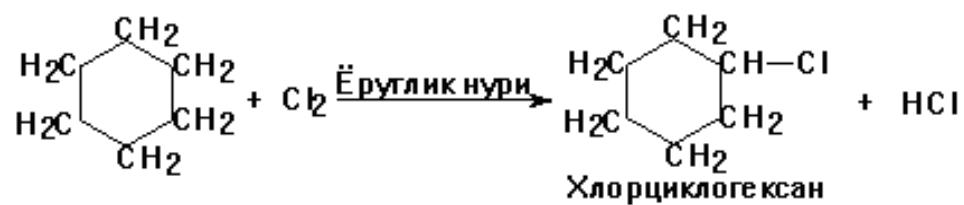
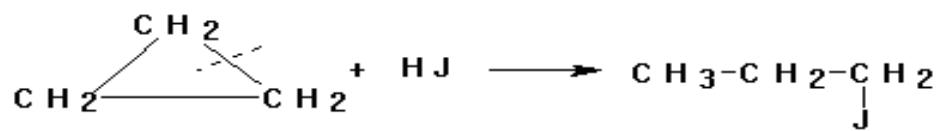
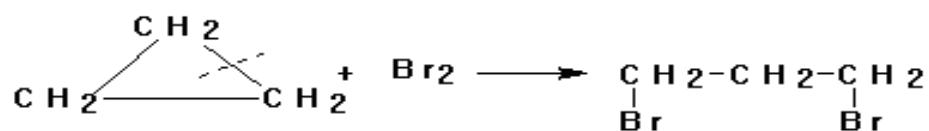
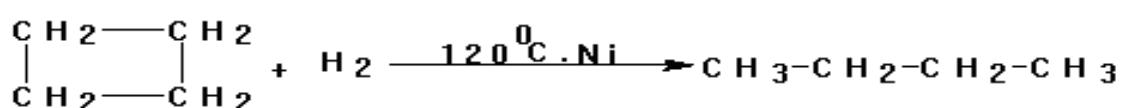
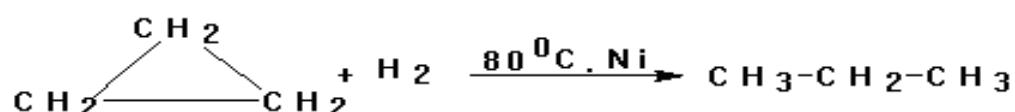
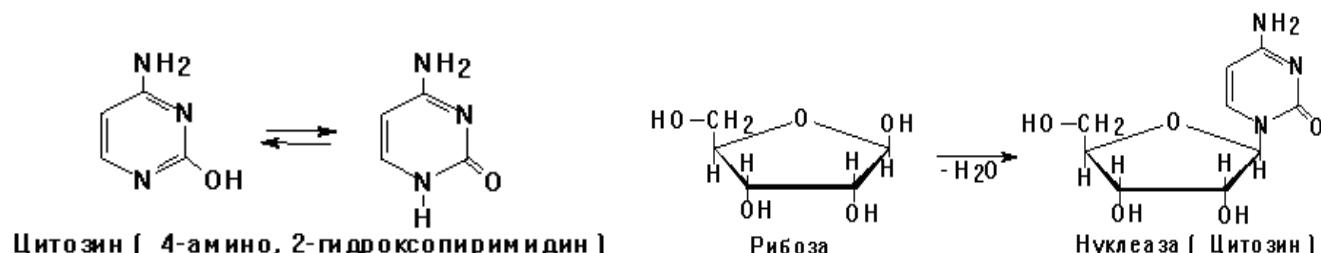
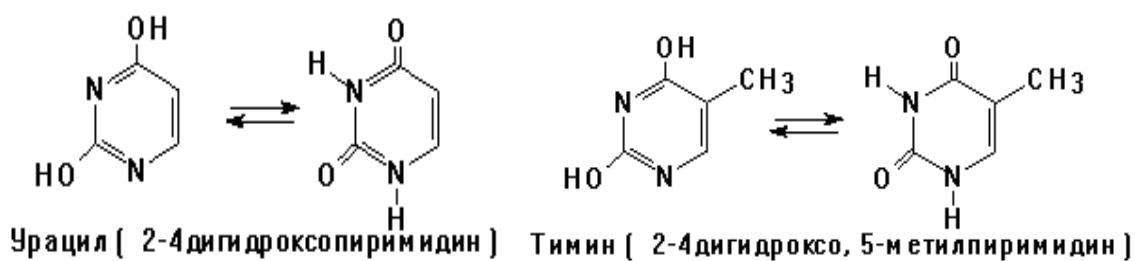
Кимёвий хоссалари.

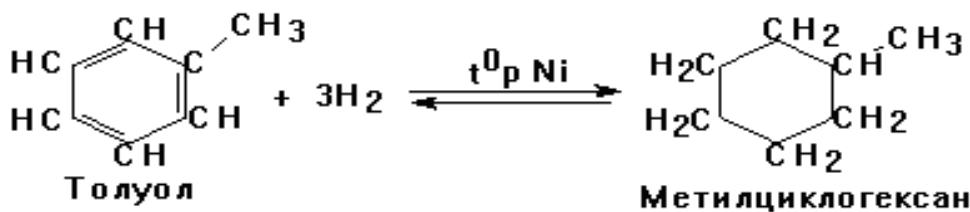
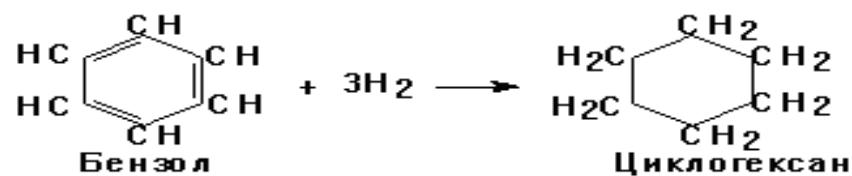


Органик кимёдан энг муҳим реакциялар

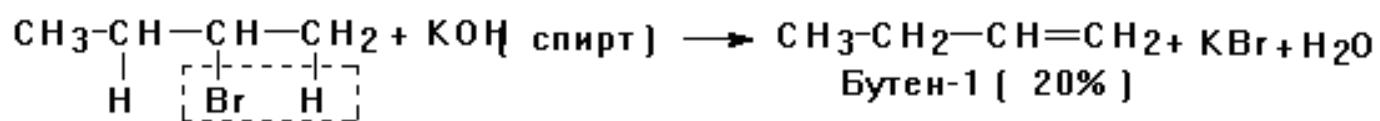
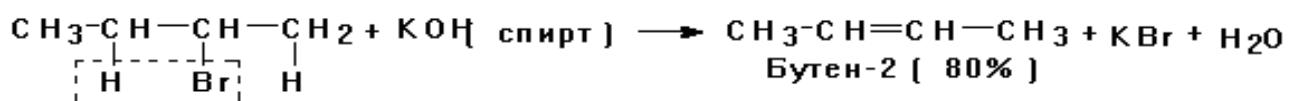
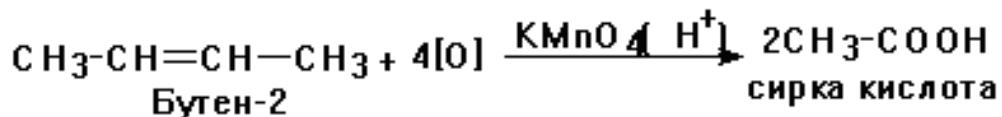
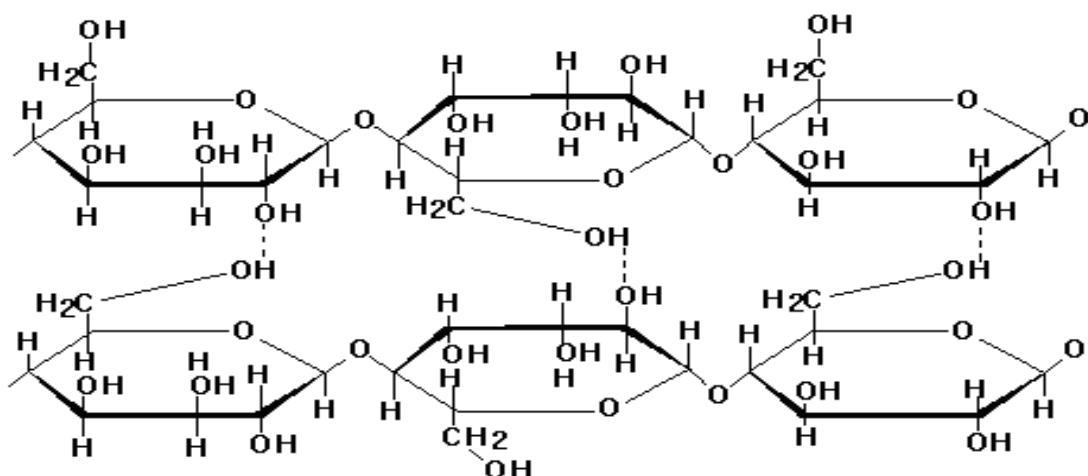


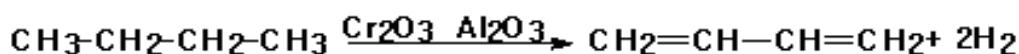
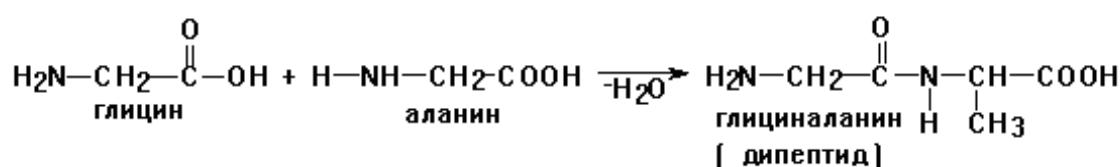
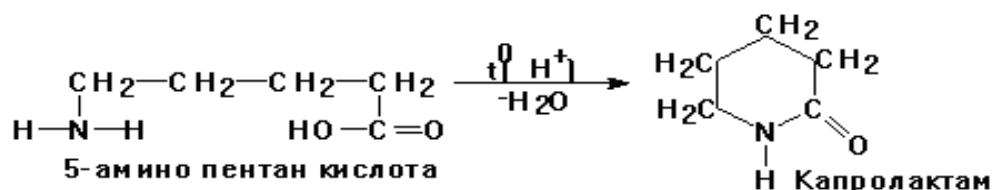
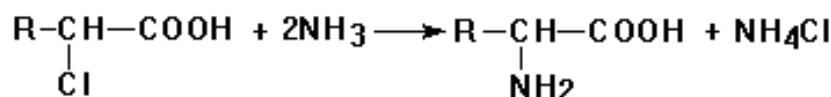
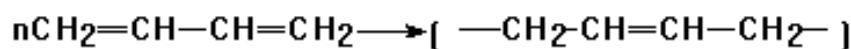
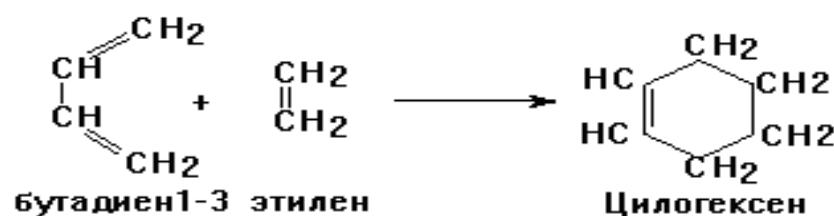
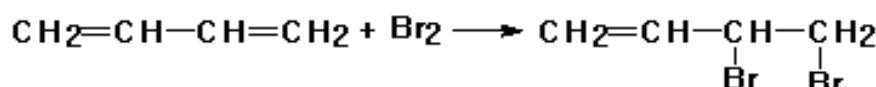
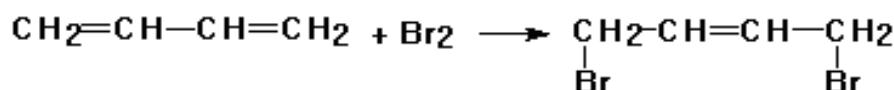
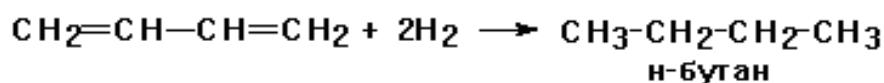
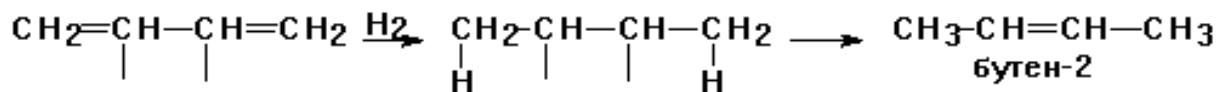
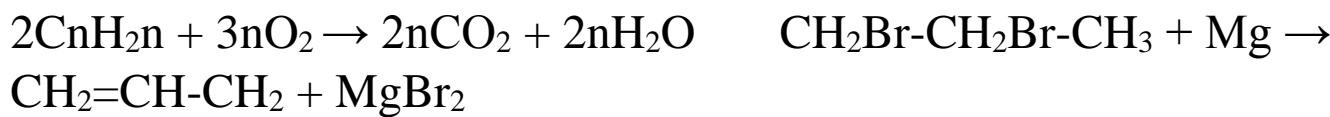


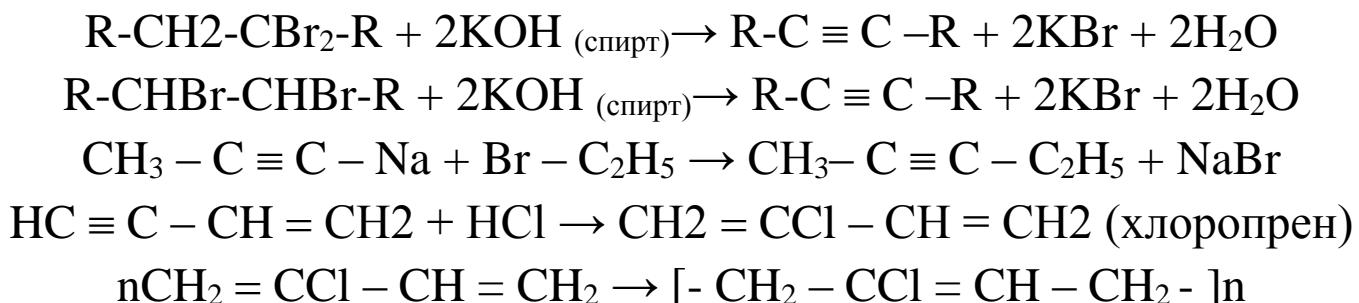
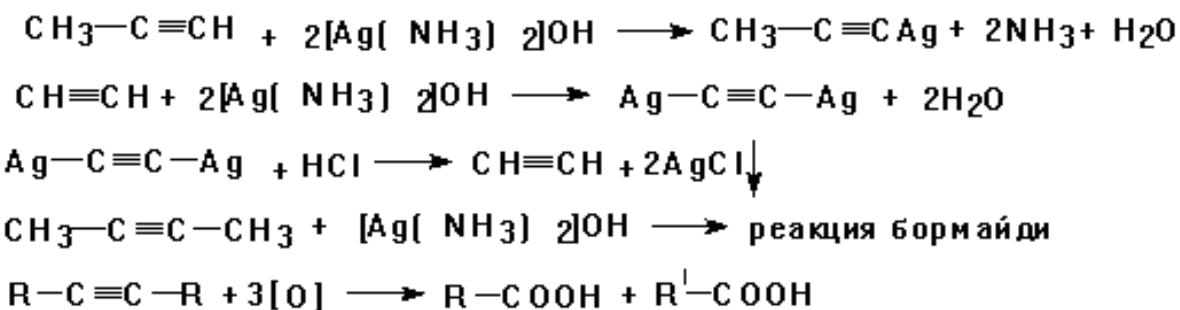
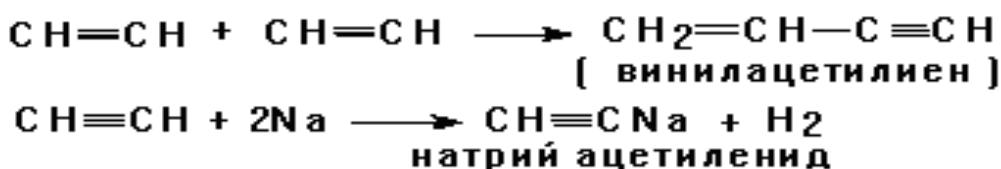
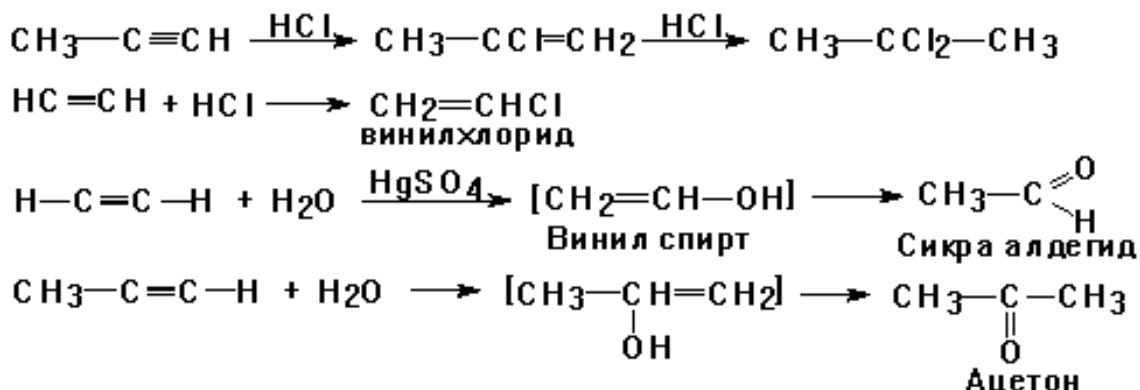
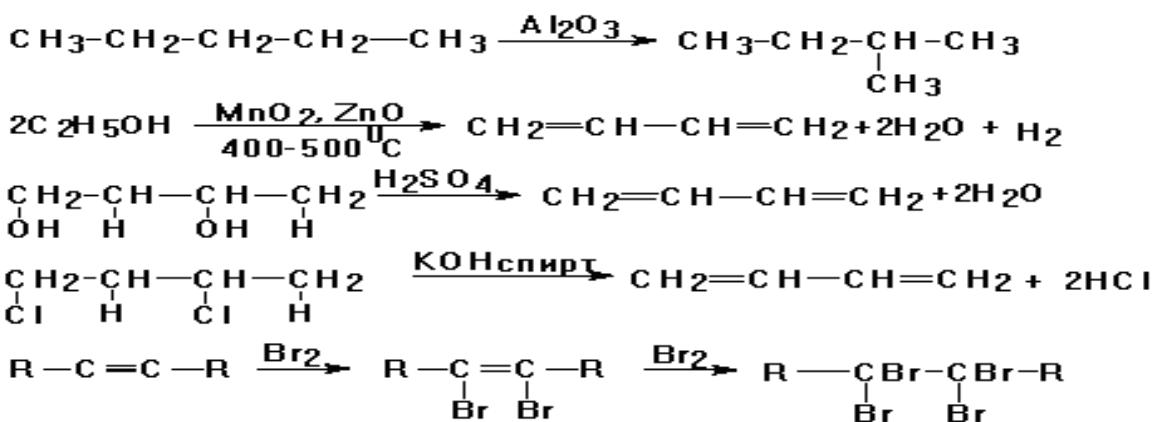


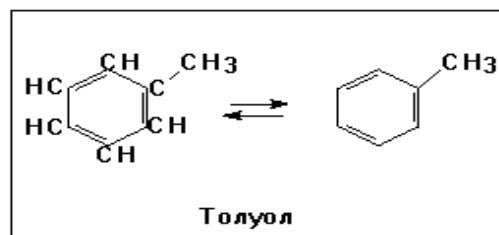
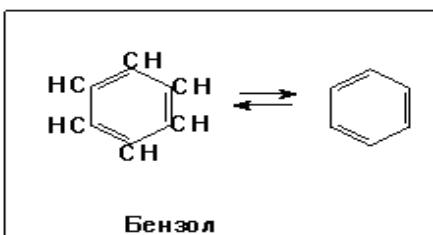


Органик кимёда водород боғнинг ҳосил бўлиши



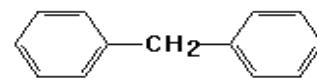
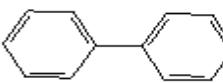
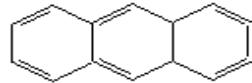
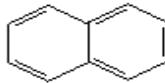






Бензол

Толуол

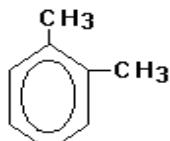


Нафталин

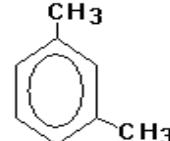
Антрацен

Дифенил

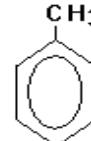
Дифенил метан



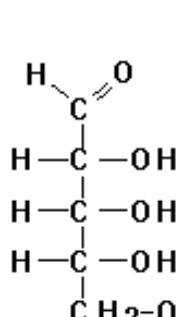
1-2 диметил бензол
о-ксилол
ёки
ортоксило



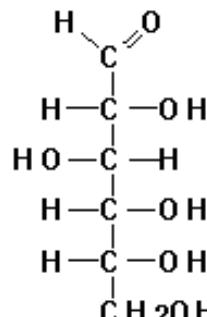
1-3 диметил бензол
м-ксилол
ёки
метаксилюл



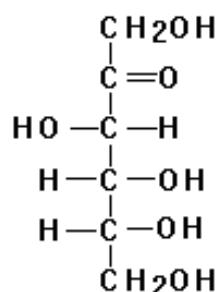
CH₃ 1-4 диметил бензол
п-ксилол
ёки
параксило



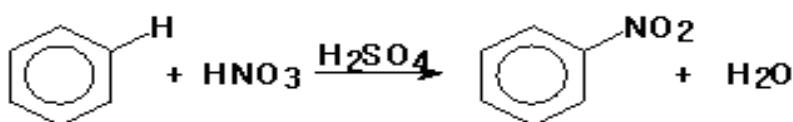
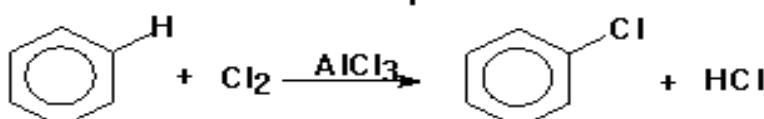
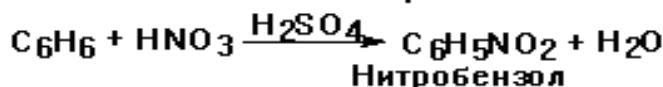
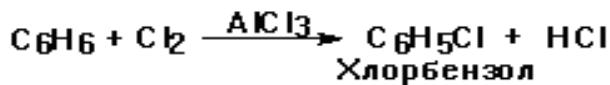
Рибоза [пентоза]

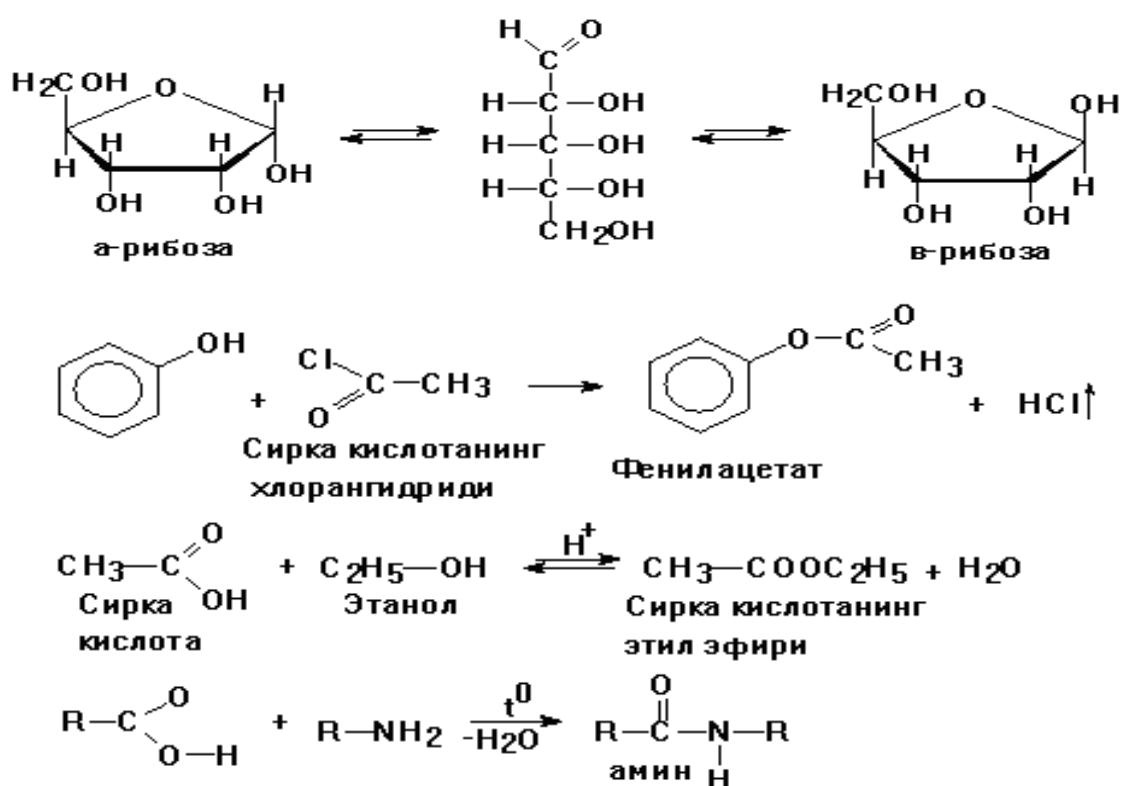
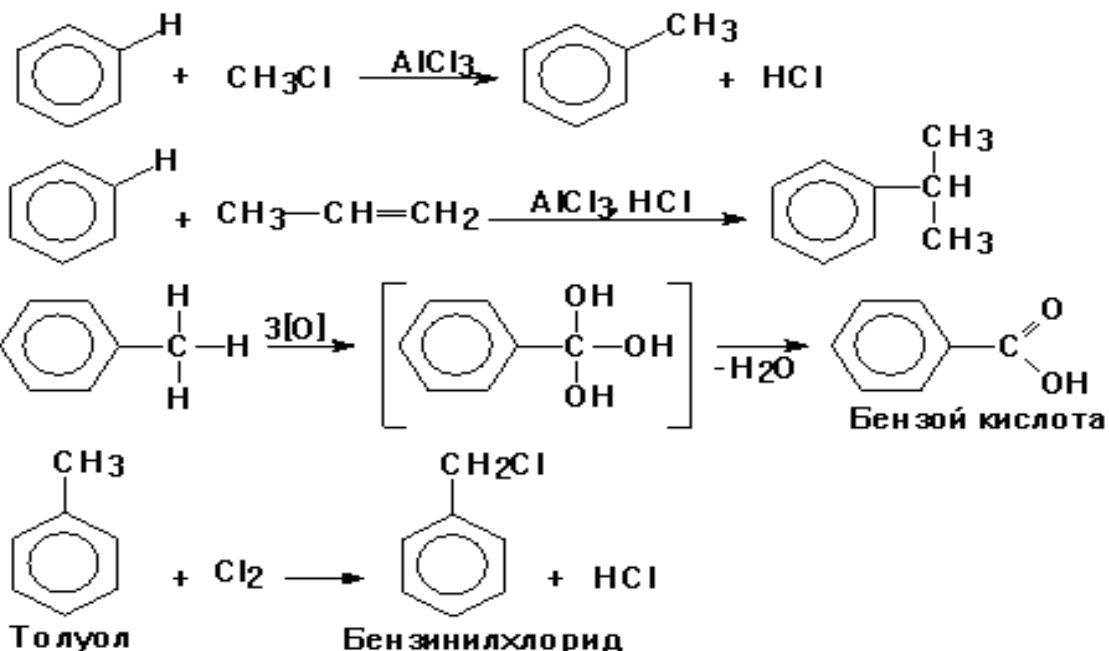


Глюкоза [Гексозалар]



Фруктоза





ORGANIK MODDALAR JADVALI.

Номи	Формуласи	Изомерияси	Суюқланиш темпера-тураси °C	Қайнаттымпера-тураси °C	Нисбий зичлиги 20°C
Түйинган углеводородлар. (Алканлар)					
Метан	CH ₄	-	-184	-162	-
Этан	C ₂ H ₆	-	-172	-88	-
Пропан	C ₃ H ₈	-	-190	-42	-
Бутан	C ₄ H ₁₀	2	-135	-0,5	-
Пентан	C ₅ H ₁₂	3	-132	-36	0,626 1
Гексан	C ₆ H ₁₄	5	-94	69	0,660 3
Гептан	C ₇ H ₁₆	9	-90	98	0,683 4
Октан	C ₈ H ₁₈	18	-57	126	0,703 1
Нонан	C ₉ H ₂₀	35	-54	151	0,718 2
Декан	C ₁₀ H ₂₂	75	-30	171	0,730 1
Циклопарафинлар					
Циклопропан		-	-127	-36	-

Циклобутан		2	-50	-13	-
Цикlopентан		5	-94	49	0,751 2
Циклогексан		12	-7	81	0,779 3
Циклогептан		26	-8	119	0,809 0
Этилен углеводородлар. (Алкенлар)					
Этилен	C ₂ H ₄	-	-169	-104	0,570 0
Пропен	C ₃ H ₆	-	-185	-47,4	0,517 0
Бутен	C ₄ H ₈	2	-130	-6	0,596 0
Пентен	C ₅ H ₁₀	4 (2)	-165	-30	0,643 0
Гексен	C ₆ H ₁₂	12 (4)	-138	63,5	0,673 0
Гептен	C ₇ H ₁₄		-119	93,6	0,697 0
Октен	C ₈ H ₁₆		-102	122,5	0,715 0
Нонен	C ₉ H ₁₈		-78	146	0,731 0
Алкадиенлар					
Пропадиен-1,2 (аллен)	C ₃ H ₄	-			

Бутадиен-1,3 (дивинил)	C_4H_6	-		-4	
2-метил бутадиен-1,3 (изопрен)	C_5H_8	-		37	
Ацетилен қатори углеводородлари. (Алкинлар)					
Ацетилен (этин)	C_2H_2	-	-80,8	-83,8	0,621
Пропин (аллилен)	C_3H_4	-	- 102,7	- 23,23	0,690
Бутин(кротони лен)	C_4H_6	2	- 125,7 2	8,07	0,678
Пентин (валирилен)	C_5H_8	3	- 106,1	40,23	0,694
Гексин	C_6H_{10}	7	- 132,1	71,35	0,715
Бензол қатори ароматик углеводородлар.					
Бензол	C_6H_6	-	5,533	80,1	0,879 0
Толуол (метил бензол)	$C_6H_5-CH_3$	-	-95	110,6 3	0,866 9
Этилбензол	$C_6H_5-C_2H_5$	4	-93,9	136,1 5	0,866 9
Пропилбензол	$C_6H_5-C_3H_7$	9	94,3	159	0,862 0
Бутилбензол	$C_6H_5-C_4H_9$	27	- 87,97	183,2 7	0,860 1

о-ксилол (1,2-диметилбензол)	$C_6H_4-(CH_3)_2$	Изомер	- 25,17 5	144,4 1	0,880 2
м- ксилол (1,3-диметилбензол	$C_6H_4-(CH_3)_2$	Изомер	- 47,82	139,1	0,864 2
п- ксилол (1,4-диметилбензол	$C_6H_4-(CH_3)_2$	Изомер	- 13,26	138,3 5	0,861 1
гексаметилбенз ол	$C_6H_4-(CH_3)_2$		166	265	-

Нормал тузилишли бир атомли түйинган спиртлар.

Метил спирт	CH_3OH	-	-97,8	64,7	0,792
Этил спирт	C_2H_5OH	-	- 117,3	78,37	0,783
Пропил спирт	C_3H_7OH	2	-127	97,2	0,804
Бутил спирт	C_4H_9OH	4	-79,9	117,5	0,809 8
Пентил (амил) спирт	$C_5H_{11}OH$	8	-78,5	138	0,814
Гексил спирт	$C_6H_{13}OH$	17	-51,6	157,2	0,819
Децил спирт	$C_{10}H_{21}OH$	39	6	231	0,889
Додецил спирт	$C_{12}H_{25}OH$		24	255	0,831

Феноллар

Фенол	C_6H_5OH	-	43	182	1,054 5
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Орта крезол - 1,2	$C_6H_4(CH_3)OH$	Изомер	30,9	30,9	1,046 5
Мета креол - 1,3	$C_6H_4(CH_3)OH$	Изомер	10,9	202,8	1,034
Пара крезол- 1,4	$C_6H_4(CH_3)OH$	Изомер	34	202,5	1,034 7
Пирокатехин- 1,2	$C_6H_4(OH)_2$	Изомер	105	240	1,371
Резоцин-1,3	$C_6H_4(OH)_2$	Изомер	110	276,5	1,285
Гидрохинон- 1,4	$C_6H_4(OH)_2$	Изомер	169	285	1,358
Пирогаллол- 1,2,3	$C_6H_3(OH)_3$	Изомер	132,5	309	1,453
Флороглюцин1 ,3,5	$C_6H_3(OH)_3$	Изомер	219	-	
Альдегидлар					
Чумоли альдегид	CH_2O	-	-92	-21	
Сирка альдегид	CH_3CHO	-	-123,5	20,8	

Пропион альдегид	$\text{CH}_3\text{CH}_2\text{CHO}$	-	-81	48,8	
Мой альдегид	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$	2	-99	75,7	
Валериан альдегид	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CHO}$	4	-92	103,4	
Палметин альдегид	$\text{CH}_3(\text{CH}_2)_{14}\text{CHO}$		34	200	
Стеарин альдегид	$\text{CH}_3(\text{CH}_2)_{16}\text{CHO}$		63,5	212	
Кетонлар					
Ацетон (диметилкетон)	$\text{CH}_3 - \text{CO} - \text{CH}_3$	-	- 95,35	56,24	
Метилэтилкетон	$\text{CH}_3 - \text{CO} - \text{C}_2\text{H}_5$	-	-86,4	79,6	
Метилпропилкетон	$\text{CH}_3 - \text{CO} - \text{C}_3\text{H}_7$	2	-77,8	101,7	
Диэтилкетон	$\text{C}_2\text{H}_5 - \text{CO} - \text{C}_2\text{H}_5$	-	-42	102,7	
Дипропилкетон	$\text{C}_3\text{H}_7 - \text{CO} - \text{C}_3\text{H}_7$	2	-32,6	144	
Нормал тузилишли бир негизли түйинган карбон кислоталар					
Чумоли кислота	HCOOH	-	8,4	100,7	1,227
Сирка кислота	CH_3COOH	-	16,6	118,1	1,049
Пропион кислота	$\text{C}_2\text{H}_5\text{COOH}$	-	-22	141,1	0,999
Мой кислота	$\text{C}_3\text{H}_7\text{COOH}$	2	-7,9	163,5	0,959

Валериан кислота	C_4H_9COOH	4	-34,5	186,3 5	0,942
Капрон кислота	$C_5H_{11}COOH$	8	-2	202	0,929
Энант кислота	$C_6H_{13}COOH$		-10,5	223	0,918
Каприл кислота	$C_7H_{15}COOH$		16	237,5	0,910
Пеларгон кислота	$C_8H_{17}COOH$		12,5	254	0,906
Каприн кислота	$C_9H_{19}COOH$		31,5	269	0,886
Меристин кислота	$C_{13}H_{27}COOH$		53,8	250.5	0,862
Пальметин кислота	$C_{15}H_{31}COOH$		64,6	272	0,849
Маргарин кислота	$C_{16}H_{33}COOH$		60,6	277	0,858
Стеарин кислота	$C_{17}H_{35}COOH$		69,4	287	0,847

Икки негизли карбон кислоталар.

Оксалат кислота	HOOC - COOH	-	189,5		
Малон кислота	HOOC -CH ₂ - COOH	-	135,6		
Қахрабо кислота	HOOC-(CH ₂) ₂ - COOH	-	185		
Глутар кислота	HOOC-(CH ₂) ₃ - COOH	2	97,5		

Адипин кислота	$\text{HOOC-(CH}_2\text{)}_4\text{-COOH}$	6	153		
Пропка кислота	$\text{HOOC-(CH}_2\text{)}_5\text{-COOH}$		140		
Себацин кислота	$\text{HOOC-(CH}_2\text{)}_6\text{-COOH}$		133		
Оддий эфирлар					
Диметил эфир	$\text{CH}_3\text{-O-CH}_3$	1			
Метилэтил эфир	$\text{CH}_3\text{-O-C}_2\text{H}_5$	1			
Диэтил эфир	$\text{C}_2\text{H}_5\text{-O-C}_2\text{H}_5$	3			
Метилизопроп ил эфир	$\text{CH}_3\text{-O-C}_3\text{H}_7$	3			
Метилпропил эфир	$\text{CH}_3\text{-O-C}_3\text{H}_7$	Из ом ер			
Этилпропил эфир	$\text{C}_2\text{H}_5\text{-O-C}_3\text{H}_7$	6			
Этилизопропил эфир	$\text{C}_2\text{H}_5\text{-O-C}_3\text{H}_7$	Из ом ер			
Дипропил эфир	$\text{C}_3\text{H}_7\text{-O-C}_3\text{H}_7$				
Дизизопропил эфир	$\text{C}_3\text{H}_7\text{-O-C}_3\text{H}_7$	Из ом ер			
Мураккаб эфирлар					

Чумоли кисло-танинг метилэфири	HCOOCH_3	-	31,8	-99	0,975
Сирка кислотанинг метилэфири	$\text{CH}_3\text{COOCH}_3$	2	57	-98,1	0,934
Пропион кисло-танинг метилэфири	$\text{C}_2\text{H}_5\text{COOCH}_3$	3	80,6	-87,5	0,915
Мой кислотанинг метилэфири	$\text{C}_3\text{H}_7\text{COOCH}_3$	9	102,7		0,898
Валериан кисло-танинг метилэфири	$\text{C}_4\text{H}_9\text{COOCH}_3$		127,7	-91	0,910
Чумоли кисло-танинг этилэфири	HCOOC_2H_5	2	54,3	-89	0,923
Сирка кислотанинг этилэфири	$\text{CH}_3\text{COOC}_2\text{H}_5$	3	77,2	-83,4	0,901
Пропион кисло-танинг этилэфири	$\text{C}_2\text{H}_5\text{COOC}_2\text{H}_5$	9	99,1	-73,9	0,888
Мой кислотанинг эитлэфири	$\text{C}_3\text{H}_7\text{COOC}_2\text{H}_5$		120,5 5	-97,9	0,879
Валериан кисло-танинг этилэфири	$\text{C}_4\text{H}_9\text{COOC}_2\text{H}_5$		145,5	-91,2	0,877

Аминокислоталар

Очиқ занжирли (ациклік), алифатик аминокарбон кислоталар.

1) Мономиндо монокарбон кислоталар – молекуласыда битта – NH_2 ва битта – COOH группа тутадилар

Глицин	$\text{H}_2\text{N}-\text{CH}_2\text{COOH}$				
Аланин	$\text{CH}_3\text{CH}(\text{NH}_2)\text{COOH}$				
Серин	$\text{HOH}_2\text{C}-\text{CH}(\text{NH}_2)\text{COOH}$				
Цистеин	$\text{HSH}_2\text{C}-\text{CH}(\text{NH}_2)\text{COOH}$				
Цистин	$\text{HOOC-CH}(\text{NH}_2)-\text{CH}_2-\text{S-S-CH}_2$				
Треонин	$\text{H}_3\text{C-CH(OH)}-\text{CH}(\text{NH}_2)\text{COOH}$				
Метионин	$\text{CH}_3\text{S-(CH}_2)-\text{CH}(\text{NH}_2)\text{COOH}$				
Лейцин	$(\text{CH}_3)_2\text{CH}_2-\text{CH}(\text{NH}_2)\text{COOH}$				
Изолейцин	$\text{C}_2\text{H}_5\text{CH}(\text{CH}_3)\text{CH}-(\text{NH}_2)\text{COOH}$				

2) Мономинокарбон кислоталар – молекуласыда битта – NH_2 а
ва иккита – COOH группа тутадилар

Аспартат кислота	$\text{HOOC-CH}_2-\text{CH}(\text{NH}_2)\text{COOH}$				
Аспаргин	$\text{H}_2\text{NCO-CH}_2-\text{CH}(\text{NH}_2)\text{COOH}$				
Глутамат кислота	$\text{HOOC-(CH}_2)_2-\text{CH}(\text{NH}_2)\text{COOH}$				

Глутамат	$\text{H}_2\text{NCO-(CH}_2)_2-\text{CH}(\text{NH}_2)\text{COOH}$				
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Olimlar haqida ma'lumot.

1892-yil Jenevada Xalqaro kimyogarlar kongresida yangi nomenklatura qabul qilindi. Jeneva nomenklaturasi bo'yicha moddalardagi asosiy zanjir no'merlanib, radikal nomining oldiga ushbu radikalning asosiy zanjirdagi qaysi uglerod atomiga brikkanligini ko'rsatuvchi raqam qo'yiladi.

1960-yilda IUPAC (International) Union of Pure Applied Chemistry)-IYPAK (sof va amaliy xalqaro ittifoqi) kamissiyasi tomonidan ishlab chiqilgan yangi nomenklatura e'lon qilindi

A.A.Abduvohobov akademik element organiklar maktabini yaratgan.

Abdubakirov N.Q. – tabiiy glukozaning kimyoviy tuzilishi va farmakologik hossalarini o'rganib, “Erizimozid”, “Strofantidin asetat”, “Psorolen” dorivor moddalarini ajratib olgan va tadbiq etgan.

Abu Ali Ibn Sino – dorivor, ta'biiy kimyoviy brikmalarning tarkibi va hossalariga ko'ra sinflarga toifalashtirgan.

Abu Rayhon Beruniy – atomlar bo'linmedi degan olimlaga qarshi chiqib ula bo'linadi lekin cheksiz emas dedi. 979-1048

Adryenov va Voronkovlar - kremniy organik brikmalar kimyosini rivojlanishiga katta hissa qo'shgan.

Ahmad al-Farg'oniy – “Kitob amal ar-rohamat” ning muallifi. Nilometrni kashf qilgan, u uchun emirilmaydigan qorishma tayyorlagan.

Ahmedov – “K-4” ning tuproq erroziyasini kamaytirishini va suv rejimini yahshilashni aniqlagan.

Ahmedov.K.S – suvda erydigan polimer yaratdi.

Alfred Nobel – Daraxtning mayda qipig'iga nitroglitserin shimdirlab, dinamitga aylantiriladi.

Andreyv – sanoatda ammikni Pt katalizatori ishtirokida oksidlاب nitrat kislota olishni kashf etdi.

Ar Roziy – atomlarni bo'linishini va atom mayda bo'laklar bilan bo'shliqlardan iborat ekanligini va ular doimo harakatda bo'lishini izohlagan 865-925

Ar Roziy – moddiy unsurlarning eng kichik birligi atom va u yana kichik zarralarga bo’linishi mumkin degan.

Arbuzov.E – birinchi marta uchlamchi alkilfosfatga galoid alkil ta’sir ettirib alkilfosfin kislota efirini sintez qildi.

Arbuzov.E r-si. $(C_2H_5O)_3P + CH_3J \rightarrow CH_3 - P(O)(OC_2H_5)_2 + C_2H_5J$

Arrenius Svante – elektrolitmaslarning suvli eritmalari elektr tokini o’tkazmasligini o`zining elektrolitik dis-nish nazariyasida javob berdi. 1887

Ar-Roziy (Rezes) – birinchi bo’lib kimyoviy moddalarni sinflarga ajratgan. Tajribahonalarida qo’llangan asboblarni tasvirlarini bergen.

Asqarov – “Askalsiy” brikmasini joriy qilgan.

Asqarov – “sintetik polimerlar kimyosini” va “polimerlar fizikasi va kimyosi” kitobini yozgan.

Asqarov va Qirg`izov – tarkibida temir saqlovchi – ferrostimulator larni ixtiro qilganlar

Bayer nazariyasi – simloalkanlarda halqada uglerodlar soni 5 ta bo’lguncha mustahkimlik ortadi so’ngra kamayadi.

Beketov – metallar ularning brikmalaridan siqib chiqarishni o’rgangan.

Bekkerel - uran tuzlaridan rentgen nurlariga o’hshash nurlar chiqishini aniqladi 1896.

Bekkerel – radiaktivlikni kashf qilgan 1996 yil.

Belozerski va A.S.Sipirnlar - 1957-yilda rus olimlari i-RNK mavjudligini aytib o’tgan edilar. Lekin u faqat 1960 yilga kelib aniqlandi

Belozerskiy – 1936 yili birinchi bo’lib o’simliklar hujayrasida DNK borliqini aniqlagan.

Berselius - 46 ta elementni atom massalari asosida elementlar jadvalini tuzdi 1814.

Berselius – bir hil sharoitda olingan va hajmlari teng bo’lgan gazlardagi atomlar soni barobar bo’ladi.

Berselius – kimyoviy elementlarni lotincha nomlarini bosh harflari bilan belgilashni fanga kiritgan. 1813.

Berselius - tomonidan XIX asr 30-yillarida kimyo faniga Izometriya tushunchasi kiritilgan. 1823 yilda kremniyni kashf qilgan.

Bertlo 1854 yili Fransus kimyogari yog’ni oldi.

Bertolle – 1-marta CH_4 ni atsetilen oldi. 1956

Beylshteyn – har hil sharoidda toluolga xlor tasir ettirib benzol halqasidagi vodorod atomini va benzol tashqarisidagi radikalning vodorod atomi xlor atomiga o’rin almashganini ko’rsatdi.

Beylshteyn.F – usulida organik moddalar tarkibida galogenlar borligi tezda aniqlanadi.

Blek.J – Mg ni kashf qilgan 1755

Bomberger – usuli $-(CH_3)_3C - NH_2 + [O] = (CH_3)_3C - NO_2 + H_2O$

Broun – diffuziya harakatini yaratdi 1827.

Butlerov – organik brikmalarning tuzilish nazariyasini yaratdi 1861

Butlerov – shakarsimon moddalarni birinchi marta chumoli aldegidan sintez qilgan 1861.

Butlerov (1828-1886) o’zining “Organik kimyoni toliq o’rganishga kirish” degan kitobi va 1861 yili organik moddalarning kimyoviy tuzilishi nazariyasini yaratish bilan organik kimyoning rivojlanishiga katta xissa qo’shdi.

Butlerov rus olimi 1861 yilda organik moddalar tuzilishi nazariyasining to’la ma’noda asoschisi hisoblanadi. U bu nazariyaning asosiy qoidalarini bayon qildi. Izomeriya hodisasining mohiyatini birinchi bo’lib tushuntirib berdi. (1864)yilda Izofutileni sintez qiliz qildi va uning polimerlanish reaksiyasini amalgam oshirdi (1867)yilda bu bilan yuqori molekulyar birikmali sinteziga asos soldi

Butlerovning oddiy chumoli aldegididan shakarsimon moddani olishi natijasida organic moddalar faqat inson va hayvon azosidagina uchramasligi isbotlanib ularni sintez yo’li bilan olishga keng yo’l ochildi
Chargaff – DNK tarkibidagi nukleotidlarni o’zoro munosabatini malum qonuniyatlarga bo’sunishini o’rgangan.

Charix Gudyar - Kauchukni sanoatda keng miqiyosida ishlatalishini **1849 yilda** Amerikalik savdogar tomonidan vulkanizatsiya jarayoni yani rezina kashf qilinganidan so’ng boshlandi

Dalton – 18 asrning ohirida elementlarning o’zoro muayyan miqdordagina brika olishini aytdi, hamda bu miqdorlarni birikuvchi moqdorlar deb atadi.

Dalton – atom molecular ta’limotni rivojlantirdi va atom massa haqidagi tushunchani fanga kiritdi 1803-1804

Dalton – atomistik nazariya asosini bayon etgan.

Dalton – atomni harakatdan tamomila holi, harakatsiz deb tasavvur qildi.

Dalton – bir elementning ma'lum sondagi atomlari boshqa elementning aniq sondagi atomlari bilan brikishidan hosil bo'ladi degan fikrni bildirdi.

Dalton – esa molekulani atomlarning mehanik to'dalanish deb qaradi.

Dalton – karrali nisbatlar qonunini kashf qildi. 1803

Dalton – ta'limotida esa oddiy moddalar faqat ayrim atomlardan tuzilgan deyilib hato qilinadi.

Danilevskiy – 1888 –yilda oqsillar molekulasida peptid bog' mavjudligi xaqidagi fikimi ilgari surgan.

Debereyner – elementlarni triadalarga yani o'hshash uchtadan iborat tabiiy oilalarni tuzdi. 1817-1829.

Debereyner – elementlarning atom massalariga asoslanib triadalar nazariyasini taklif qildi. 1817-1829.

Demokrit – tabiatda barcha narsalar juda kichik zarralar –atomlardan tashkil topganligini aytgan. Mil.av. 460-370

Devi – Ca (1808) ,Na (1807) , K (1807) ni kashf qilgan.

Dyuma, Buley – tomonidan organik moddalarni radikallar asosida birinchi yuzilish nazariyasini taklif etildi.

Dyuma.J – elementlar jadvalini tuzishga harakat qilgan.

Emanuel r-si. $2\text{CH}_3\text{-}(\text{CH}_2)_2\text{-}\text{CH}_3 + 5\text{O}_2 \longrightarrow 4\text{CH}_3\text{COOH} + 2\text{H}_2\text{O}$

Engelgart.A – tomonidan bazi bir genlar fermentativ usulda sintez qilindi.

Ersted.K – Al ni kashf qilgan 1825.

Faradey – elektroliz qonunlarini kashf qilgan.

Faradey 1825 yilda ingliz kimyogari va fizigi Molekulasi tarkibida benzol yoki uning gomologlarini saqlaydigan karbosiklar birikmalarga aromatik uglevodorodlar deb ataladi ularning birinchi vakili benzol bo'lib uni ko'ks gazidan ajratib olgan

Faradey 1826 yilda kauchuk molekulasi uglerod va vodorod atomlaridan iborat to'yinmagan uglevodorod ekanligini aniqladi.

Faradey.M - 1825 yilda kaks gazidan benzolni ajratib olgan.

Farobiy – talqiniga ko'ra

Fersman.A.Yu. – fosforni hayot va tafakkur elemanti deb atadi.

Flips – 1831 yilda kontakt usuli bilan sulfat kislota olishni ishlab chiqi.

Fokin.A – yog'larni gidrolizlanishini gidrogenlashni kashf qilgan.

Foking usuli - moylarni gidrogenlab yog'larni olinishi.

Fovoriskiy (1860-1945) akademik asetilen allen va diyen uglevodorodlarining kimyosini o'rgandi.

Frankland - ingliz olimi 1849 yilda birinchi bo'lib element-organik brikmalarini kashf etdi.

Franklend – valentlik tushunchasini fanga kiritdi. 1852

Fredrix Jolio Kyuri va Iren Kyurilar – suniy radioaktivlikni kashf etdilar. 1934

Fridel – Kraft r-si. $C_6H_6 + CH_3ClB \xrightarrow{AlCl_3} C_6H_5-CH_3 + HCl$

Fridel.Sh – Kraft.D – usuli bilan 1877 yilda ham laboratoriyada ham sanoatda aramatik uglevodorodlar aramatik yadroga $AlCl_3$ ishtirokida alkil xlorid ta'sir ettirib olindi.

Gaber - 721-813 yillarda yashagan. Sulfat, nitrat kislotalarini va zar suvini olish usullarini yozib qoldirgan. Navshadil spirtini aniqlab, hossalarini o'rgangan. Oq bo'yoq tayyorlash uslubini taklif qilgan. Sirka kislotani haydash orqali tozalash usuluni o'rgangan, uning turli % li eritmalarini tayyorlashni ko'rsatib bergen. "Yetmish kitob" ida metallar va mineralar haqida ko'p ma'lumotlar bergen.

Gapon – praton-neytron nazariyasini kashf qildilar 1932.

Gassendi – moddalar atomlardan tuzilgan, atomlarning brikishidan molekula hosil bo'ladi.

Gassendi-atom tushunchasini fanga kiritgan.

Gess – 1840 yilda termokimyo tushunchasini tariflab bergen .

Geylyussak va Glover – lar tomonidan 1859 yilda nitroza usulini takomillashtirdi.

Geyzenberg – praton-neytron nazariyasini kashf qildilar 1932.

Gippokrat – miloddan avval 460-377-yillarda yashagan. U hayvonlar o'simliklar va tabiiy minerallardan dorivor vositalar olish haqida qimmatli ma'lumotlar bergen.

Gize – xininni oldi 1815

Gofman – galoidalkillarga ammiak ta'sir etib quyidagi shema bo'yicha birlamchi, ikkilamchi, uchlamchi, aminlar va to'rtlamchi ommoniy asoslarini olishga muvaffaq bo'ldi. Shuning uchun bu reaksiyani Gofman reaksiyasi deb yuritilgan.

Grem T. – kalloid kimyoga asos solgan.

Grinyar 1861-yilda - fransus kimyogari birinchi bo'lib $\text{RX} + \text{Mg} = \text{R-Mg} + \text{X}$ bu reaksiyani ochgan shuning uchun uni Grinyar reaksiya deb atalib hosil qilingan magniy-organik brikmani Grinyar reaktiv deb ataldi.

Grinyar r-si 1861. $\text{RX} + \text{Mg} \rightarrow \text{R} - \text{MgX}$

Guldberg.K va Vaage.P – massalar ta'siri qonunini kashf etdilar. 1868

Ivanenko, E.N.Gapon, V.Geyzenberg – praton-neytron naza-sini kashf qildilar 1932.

Jak Sharl – tomonidan vodorod to'ldirilgan shar havoga uchirildi. 1783.

Jobir Ibn Hayyom (Gaber) – 721-813 yillarda yashagan. Sulfat, nitrat kislotalarini va zar suvini olish usullarini yozib qoldirgan. Navshadil spirtini aniqlab, hossalarini o'rgangan. Oq bo'yoq tayyorlash uslubini taklif qilgan. Sirka kislotani haydash orqali tozalash usuluni o'rgangan, uning turli % li eritmalarini tayyorlashni ko'rsatib bergen. “Yetmish kitob” ida metallar va mineralar haqida ko'p ma'lumotlar bergen.

Joffrua.E – moddalarni o'hhashlik jadvalini tuzdi 1718.

Kablukov – birinchi marta Mendeleyevning “Gidratlar” nazariyasini va Arreniusni “ionlanish nazariyalari” ni “elektrolitik dissotsiyalanish nazariyasi” shaklida birlashtirishni taklif etdi.

Kanissaro r-si. $\text{H-COH} + \text{KOH} + \text{H-COH} \rightarrow \text{CH}_3\text{OH} + \text{HCOOK}$ 5O_2

Kassel – 1916 yil kassel nazariyasini kashf qilgan.

Kavendish – yonuvchi havo yani H ni kashf etdi 1766.

Kekula – birgina sirka kislotani 20 ta formulasidan foydalangan.

Kekule – nemis kimyogari benzol tuzilishi ikki ko'rinishda ifodalaydi. 1865 yilda

Kekule va A. Kuper.1858 yili - Uglerod atomlari o'zaro birikib uzun C-C bog' hosil qilishi aniqlanadi

Kekule va A.Kolbe 1867 organik birikmalarda uglerodning doimiy 4 valentlik bo'lishi aniqlandi

Kirxgof.S – kraxmalni kislotali va fermentativ gidrolizlanishini kashf qilgan. 1814

Klayzen.L – murakkab efirlarni kondensatlanishini kashf etgan.

Klechkovskiy – elektronlarni pog'onalarda o'zi yaratgan qonun asosida tartib bilan to'lib borishini aniqladi. 1900-1972

Kolbe 1845-yili Nemis kimyogarining sirka kislotani sintez qildi.

Konovalov – alkanlarni nitrolanish reaksiyasii kashf qildi. 1888

Korana – sintezi bilan DNK tuzilishi aniqlandi.

Krik - ingliz olimini 1961-yilda genetik kod tripletli xarakterga ega ekanligini yani uchta nukleotid to'plamidan tashkil topganini aniqladi.

Kucherov 1881 yilda rus olimi Suvning birikishi osetilenga,

$HgSO_4 + H_2SO_4$ aralashmasi ishtirokida suvning oson birikishi tufayli sirka aldegid hosil bo'lishini kashf etdi.

Kuper.A – atomlarning ulanish kimyoviy kuchini belgilash uchun valentshtrihni kiritdi.

Kurnokov - daltonitlar va bertolitlarni bo'lishini taklif qilgan.

Kurnokov – ning qotishmalarni hususiyatlarini o'rgangan.

Kyuri Mariya Skladovskaya va Pyer Kyuri - radiotermik usul bilan Ra va Po elementlarini aniqladi lar.1898

Kyuri Pyer - radiotermik usul bilan Ra va Po elementlarini aniqladi lar.1898

Lavuaze - 101 kun davomida og'irligi tortilgan kolbada aniq miqdor suvni qaynatib idish og'irligini ma'lum miqdorga kamayganligini, bu miqdor suvni bug'latilgandan keyin qolgan qoldiq miqdoriga tengligini aniqladi.

Lavuaze - kislородни yangi modda sifatida izohlab bergen.

Lavuaze - vodorodni suv tarkibiga kirishini aniqladi va unga GIDROGENIUM yani suv yaratuvchi degan nom berdi.1787

Lavuaze – 1774-1775 yilda Lomonosov – ning azot ustida qilgan tajribalarini simob elementlari bilan takrorlab yonishdan ortib qolgan gaz havoning 5 dan 4 qismini tashkil etishini aniqladi.

Lavuazye – kislородни lotincha nomlashni taklif qildi.

Lavuazye – yonish va oksidlanish haqidagi ilmiy nazariyani yaratgan.

Lebedov – sanoatda sintetik kauchukni oldi.

Lebedov 1928 yilda Akademik yuqori tempreturada etil spirtidan katalizator (MgO ; ZnO) ishtirokida 1,3-butadiyen sintez qildi.

Lebedov akademik sanoatda sintetik kauchukni oldi.

Lebedov raxbarligida 1932 yilda dunyoda birinchi bo'lib Rossiyada sintetik kauchuk sanoat masshtabida ishlab chiqarila boshlandi

Leblan – soda olishni "sulfat usuli"ni taklif qilgan.

Lekok De Buabadron – galliyni 1875 aniqladi.

Leshatele – 1884 yilda muvozanatni siljishini kashf etdi.

Libih, Vyollerlar – tomonidan izomeriya hodisasi ochilgan.

Libiz .Yu. – agrokimyo fanigan asos soldi.

Lomonosov – atom molekulyar talmotni to'g'risidagi tushunchalarni rivojlantirdi.

Lomonosov – molekulada yangi sifatlar hosil bo'lishini tushuntira oldi.

Lomonosov – ning fikricha oddiy moddalar ham moddalardan tuzilishi mumkin.

Lomonosov va Rezerford – 1756-1772 yilda metallar berk idishda qizdirilganda havoning bir qismini metal bilan brikmasdan ortib qolishini tajribada isbotladi.

Lomonsov – atom hamisha harakatda deb qarab materiyani harakat bialan birgalikda tasavvur etgan.

Lomonsov, Berselik Selmi, Musin Pushkin, Faradey, Berigov,

Veymarn va boshqa olimlar kalloid kimyo sohaida ish olib bordilar.

Mahsumov A.G. – tomonidan XX asrning ikkinchi yarmida kimyoviy tuzilish nazariyasining elektron va fazoviy tuzilishiga bog'liq hozirgi zamon varianti taklif etildi.

Makintosh (1823) Angliyalik muhandis birincji bo'lib kauchukni amaliyotda ishlatishi topdi va va kauchuk eritmasida shimdirlilgan gazmoldan suv o'tkazmaydigan buyumlarni ishlab chiqarishni yo'lga qo'ydi.

Mallixi va Poling – elementlarning metallik va metalmaslik hossalarini taqqoslab ko'rish uchun elektronmanfiylikni nisbiy qiymatlaridan foydalanishni taklif qilgan.

Manshutkin – va uning shogirdlari tomonidan $R-OH-HOOC-R=R-O-C^0-R+H_2O$ reaksiyaning kinetikasi batafsil o'ranilgan. (1877-1891)

Markovnikov - neft tarkibidan sikioalkanlarning besh va otti azoli vakillari ilk bor ajratib olib o'rgangan.

Markovnikov (1869) qo'shbog' yonidagi uglerod atomlaridagi vodorod atomlari teng bo'limganda galoidovodorodlarning birikishi rus olimi qoidasiga asosan boradi

Mendeleyev – 1871 yil davriy sistemani 2 – variantini bosib chiqardi.

Mendeleyev – davriy qonunni ta'rifladi 1869

Meyer – atom massa ortib borishiga asoslangan jadvalni taklif qildi. 1864.

Misher – 1868 y nuklein kislotalarni birinchi marta topgan.

Misher – 1869-yili leykosit tarkibida nuklein kilata borligini aniqlagan.

Mozli – Atom yadrosi zaryadini elementninig davriy sistemadagi tartib raqamiga tengligini aniqladi.

Mozli.D – atom yadrosi zaryadining elementning davriy sistemadagi tartib raqamiga tengligin topgan.

Nabiyev .M.N. – kam zaharli defolintlar ustida tadqiqotlar olib bordi.

Nilson – skandiyni 1879 aniqladi.

Nyulends – ekvivalentlarga asoslangan oktavalar qonunini taklif qildi 1865.

Odling.U – elementlar jadvalini tuzishga harakat qilgan.

Omelyanskiy – “azot biologik nuqtai nazardan eng asl metallardan ham aslroq” degan.

Orexov - rus olimi akademik Rossiyada alkoloидлар kimyosiga asos slogan. Anabazin- ning tuzilishi aniqlagan. 1929

Poling – 1932 yil elekromanfiylik tushunchasini fanga kiritdi.

Poling 1931 yilda Amerikalik kimyogar olim Bug’lanishlar puxtaligini bir xiligi (1901-1994) olim tomonidan taklif etilgan atom arbitallarining gibritlanishi haqidagi qoida bilan izohlanadi

Popov qoidasi – ketonlar oksidlanganda karonil gruppaning har ikkala tomonidan ham uziladi.

Prist – tarkibni doimiylik qonini 1799 taklif etgan. Omma tomonidan 1809 yilda etirof etilgan.

Pristli – kislородни kasf etgan 1744. Shu yili Shele ham undan behabar holda keshf etgan.

R Boil – kimyoviy element eng oddiy kimyoviy jihatdan bo’linmaydigan modda bo’lib u murakkab moddalar tarkibiga kirishini tushuntirdi. 1627-1691

Rashidova - kovilon deb nomlanuchi plazma o’rnini bosuvchi dori olgan.

Raysev qoidasi – vodorod atomi bazi reaksiyalarda kam gidrogenlangan uglerod atomidan ajraladi.

Rentgen - rengen nurlarini ochigan 1895 yil.

Rezarford – atom yuzilishining planetar modelini taklif etdi 1911

Rezerford – 1919 yilda azot atomlarini alfa zarrachalari bilan bombardimon qilib azotni vodorod va kislородга aylantirdi.

Rezerford – 1-marta suniy ravishda yadro reaksiyani amalga oshirdi 19119 yil.

Rezerford - radioaktiv nurlarni 3 qismga a) alfa b) betta c) gamma nurlarga ajratdi. 1899

S.Sh.Rashidovna akademik yuqori molekulalar birikmalar kimyosi sohasidagi olma

Sabate – alkenlardan 150 -200 C da Ni yoki Pl katali-da H₂ briktirib alkanlar olgan.

Sala.A – 1620 –yilda erituvchilarni suvli, kislotali va yog'li sinfga ajratdi.

Salimov.Z.Z. – tomonidan chiqindisiz tehnologiya asosida Farg'ona kimyoviy tolalar zavodi chiqindilaridan aseton bug'larini yutib qoluvchi sferik va yarim sferik yutkichlarni ishlab chiqdi. Iqtisodiy samarador “Pnevmo” qurilmalar ishlab chiqqan.

Segen - Fransus farmatsevti tozalanmagan morfinni oldi. 1804 yili

Semyonov.N – alkanlarning galogenlanish reaksiyalarini yani radikal mehanizmini aniqlagan.

Sent Kleer Devil – 1885 yilda alyuminiyni kashf qilgan.

Sertyurner - Nemis formasefti toza morfinni oldi. 1906 yilda

Seyrel – usuli C₂H₅-O-C₂H₅ + IJ = C₂H₅J + C₂H₅OH reaksiyadan foydalanib metoksil va etoksil gruppalar miqdorini aniqladi.

Seyze 1827 yilda birinchi bo'lib platina Pt (II) ning π –kompleksini aniqlagan

Shankurtua – kimyoviy elementlarning slindr shaklidagi jadvalini yaratdi. 1862.

Sharipov.X.T. – oltin platina molibden volfram kabi qimmatbaho metallarni chiqindilardan ajratib olish texnologiyasini ishlab chiqdilar va metallurgiya sanoatida amaliyatga joriy qildilar.

Shele – 12 kun davomida distillangan qor suvini kolbada qaynatib kolbani yemirilganligini aniqladi. Eruvchanlikni isbotladi

Sheyelye – 1774 yilda xlorni aniqlagan.

Shtal.G – flogiston nazariyasini yaratdi XVII asr.

Shtaudinger 1924 yil nemis kimyogari Tabiy kauchok izoprenni polimerlash mahsuloti ekanligi va uning to'liq tuzilishini aniqlagan

Shyele – Sut kislota yoki oksipropion kislotani CH₃-CH (OH)-COOH birinchi marta qatiqdan ajratib olgan 1870 yilda

Siglerning - aluminiy-organik brikmalari kimi yosida yangilik boldi K.

Sigler (1955) vodorod ishtirokida allenlarga aluminiy ta'sir etilib (3-20 MPa, 60-100°С да) trietyl aluminiyini sintez qildi.

Sodiqov (1913-1987) akademik dunyoga tanilgan o'zbek kimyogar olimi va tashkilotchi rahbardin U 1966 yildan 1983 yilgacha O'zbek Fanlar Akademiyasining Prezidenti bo'lib ishlagan

Solvey - soda olishni "ammiakli usuli"ni taklif qilgan.

Sukervanik (1901-1968) akademik "aromatik birikmalarni alkillash va asillash" sohasi bo'yicha izchil va keng qamrovli tadqiqotlar o'tkazgan, shu yo'nalishda tanilgan organik kimyogarlar maktabini yaratgan olim

Tilden – izoprenni polimerlab kauchuksimon modda oldi.

Tile 1899 yilda Konyugirlangan diyen uglevodorolarning bu xususiyatini malekuladagi uglerod atomlaridan saqlanib qolgan qoldiq valentlik hisobiga shunday birikishi mumkin degan nazariyasida isotlab berdi

Tishchenko r-si. $2\text{CH}_3\text{COH} \xrightarrow{\text{Al}(\text{OC}_2\text{H}_5)_3} \text{CH}_3\text{COOC}_2\text{H}_5$

Tomson – elektronni ochilishi 1897 yil.

Tood.A – tomonidan nuklein kislotalar tuzilishi aniqlandi.

Uillard.P. – gamma nurlarni elektromagnil nurlar ekanligini aniqladi. 1900

Uilkins 1951-yilda - DNK ning rentgen struktura analizini amalga oshirdi

Uotson va F. Krik - E.Chargaff A.Todd L.Poling ishlariga asoslanib DNK ning ikilamchi to'liq strukturasini va uning qo'sh spiral modelini aniqladilar.

Vant-Goff - kimyo sohasida birinchi Nobel mukofoti sovrindori.

Vant-Goff , Le-Bel – bir biridan behabar holda bir vaqtni o'zida organik moddalardagi har bir uglerod alementining to'rt valinti to'rt atom yoki atomlar grupassi bilan brikkan bo'lsa shu moddalar asimmetrik markazga ega bo'lishini isbotlaganlar 1874.

Vegner – olefinlarga katalizator (Cr_2O_3) ishtirokida peroksid ta'sir ettirib ikki atomli spirt olgan

Vilyams 1860 yilda ingliz olimi kauchukni "quruq haydash" natijasida C_5H_8 tarkibli izoprenni oldi

Vinkler – germaniyini aniqladi 1886.

Voronkov akademik kremniy-organik birikmalarning alohida katta sinfi silatronlarni kashf etdi

Voskresenskiy 1842 yili teobrominni ajratib oldi. Alkaloid konining tuzilishi 1886-yilda aniqlangandan so'ng alkaloidlar kimyosi keng rivojlanib ketdi.

Vyolerning -1824 yili nemis kimyogari o'simlik a'zosida uchraydigan oksalat kislotani ditsiandan va 1828 yili inson va hayvon azosida hosil bo'ladigan mochevinani ammoniy sianatdan labaratoriya sharoitida sintez qildi.

Vyoller – 1824 yilda o'simlik a'zosida uchraydigan oksalat kislotani ditsiandan oldi. 1828 yili hayvon azosida hosil bo'ladigan machevinani ammoniy sianatdan oldi.

Vyurs – dixloretanini gidroliz qilish etandi olgan 1856 y.

Yakobi.B – galvanoplastikani kashf qilgan. 1837.

Yunusov (1909-1995) akademik boshchiligida izohi nolin, eritrin, diterpen xinolin, indol, xinozolidin, xinozolin, steroid, piroliziddin, priding, tropan va oltingugurtli alkoloidlar ustida ilmiy ishlar olib borildi.

Yuryev.K –ning ko'rsatishicha 300 C⁰ da Al₂O₃ katalizotori ishtirokida furon tiofen va pirollar o'zoro bir-biriga o'tib turadi.

Zeliniskiy (1861-1953) akademik to'yingan va to'yinmagan siklik birikmalar kimyoni va ularning sintez qilish usullari bilan organik kimyoni rivojiga o'z hissalarini qo'shdi.

Zelinskiy - neft tarkibidagi sikloqeksandan benzol olishni isbotladi.

Zelinskiy – protiva gazni kashf qilgan.

Zelinskiy.D.N – siklogeksanni degidrogenlab benzol oldi.

Zelinskiy.D.N va Kazanskiy.B.A. – aktivlangan ko'mir bilan atsetilenni trimerlab benzol oldilar.

Zinin – Nitrobirikmalarni qaytarish bilan aromatik aminlarni olish usulini birinchi bo'lib kashf qilgan 1842

Zinin (1812-1880) rus olimi sanoatda benzoldan anilin oldi.

ENG ENG ENG.

Eng aktiv metallar	Cs, Fr
Eng bolg'alanuvchan metal	Oltin
Eng og'ir gaz	Radon Rn
Eng og'ir metal	Os p=22,5 g/ml

Eng plastik metal	Oltin
Eng qattiq metal	Cr xrom
Eng qimmatbaho element	Cf
Eng qiyin eriydigan metal	W volfram 3220 C° da eriydi
Eng siyrak element	At er qobig'ida 0,16 g
Eng yahshi tok o'tkazuvchilar	Ag – Cu – Au – Al ortadi
Eng yengil metal	Li
Eng g'ayrioddiiy metal	Pt (u 320-540 C° oralig'ida hajmi kichrayib zichligi keskin ortadi)
Eng katta kengayish koeffitsantiga ega metal	Cs ($97 \cdot 10^{-6} \text{ k}^{-1}$)
Eng qarshiligi katta metal	W
Eng yengil gaz	Vodorod
Eng ko'p tarqalgan metal	Al

Metallarning aktivlik qatori

Li K Ca Na Mg Al Mn Zn Cr Fe Ni Sn Pb (H) Cu Hg Ag Pt Au

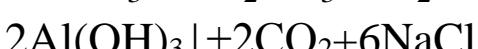
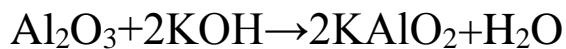
← *Ornatdu* Атомларнинг электрон бериш қобилияти

Metallarni olinish usullari.

Polimetallurgik usul	Po'lat va cho'yan
Gidrometallurgik usul	Au, Ag, Zn, U va b.
Elektrotermik usul	Ishqoriy va ishqoriy er met. Al

Pestsidsidar.

Insektitsid	Zararli hashoratlarga qarshi ishlatiladi
Akaritsid	Kapalaklarga qarshi ishlatiladi
Fungitsid	Kasallik tarqatuvchi zamburug'larga qarshi ishlatiladi
Gerbitsid	Begona o'tlarga qarshi ishlatiladi
Bakteritsid	Zararli bakteriyalarga qarshi ishlatiladi
Zootsid	Zararli kemiruvchilarga qarshi ishlatiladi
Defoliant	O'simlik bargini to'kadigan modda sifatida



$\text{AlCl}_3 + 3\text{K}_2\text{CO}_3 + 3\text{H}_2\text{O} \rightarrow 2\text{Al}(\text{OH})_3 + 3\text{CO}_2 + 6\text{KCl}$	$\text{Cr}(\text{OH})_3 + 3\text{KOH} \rightarrow \text{K}_3[\text{Cr}(\text{OH})_6]$
$\text{Ag} + \text{KNO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Ag}_2\text{SO}_4 + \text{NO} + \text{H}_2\text{O} + \text{K}_2\text{SO}_4$	$\text{Cr}_2(\text{SO}_4)_3 + 10\text{KOH} + 3\text{H}_2\text{O}_2 \rightarrow 2\text{K}_2\text{Cr}_2\text{O}_4 + 3\text{K}_2\text{SO}_4 + 8\text{H}_2\text{O}$
$\text{AgO} + \text{H}_2\text{O} + \text{Cl}_2 \rightarrow \text{AgCl}_2 + \text{HOCl}$	$\text{CrCl}_3 + 3\text{KOH} \rightarrow \text{Cr}(\text{OH})_3 + 3\text{KCl}$
$\text{AgNO}_3 + 2\text{KOH} \rightarrow \text{Ag}_2\text{O} + 2\text{KNO}_3 + \text{H}_2\text{O}$	$\text{Cu}(\text{OH})_2 + 2\text{NaOH} \rightarrow \text{Na}_2[\text{Cu}(\text{OH})_4]$
$\text{AgCl} + 2\text{NH}_4\text{OH} \rightarrow [\text{Ag}(\text{NH}_3)_2]\text{Cl} + 2\text{H}_2\text{O}$	(natriy kuprit)
$\text{AgS} + \text{CaO} + \text{O}_2 \rightarrow \text{Ag} + \text{CaSO}_4$	$\text{Cu}(\text{OH})_2 + 4\text{NH}_3 \rightarrow [\text{Cu}(\text{NH}_3)_4](\text{OH})_2$
$\text{Au} + 3\text{HCl} + \text{HNO}_3 \rightarrow \text{AuCl}_3 + \text{NO} + 2\text{H}_2\text{O}$	$\text{Cu} + 4\text{HCl} + \text{O}_2 \rightarrow \text{Cl}_2 + 2\text{H}_2\text{O}$
$\text{Au} + 4\text{HCl} + \text{HNO}_3 \rightarrow \text{H}[\text{AuCl}_4] + \text{NO} + 2\text{H}_2\text{O}$	$\text{Cu}_2\text{O} + \text{H}_2\text{SO}_4 \rightarrow \text{Cu}_2\text{SO}_4 + \text{H}_2\text{O}$
$4\text{Au} + 8\text{NaCN} + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{Na}[\text{Au}(\text{CN})_2] + 4\text{H}_2\text{O}$	$\text{Cu}_2\text{SO}_4 \rightarrow \text{CuSO}_4 + \text{Cu}$
$3\text{AuCl}_3 \rightarrow \text{AuCl}_3 + 2\text{Au}$	$\text{CuSO}_4 + 4\text{NH}_4\text{OH} \rightarrow [\text{Cu}(\text{NH}_3)_4] + \text{SO}_2 + 4\text{H}_2\text{O}$
$\text{AuCl} + \text{KCl} \rightarrow \text{K}[\text{AuCl}_2]$	$2\text{Fe} + 1.5\text{O}_2 + \text{nH}_2\text{O} \rightarrow \text{Fe}_2\text{O}_3 \cdot \text{nH}_2\text{O}$
$\text{AuCl}_3 \rightarrow \text{AuCl} + \text{Cl}_2$	$2\text{Fe} + 3\text{Cl}_2 \rightarrow 2\text{FeCl}_3$
$\text{Be} + 2\text{NaOH} + 2\text{H}_2\text{O} \rightarrow \text{Na}_2[\text{Be}(\text{OH})_4] + \text{H}_2$	$2\text{Fe} + 6\text{H}_2\text{SO}_4 \rightarrow \text{Fe}_2(\text{SO}_4)_3 + 3\text{SO}_2 + 6\text{H}_2\text{O}$
$\text{Be} + \text{H}_2\text{SO}_4 \rightarrow \text{BeSO}_4 + \text{H}_2$	$2\text{FeCl}_2 + 2\text{HCl} + \text{H}_2\text{O}_2 \rightarrow 2\text{FeCl}_3 + 2\text{H}_2\text{O}$
$\text{Ca}(\text{OCl})\text{Cl}_2 \rightarrow \text{CaCl}_2 + \text{O}_2 + 92\text{kJ}$	$\text{Fe}(\text{OH})_2 + \text{KOH} \rightarrow \text{KFeO}_2 + 2\text{H}_2\text{O}$
$\text{Ca}_3(\text{PO}_4)_2 + 2\text{H}_2\text{SO}_4 \rightarrow 3\text{Ca}(\text{H}_2\text{PO}_4)_2 + 2\text{CaSO}_4$	$\text{Fe} + 4\text{HNO}_3 \rightarrow \text{Fe}(\text{NO}_3)_3 + \text{NO} + 2\text{H}_2\text{O}$
$\text{Ca}_3(\text{PO}_4)_2 + 3\text{H}_2\text{SO}_4 \rightarrow 3\text{CaSO}_4 + 2\text{H}_3\text{PO}_4$	$3\text{FeSO}_4 + 2\text{K}_3[\text{Fe}(\text{CN})_6] \rightarrow \text{Fe}_3[\text{Fe}(\text{CN})_6]_2 + 3\text{K}_2\text{SO}_4$
$\text{Ca}_3(\text{PO}_4)_2 + 4\text{H}_3\text{PO}_4 \rightarrow 3\text{Ca}(\text{H}_2\text{PO}_4)_2$	$\text{Fe}_2(\text{SO}_4)_3 + \text{K}_4[\text{Fe}(\text{CN})_6] \rightarrow \text{Fe}_4[\text{Fe}(\text{CN})_6] \cdot \cdot \text{xK}_4[\text{Fe}(\text{CN})_6] \cdot \text{nH}_2\text{O}$ (bunda x-0.3-0.8 va n=12-24)
$\text{CaF}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{CaSO}_4 + 2\text{HF}$	$\text{Fe}_2\text{O}_3 + 2\text{NaOH} \rightarrow 2\text{NaFeO}_2 + \text{H}_2\text{O}$
$\text{CaO} + 3\text{C} \rightarrow \text{CO} + \text{CaC}_2$	$\text{Fe}_2\text{O}_3 + \text{CO} \rightarrow 2\text{FeO} + \text{CO}_2$
$\text{CO} + 2\text{H}_2 \rightarrow \text{CH}_3\text{OH}$	$\text{FeCl}_3 + 3\text{KSCN} \rightarrow \text{Fe}(\text{SCN})_3 + 3\text{KCl}$
$\text{CO} + \text{NaOH} \rightarrow \text{HCOONa}$	$\text{FeCO}_3 + \text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{Fe}(\text{HCO}_3)_2$
$\text{CO}_2 + 2\text{Mg} \rightarrow 2\text{MgO} + \text{C}$	$\text{FeS}_2 + 8\text{HNO}_3 \rightarrow \text{Fe}(\text{NO}_3)_3 + 2\text{H}_2\text{SO}_4 + 5\text{NO} + 2\text{H}_2\text{O}$
$2\text{ClO}_2 + 2\text{KOH} \rightarrow \text{KClO}_3 + \text{KClO}_2 + \text{H}_2\text{O}$	$\text{FeSO}_4 + 2\text{NaOH} \rightarrow \text{Fe}(\text{OH})_2 + \text{Na}_2\text{SO}_4$
$\text{Cl}_2 + 2\text{KOH} \rightarrow \text{KClO} + \text{KCl} + \text{H}_2\text{O}$	$4\text{Fe}(\text{OH})_2 + \text{O}_2 + \text{H}_2\text{O} \rightarrow 4\text{Fe}(\text{OH})_3$
$\text{Cl}_2 + \text{H}_2\text{O} \rightarrow \text{HCl} + \text{HOCl}$	$2\text{H}_2\text{SO}_{4(\text{kons})} + \text{Cu} \rightarrow \text{CuSO}_4 + \text{SO}_2 + 2\text{H}_2\text{O}$
$\text{Cl}_2\text{O} + \text{H}_2\text{O} \rightarrow 2\text{HOCl}$	$2\text{H}_2\text{SO}_4 + \text{P}_4\text{O}_{10} \rightarrow 4\text{HPO}_3 + 2\text{N}_2\text{O}_5$
$4\text{CrO}_3 \rightarrow 2\text{Cr}_2\text{O}_3 + 3\text{O}_2$	$2\text{H}_3\text{PO}_2 \rightarrow \text{PH}_3 + \text{H}_3\text{PO}_4$
$2\text{CrCl}_2 + 2\text{H}_2\text{O} \rightarrow 2\text{Cr}(\text{OH})\text{Cl}_2 + \text{H}_2$	$2\text{HClO}_4 + \text{P}_2\text{O}_5 \rightarrow 2\text{HPO}_3 + \text{Cl}_2\text{O}_7$
$2\text{Cu}(\text{OH})_2 + \text{K}_2\text{S}_2\text{O}_8 \rightarrow \text{Cu}_2\text{O}_3 + 2\text{KHSO}_4 + \text{H}_2\text{O}$	$2\text{HNO}_2 + \text{O}_2 \rightarrow 2\text{HNO}_3$
$2\text{Cu} + \text{H}_2\text{SO}_4 + \text{O}_2 \rightarrow 2\text{CuSO}_4 + \text{H}_2\text{O}$	
$2\text{CuCl}_2 + 4\text{KJ} \rightarrow 2\text{CuJ} + \text{J}_2 + 4\text{KCl}$	

$4\text{H}_3\text{PO}_2 \rightarrow \text{PH}_3 + 3\text{H}_3\text{PO}_4$	$\text{Mg}(\text{HCO}_3)_2 \rightarrow \text{MgCO}_3 + \text{CO}_2 + \text{H}_2\text{O}$
$4\text{HNO}_3 + \text{P}_4\text{O}_{10} \rightarrow 4\text{HPO}_3 + 2\text{SO}_3$	$\text{Mg}(\text{OH})_2 + \text{H}_2\text{O}_2 \rightarrow \text{MgO}_2 + 2\text{H}_2\text{O}$
$11\text{H}_2\text{SO}_{4(\text{kons})} + 8\text{Zn} \rightarrow 8\text{ZnSO}_4 + \text{H}_2\text{S} + \text{S} + \text{SO}_2 + 10\text{H}_2\text{O}$	$\text{Mg}_2\text{Si} + 4\text{HCl} \rightarrow 2\text{MgCl}_2 + \text{SiH}_4$
$2\text{H}_2\text{SO}_{4(\text{kons})} + \text{C} \rightarrow \text{CO}_2 + 2\text{SO}_2 + 2\text{H}_2\text{O}$	$\text{MnO}_2 + \text{K}_2\text{CO}_3 + \text{KNO}_3 \rightarrow \text{K}_2\text{MnO}_4 + \text{KNO}_2 + \text{O}_2$
$\text{H}_2\text{SO}_{4(\text{suyl})} + \text{Zn} \rightarrow \text{ZnSO}_4 + \text{H}_2$	$2\text{Na}[\text{Au}(\text{CN})_2] + \text{Zn} \rightarrow \text{Na}_2[\text{Zn}(\text{CN})_4] + 2\text{Au}$
$\text{HCOOH} \rightarrow \text{H}_2\text{O} + \text{CO}$	$2\text{NaN}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{HN}_3$
$\text{Hg}(\text{NO}_3)_2 + 2\text{KJ} \rightarrow \text{HgJ}_2 \downarrow + 2\text{KNO}_3$	$2\text{NaNO}_2 + 4\text{Na} + 2\text{H}_2\text{O} \rightarrow \text{Na}_2\text{N}_2\text{O}_2 + 4\text{NaOH}$
$\text{HNO}_3 + 6\text{H} \rightarrow \text{NH}_2\text{OH} + \text{H}_2\text{O}$	$2\text{NaOH} + \text{H}_2\text{SnO}_3 + \text{H}_2\text{O} \rightarrow \text{Na}_2[\text{Sn}(\text{OH})_6]$
$2\text{K}[\text{AuCl}_2] + 2\text{KOH} \rightarrow 4\text{KCl} + \text{Cu}_2\text{O} + \text{H}_2\text{O}$	$\text{Na}_2\text{S} + 2\text{S} \leftrightarrow \text{Na}_2\text{S}_3$
$2\text{K}[\text{AuCl}_4] + \text{N}_2\text{H}_4 + 6\text{KOH} \rightarrow \text{N}_2 + 8\text{KCl} + \text{Au}_2\text{O} + 5\text{H}_2\text{O}$	$\text{Na}_2\text{S} + \text{S} \leftrightarrow \text{Na}_2\text{S}_2$
$2\text{K}_2\text{Cr}_2\text{O}_7 + 3\text{C} + 8\text{H}_2\text{SO}_4 \rightarrow 2\text{Cr}_2(\text{SO}_4)_3 + 3\text{CO}_2 + 2\text{K}_2\text{SO}_4 + 8\text{H}_2\text{O}$	$\text{Na}_2\text{S}_4 + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2\text{S} + 3\text{S}$
$2\text{K}_2\text{MnO}_4 + \text{Cl}_2 \rightarrow 2\text{KMnO}_4 + 2\text{KCl}$	$\text{Na}_3\text{PO}_4 + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{Na}_2\text{HPO}_4$
$2\text{K}_3[\text{Cr}(\text{OH})_6] + 3\text{Br}_2 + 4\text{KOH} \rightarrow 2\text{K}_2\text{Cr}_2\text{O}_4 + 6\text{KBr} + 8\text{H}_2\text{O}$	$\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$
$2\text{KClO}_4 + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + 2\text{HClO}_4$	$\text{NaNH}_2 + \text{N}_2\text{O} \rightarrow \text{NaN}_3 + \text{H}_2\text{O}$
$2\text{KJ} + 2\text{HNO}_2 \rightarrow \text{J}_2 + 2\text{NO} + 2\text{H}_2\text{O}$	$2\text{NH}_3 + 3\text{O}_2 \rightarrow 2\text{HNO}_2 + 2\text{H}_2\text{O}$
$2\text{KMnO}_4 + 16\text{HCl} \rightarrow 2\text{MnCl}_2 + 5\text{Cl}_2 + 2\text{KCJ} + 8\text{H}_2\text{O}$	$2\text{NO} + \text{H}_2 \rightarrow \text{N}_2\text{O} + \text{H}_2\text{O}$
$2\text{KMnO}_4 + \text{H}_2\text{SO}_4 \rightarrow \text{Mn}_2\text{SO}_4 + \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$	$2\text{NO}_2 + \text{H}_2\text{O} \rightarrow \text{HNO}_3 + \text{HNO}_2$
$\text{K}_2\text{Cr}_2\text{O}_7 + 14\text{HCl} \rightarrow 2\text{CrCl}_2 + 3\text{Cl}_2 + 2\text{KCl} + 7\text{H}_2\text{O}$	$4\text{N}_2\text{O}_5 \rightarrow 4\text{NO}_2 + \text{O}_2$
$\text{K}_2\text{Cr}_2\text{O}_7 + 6\text{HCl} \rightarrow \text{CrCl}_3 + \text{Cl}_2 + \text{KCl} + \text{H}_2\text{O}$	$4\text{NH}_4\text{SH} + \text{O}_2 \rightarrow 2\text{H}_2\text{O} + 2\text{NH}_4\text{-S-S-NH}_4$
$\text{K}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{S} + \text{H}_2\text{SO}_4 \rightarrow \text{Cr}_2(\text{SO}_4)_3 + \text{S} + \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$	$4\text{NO}_2 + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{HNO}_3$
$\text{K}_2\text{Cr}_2\text{O}_7 + \text{S} \rightarrow \text{Cr}_2\text{O}_3 + \text{K}_2\text{SO}_4$	$5\text{NH}_2\text{OH} \rightarrow \text{NH}_3 + \text{N}_2 + \text{N}_2\text{O} + \text{H}_2\text{O}$
$\text{K}_2\text{Cr}_2\text{O}_7 + \text{SO}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{Cr}_2(\text{SO}_4)_3 + \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$	$(\text{NH}_4)_2\text{Cr}_2\text{O}_7 \rightarrow \text{N}_2 + \text{Cr}_2\text{O}_3 + 4\text{H}_2\text{O}$
$\text{K}_2\text{O}_4 + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}_2 + \text{O}_2$	$(\text{NH}_4)_2\text{SO}_4 + 2\text{NaOH} \rightarrow 2\text{NH}_3 \uparrow + \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
$\text{KOH} + \text{Be}(\text{OH})_2 + \text{H}_2\text{O} \rightarrow \text{K}[\text{Be}(\text{OH})_3(\text{H}_2\text{O})]$	$\text{N}_2\text{O}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}_2$
$\text{KOH} + \text{Be}(\text{OH})_2 \rightarrow \text{K}[\text{Be}(\text{OH})_4]$	$\text{N}_2\text{O}_3 + 2\text{NaOH} \rightarrow \text{NaNO}_2 + \text{H}_2\text{O}$
$\text{KOH} + \text{HCl} \rightarrow \text{KCl} + \text{H}_2\text{O}$	$\text{N}_2\text{O}_3 + \text{H}_2\text{O} \rightarrow 2\text{HNO}_2$
$6\text{KOH} + 3\text{Cl}_2 \rightarrow \text{KClO}_3 + 5\text{KCl} + 3\text{H}_2\text{O}$	$\text{N}_2\text{O}_3 \rightarrow \text{NO} + \text{NO}_2$
	$\text{NCl}_3 + 3\text{H}_2\text{O} \rightarrow \text{NH}_3 + 3\text{HOCl}$
	$\text{NH}_2\text{OH} \rightarrow \text{NH}_3 + \text{N}_2 + \text{N}_2\text{O} + \text{H}$
	$\text{NH}_3 + \text{NaOCl} \rightarrow \text{H}_2\text{N-NH}_2 + \text{NaCl} + \text{H}_2\text{O}$
	$2\text{NH}_3 + 6\text{MnO}_2 \rightarrow \text{N}_2 + 3\text{Mn}_2\text{O}_3 + 3\text{H}_2\text{O}$
	$\text{NH}_4\text{NO}_3 \rightarrow \text{N}_2\text{O} + 2\text{H}_2\text{O}$
	$2\text{Pb}(\text{NO}_3)_2 + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 2\text{PbO}_2 + 4\text{HNO}_3$
	$2\text{Pb}(\text{NO}_3)_2 \rightarrow 2\text{PbO}_2 + 4\text{NO}_2 + \text{O}_2$

2Pb+O ₂ +2H ₂ O→2Pb(OH) ₂	3SiF ₄ +4H ₂ O→2H ₂ [SiF ₆] ⁻ + H ₄ SiO ₄
3P ₂ S ₂ +28HNO ₃ +4H ₂ O→6H ₃ PO ₄ +9H ₂ SO ₄ +28NO	S ₂ Cl ₂ +2H ₂ O→SO ₂ +H ₂ S+2HCl
3PbO ₂ →Pb ₃ O ₄ +O ₂	Si+2NaOH+H ₂ O→Na ₂ SiO ₃ +2H ₂
P ₂ +3KOH+3H ₂ O→PH ₃ +3KH ₂ PO ₂	Si ₂ H ₆ +4H ₂ O→2SiO ₂ +7H ₂
P ₄ H ₁₀ +2H ₂ O→4HPO ₃	SiCl ₄ +3H ₂ O→H ₂ SiO ₃ +4HCl
P ₄ S ₇ +62HNO ₃ →4H ₃ PO ₄ +7H ₂ SO ₄ +62NO ₂ +18H ₂ O	SiCl ₄ +LiAlH ₄ →SiH ₄ +AlCl ₃ +LiCl
Pb(CH ₃ COO) ₂ +2NaOH→Pb(OH) ₂ +2CH ₃ COOH	SiH ₄ +2H ₂ O→SiO ₂ +4H ₂
Pb+4KOH+2H ₂ O→K ₄ [Pb(OH) ₆] ⁻ +H ₂	SiO ₂ +4HF→SiF ₄ +2H ₂ O
Pb+H ₂ SO ₄ →Pb(HSO ₄) ₂ +H ₂	Sn+2HCl→SnCl ₂ +H ₂
Pb+PbO ₂ +2H ₂ SO ₄ →2PbSO ₄ +2H ₂ O	Sn+4H ₂ SO ₄ →Sn(SO ₄) ₂ +2SO ₂ +4H ₂ O
Pb ₃ O ₄ +4HNO ₃ →PbO ₂ +2Pb(NO ₃) ₂ +2H ₂ O	Sn+4HNO ₃ →H ₂ SnO ₃ (β qalaykislota)+4NO ₂ +H ₂ O
PbCl ₄ +2KCl→K ₂ [PbCl ₆] ⁻	SnCl ₂ +2KOH→2KCl+Sn(OH) ₂
PbCl ₄ →PbCl ₂ +Cl ₂	SnCl ₄ +2H ₂ O→SnO ₂ +4HCl
PbO+C→Pb+CO	SnCl ₄ +2HCl→H ₂ [SnCl ₆] ⁻
PbO ₂ +2KOH+2H ₂ O→K ₂ [Pb(OH) ₂] ⁻	SnCl ₄ +4NH ₄ OH→H ₂ SnO ₃ (α qalaykislota)+4NH ₄ Cl+H ₂ O
PbO ₂ +4HCl(kons)→PbCl ₂ +Cl ₂ +2H ₂ O	SnS ₂ +(NH ₄) ₂ S+S→(NH ₄) ₂ [SnS ₃] ⁻
PbO ₂ +4HCl→PbCl ₄ +2H ₂ O	2TiO+2C+2Cl ₂ →TiCl ₄ +2CO ₂
PbO ₂ +H ₂ SO ₄ →PbSO ₄ +O ₂ +H ₂ O	2TiO+6HCl→2TiCl ₃ +2H ₂ O+H ₂
PbS+O ₂ →PbO+SO ₂	3TiCl ₄ +Ti→4TiCl ₃
PCl ₅ +4H ₂ O→H ₃ PO ₄ +5HCl	Zn(OH) ₂ →K ₂ ZnO ₂ +2H ₂ O
2TiCl ₃ →TiCl ₄ +TiCl ₂	Zn ₃ N ₂ +H ₂ O→Zn(OH) ₂ +NH ₃
3S+6NaOH→2Na ₂ S+Na ₂ SO ₃ +3H ₂ O	ZnCl ₂ +2KOH→Zn(OH) ₂ +2KCl
3S+6NaOH→2Na ₂ S+Na ₂ SO ₃ +3H ₂ O	ZnSO ₄ +2H ₂ O→Zn+H ₂ +O ₂ +H ₂ SO ₄
	2ZnSO ₄ +4KOH→2Zn+2H ₂ O+O ₂ +2K ₂ SO ₄

Tashev reaksiyalar

2NH ₃ + 3O ₂ → NO ₂ + NO + 3H ₂ O
2Ag + 2H ₂ SO ₄ (kons) → Ag ₂ SO ₄ + SO ₂ + 2H ₂ O
2Ag + 2O ₃ → Ag ₂ O ₂ + 2O ₂ ↑
2Al + 2NaOH + 2H ₂ O → 2NaAlO ₂ + 3H ₂ (jilvirlanganda)
2Al + 2NH ₃ = 2AlN + 3H ₂ ↑

2Al + 3H ₂ SO ₄ → Al ₂ (SO ₄) ₃ + 3H ₂ (jilvirlanganda)
2Al + 6H ₂ O → 2Al(OH) ₃ + 3H ₂ (jilvirlanganda)
2Al + 6HCl → 2AlCl ₃ + 3H ₂ (jilvirlanganda)
2Al + 6NaOH → 2Na ₃ AlO ₃ + 3H ₂ ↑

$2\text{Al} + \text{N}_2 \rightarrow 2\text{AlN}$
$2\text{Al} + \text{N}_2 = 2\text{AlN}$
$2\text{Au(OH)}_3 \rightarrow \text{Au}_2\text{O}_3 + 3\text{H}_2\text{O}$ (100*)
$2\text{Ca} + \text{N}_2 \rightarrow \text{Ca}_2\text{N}_2 + 102.3 \text{ kkal}$
$2\text{CaOCl}_2 + \text{H}_2\text{O} + \text{CO}_2 \rightarrow \text{CaCl} + \text{CaCO}_3 + 2\text{HClO}$
$2\text{Cl}_2 + \text{HgO} \rightarrow \text{HgCl}_2 + \text{Cl}_2\text{O}$
$2\text{Cl}_2\text{O} \rightarrow 2\text{Cl}_2 + \text{O}_2 \uparrow$
$2\text{ClO}_2 + \text{H}_2\text{O} \rightarrow \text{HClO}_2 + \text{HClO}_3$
$2\text{Co} + \text{O}_2 \rightarrow 2\text{CoO}$ yoki $4\text{Co} + 3\text{O}_2 \rightarrow 2\text{Co}_2\text{O}_3$
$2\text{Cr}_2\text{O}_3 + 3\text{Si} \rightarrow 3\text{SiO}_2 + 4\text{Cr}$
$2\text{CrCl}_3 + 3\text{H}_2\text{O} + 10\text{NaOH} \rightarrow 6\text{NaCl} + 2\text{Na}_2\text{CrO}_4 + 8\text{H}_2\text{O}$
$2\text{CrO}_3 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{Cr}_2\text{O}_7$ dixromat kislota
$2\text{Cu} + \text{O}_2 + 4\text{HCl} \rightarrow 2\text{CuCl}_2 + 2\text{H}_2\text{O}$
$2\text{Cu} + \text{O}_2 + \text{H}_2\text{O} + \text{CO}_2 \rightarrow (\text{CuOH})_2\text{CO}_3$
$2\text{Cu} + \text{O}_2 \rightarrow 2\text{CuO}$
$2\text{Cu}_2\text{O} + \text{Cu}_2\text{S} \rightarrow 6\text{Cu} + \text{SO}_2$
$2\text{Cu}_2\text{S} + 3\text{O}_2 \rightarrow 2\text{SO}_2 + 2\text{Cu}_2\text{O}$
$2\text{FeCl}_3 + \text{H}_2\text{S} = 2\text{FeCl}_2 + 2\text{HCl} + \text{S}$
$2\text{FeO} + \text{SiO}_2 \rightarrow \text{Fe}_2\text{SiO}_4$ (SHLAK)
$2\text{H}_2\text{MnO}_4 \rightarrow 2\text{HMnO}_4 + \text{MnO}_2 + 2\text{H}_2\text{O}$
$2\text{H}_2\text{S} + 3\text{O}_2 \rightarrow 2\text{H}_2\text{O} + 2\text{SO}_2$
$2\text{H}_2\text{S} + \text{O}_2 \rightarrow 2\text{H}_2\text{O} + 2\text{S}$
$2\text{H}_3\text{AsO}_3 + 2\text{H}_2\text{S} \rightarrow \text{As}_2\text{S}_3 + 6\text{H}_2\text{O}$
$2\text{H}_3\text{PO}_4 \rightarrow \text{H}_4\text{P}_2\text{O}_7 + \text{H}_2\text{O}$
$2\text{HAuCl}_4 + 6\text{H}_2\text{O} \rightarrow 2[\text{Au}] + 16\text{HCl} + 3\text{O}_2$
$2\text{HBr} + \text{H}_2\text{SO}_4 \rightarrow \text{Br}_2 + \text{SO}_2 + 2\text{H}_2\text{O}$

$2\text{HClO} \rightarrow 2\text{HCl} + \text{O}_2 \uparrow$
$2\text{Hg} + 2\text{H}_2\text{SO}_4 \rightarrow \text{Hg}_2\text{SO}_4 + \text{SO}_2 + 2\text{H}_2\text{O}$
$2\text{HgO} \rightarrow 2\text{Hg} + \text{O}_2$
$2\text{HgO} \rightarrow \text{Hg} + \text{O}_2$
$2\text{HNO}_3 + \text{P}_2\text{O}_5 \rightarrow 2\text{HPO}_3 + \text{N}_2\text{O}_5$
$2\text{K}[\text{Au}(\text{Cu})_2] + \text{Zn} \rightarrow \text{K}_2[\text{Zn}(\text{CN})_4] + 2\text{Au}$
$2\text{KClO}_3 + \text{I}_2 \rightarrow 2\text{KIO}_3 + \text{Cl}_2 \uparrow$
$2\text{KCrO}_3 + 3\text{Br}_2 + 8\text{KOH} \rightarrow 6\text{KBr} + 2\text{K}_2\text{CrO}_4 + 4\text{H}_2\text{O}$
$2\text{KI} + 3\text{H}_2\text{SO}_4 \rightarrow 2\text{KHSO}_4 + \text{I}_2 + \text{SO}_2 + 2\text{H}_2\text{O}$
$2\text{KI} + \text{H}_2\text{O} + \text{O}_3 \rightarrow \text{I}_2 + 2\text{KOH} + \text{O}_2 \uparrow$
$2\text{Mg} + \text{CO}_2 \rightarrow 2\text{MgO} + \text{C}$
$2\text{MgOHC} \rightarrow \text{Mg}_2\text{OCl}_2 + \text{H}_2\text{O}$
$2\text{MgOHC} \rightarrow \text{Mg}_2\text{OCl}_2 + \text{H}_2\text{O}$
$2\text{N}_2\text{O} \rightarrow 2\text{N}_2 + \text{O}_2$
$2\text{Na}[\text{Ag}(\text{CN})_2] + \text{Zn} \rightarrow 2\text{Ag} + \text{Na}_2[\text{Zn}(\text{CN})_2]$
$2\text{Na}[\text{Au}(\text{CN})_2] + \text{Zn} \rightarrow \text{Na}_2[\text{Zn}(\text{CN})_4] + 2\text{Au}$
$2\text{Na}_2\text{CrO}_4 + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{Na}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{O}$
$2\text{Na}_2\text{O}_2 + 2\text{CO}_2 \rightarrow 2\text{Na}_2\text{CO}_3 + \text{O}_2$
$2\text{Na}_2\text{O}_2 + 2\text{H}_2\text{O}(\text{issiq}) \rightarrow 4\text{NaOH} + \text{O}_2$
$2\text{Na}_2\text{SO}_4 + \text{C} + 2\text{SiO}_2 \rightarrow 2\text{Na}_2\text{SiO}_3 + \text{CO}_2 \uparrow + 2\text{SO}_2 \uparrow$
$2\text{NaCrO}_2 + 3\text{Br}_2 + 8\text{NaOH} \rightarrow 2\text{Na}_2\text{CrO}_4 + 6\text{NaBr} + 4\text{H}_2\text{O}$
$2\text{NaI} + \text{MnO}_2 + \text{H}_2\text{SO}_4 \rightarrow 2\text{NaHSO}_4 + \text{MnSO}_4 + \text{I}_2 + 2\text{H}_2\text{O}$
$2\text{NaOH} + \text{Al}_2\text{O}_3 = 2\text{NaAlO}_2 + \text{H}_2\text{O}$

$2\text{NaOH} + \text{Cl}_2 \rightarrow \text{NaCl} + \text{NaClO} + \text{H}_2\text{O}$ (sov uqda)
$2\text{NaOH} + \text{Zn(OH)}_2 = \text{Na}_2\text{ZnO}_2 + 2\text{H}_2\text{O}$
$2\text{NaOH} + \text{Zn(OH)}_2 \rightarrow \text{Na}_2\text{ZnO}_2 + 2\text{H}_2\text{O}$
$2\text{NaOH} + \text{ZnO} = 2\text{Na}_2\text{ZnO}_2 + \text{H}_2\text{O}$
$2\text{NH}_3 + \text{CO}_2 \rightarrow \text{CO}(\text{NH}_2) + \text{H}_2\text{O}$
$2\text{NiS} + 3\text{O}_2 \rightarrow 2\text{NiO} + 2\text{SO}_2$
$2\text{NO} + \text{Cl}_2 \rightarrow 2\text{NOCl}$
$2\text{NO}_2 \rightarrow \text{N}_2\text{O}_4 + 13 \text{ kkal}$
$2\text{P} + 3\text{S} \rightarrow \text{P}_2\text{S}_3$
$2\text{Pb(OH)}_2 + 2\text{O}_3 \rightarrow 2\text{PbO}_2 + 2\text{H}_2\text{O} + 2\text{O}_2 \uparrow$
$2\text{Ti} + 6\text{HCl}$ (suyul) $\rightarrow 2\text{TiCl}_3 + 3\text{H}_2$
$3\text{Ag} + 4\text{HNO}_3$ (suyul) $\rightarrow 3\text{AgNO}_3 + \text{NO} + 2\text{H}_2\text{O}$
$3\text{As}_2\text{S}_3 + 28\text{HNO}_3 + 4\text{H}_2\text{O} \rightarrow 6\text{H}_3\text{AsO}_4 + 9\text{ H}_2\text{SO}_4$
$3\text{AuCl} \rightarrow \text{AuCl}_3 + 2\text{Au}$
$3\text{BaO}_2 + 3\text{H}_2\text{SO}_4 \rightarrow 3\text{BaSO}_4 + 3\text{H}_2\text{O} + \text{O}_3 \uparrow$
$3\text{Co} + 8\text{HNO}_3$ (kons) $\rightarrow 3\text{Co}(\text{NO}_3)_2 + 2\text{NO} + 4\text{H}_2\text{O}$
$3\text{CuO} + 2\text{NH}_3 = \text{N}_2 + 3\text{Cu} + 3\text{H}_2\text{O}$
$3\text{Fe} + 4\text{H}_2\text{O}$ 800 C° $\text{Fe}_3\text{O}_4 + 4\text{H}_2 \uparrow$
$3\text{Fe} + \text{C} \rightarrow \text{Fe}_3\text{C}$ (sementit)
$3\text{Fe} + 2\text{CO} \rightarrow \text{Fe}_3\text{C} + \text{CO}_2$
$3\text{Hg} + 8\text{HNO}_3 \rightarrow 3\text{Hg}(\text{NO}_3)_2 + 2\text{NO} + 4\text{H}_2\text{O}$
$3\text{Mg} + 2\text{NH}_3 = 2\text{Mg}_3\text{N}_2 + \text{H}_2 \uparrow$
$3\text{Mg} + \text{N}_2 = \text{Mg}_3\text{N}_2$
$3\text{P} + 5\text{HNO}_3 + 2\text{H}_2\text{O} \rightarrow 3\text{H}_3\text{PO}_4 + 5\text{NO} \uparrow$

$3\text{Pt} + 4\text{HNO}_3 + 12\text{HCl} \rightarrow 3\text{PtCl}_4 + 4\text{NO} + 8\text{H}_2\text{O}$
$3\text{S} + 6\text{NaOH} \rightarrow 2\text{Na}_2\text{S} + \text{Na}_2\text{SO}_3 + 3\text{H}_2\text{O}$
$3\text{S} + 6\text{NaOH} \rightarrow 2\text{Na}_2\text{S} + \text{NaSO}_3 + 3\text{H}_2\text{O}$
$3\text{Si} + 2\text{N}_2 \rightarrow \text{Si}_3\text{N}_4$
$3\text{Ti} + 4\text{HNO}_3 + 18\text{HF} \rightarrow 3\text{H}_2[\text{TiF}_6] + 4\text{NO} + 8\text{H}_2\text{O}$
$3\text{XeF}_4 + 8\text{H}_2\text{O} \rightarrow \text{Xe} + \text{H}_2\text{XeO}_4 + 12\text{HF}$
$4\text{Au} + 8\text{KCN} + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{K}[\text{Au}(\text{CN})_2] + 4\text{KOH}$
$4\text{Au} + 8\text{NaCN} + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{Na}[\text{Au}(\text{CN})_2] + 4\text{NaOH}$
$4\text{BaXeO}_4 \rightarrow \text{Ba}_4(\text{XeO}_6)_2 + 2\text{Xe} + 2\text{O}_2$
$4\text{Co(OH)}_2 + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{Co(OH)}_3$
$4\text{Cr(OH)}_2 + 2\text{H}_2\text{O} + \text{O}_2 \rightarrow 4\text{Cr(OH)}_3$
$4\text{CrCl} + \text{O}_2 + 4\text{HCl} \rightarrow 4\text{CrCl}_3 + 2\text{H}_2\text{O}$
$4\text{CrO}_3 \rightarrow 2\text{Cr}_2\text{O}_3 + 3\text{O}_2$
$4\text{CuO} \rightarrow 2\text{Cu}_2\text{O} + \text{O}_2$
$4\text{Fe(OH)}_2 + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{Fe(OH)}_3$
$4\text{FeCl}_3 + 3\text{K}_4[\text{Fe}(\text{CN})_6] \rightarrow \text{Fe}_4[\text{Fe}(\text{CN})_6]_3 + 12\text{KCl}$
$4\text{FeO} + \text{Cr}_2\text{O}_3 + 8\text{Na}_2\text{CO}_3 + 7\text{O}_2 \rightarrow 8\text{Na}_2\text{Cr}_2\text{O}_4 + 2\text{Fe}_2\text{O}_3 + 8\text{CO}_2$
$4\text{FeS}_2 + 11\text{O}_2 = 2\text{Fe}_2\text{O}_3 + 8\text{SO}_2$
$4\text{FeS}_2 + 11\text{O}_2 \rightarrow 2\text{Fe}_2\text{O}_3 + 8\text{SO}_2$
$4\text{HgS} + 4\text{CaO} \rightarrow 4\text{Hg} + 3\text{CaS} + \text{CaSO}_4$

$4\text{HNO}_3 \rightarrow 4\text{NO} + \text{O}_2 + 2\text{H}_2\text{O}$
$4\text{NH}_3 + 5\text{O}_2 (\text{Pt}, \text{Cr}_2\text{O}_3) = 4\text{NO} + 6\text{H}_2\text{O}$
$4\text{XeF}_6 + 18\text{H}_2\text{O} \rightarrow \text{Xe} + 3\text{H}_2\text{XeO}_4 + 12\text{HF}$
$6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \uparrow$
$6\text{Hg} + 8\text{HNO}_3 (\text{suyul}) \rightarrow 3\text{Hg}_2(\text{NO}_3)_2 + 2\text{NO} + 4\text{H}_2\text{O}$
$6\text{KOH} + 3\text{Cl}_2 \rightarrow \text{KClO}_3 + 5\text{KCl} + 3\text{H}_2\text{O}$ qaynoqda
$6\text{Li} + \text{N}_2 = 2\text{Li}_3\text{N}$
$6\text{NaOH} + 3\text{Cl}_2 \rightarrow 5\text{NaCl} + \text{NaClO}_3 + 3\text{H}_2\text{O}$ (70°C gacha qizdirilganda)
A. Verner (1983-y) koordinatsion nazariyani yaratdi.
$\text{Ag}_2\text{O} + \text{H}_2 \rightarrow 2[\text{Ag}] + \text{H}_2\text{O}$
$\text{Ag}_2\text{S} + 4\text{KCN} \rightarrow 2\text{K}[\text{Ag}(\text{CN})_2] + \text{K}_2\text{S}$
$\text{AgCl} + 2\text{KCN} \rightarrow \text{K}[\text{Ag}(\text{CN})_2] + \text{KCl}$
$\text{AgCl} + 2\text{NH}_3 \rightarrow [\text{Ag}(\text{NH}_3)_2]\text{Cl}$
$\text{AgNO}_3 + 2\text{NaOH} \rightarrow 2\text{NaNO}_3 + \text{Ag}_2\text{O} + \text{H}_2\text{O}$ (AgOH o'r niga Ag ₂ O cho`kmaga tushadi)
$\text{Al}_2\text{O}_3 + 2\text{NaOH} + \text{H}_2\text{O} \rightarrow 2\text{NaH}_2\text{AlO}_3$
$\text{Au} + \text{HNO}_3 + 3\text{HCl} \rightarrow \text{AuCl}_3 + \text{NO} + 2\text{H}_2\text{O}$
$\text{AuCl}_3 \rightarrow \text{AuCl} + \text{Cl}_2$ (185*)
$\text{Ba}(\text{OH})_2 + \text{XeO}_3 \rightarrow \text{BaXeO}_4 + \text{H}_2\text{O}$
$\text{Be} + 2\text{KOH} \rightarrow \text{K}_2\text{BeO}_2 + \text{H}_2$
$\text{C} + \text{H}_2\text{O} \rightarrow \text{CO} + \text{H}_2 \uparrow$
$\text{C} + \text{H}_2\text{O} \rightarrow \text{H}_2 + \text{CO}$
$\text{Ca}(\text{HCO}_3)_2 + \text{Na}_2\text{Al}_2\text{S}_2\text{O}_8 \rightarrow \text{CaAl}_2\text{S}_2\text{O}_8 * \text{nH}_2\text{O} + 2\text{NaHCO}_3$

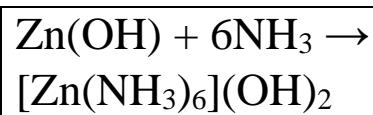
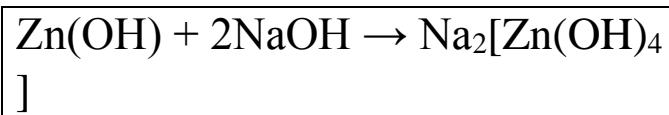
$\text{Ca}(\text{HCO}_3)_2 + \text{Na}_2\text{CO}_3 \rightarrow \text{CaCO}_3 + 2\text{NaHCO}_3$
$\text{Ca}(\text{HCO}_3)_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O} + \text{CO}_2$
$\text{Ca}_3(\text{PO}_4)_2 + 5\text{C} + 3\text{SiO}_2 \rightarrow 3\text{CaSiO}_3 + 2\text{P} + 5\text{CO}$
$\text{Ca}_3(\text{PO}_4)_2 + 5\text{C} \rightarrow 2\text{P} + 3\text{CaO} + 5\text{CO}$
$\text{Ca}_3\text{P}_2 + 6\text{H}_2\text{O} \rightarrow 3\text{Ca}(\text{OH})_2 + 2\text{PH}_3 \uparrow$
$\text{CaOCl}_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{Cl}_2$
$\text{CdO} + \text{H}_2\text{S} = \text{Cd}_2\text{S} + \text{H}_2\text{O}$
$\text{Cl}_2 + 2\text{KOH} \rightarrow \text{KCl} + \text{KClO} + \text{H}_2\text{O}$
$\text{Cl}_2\text{O}_6 + \text{H}_2\text{O} \rightarrow \text{HClO}_4 + \text{HClO}_3$
$\text{CO} + 2\text{H}_2 (360^\circ, \text{ZnO}) \rightarrow \text{CH}_3\text{OH}$
$\text{CO} + 2\text{H}_2 \rightarrow \text{CH}_3\text{OH}$
$\text{CO} + 3\text{H}_2 (300^\circ, \text{Ni}) \rightarrow \text{CH}_4 + \text{H}_2\text{O}$
$\text{CO} + 3\text{H}_2 \rightarrow \text{CH}_4 + \text{H}_2\text{O}$
$\text{CO} + \text{Cl}_2 \rightarrow \text{COCl}_2$ (fosgen)
$\text{CO} + \text{NaOH} (200^\circ, 15 \text{ Atm}) \rightarrow \text{HCOONa}$
$\text{Co}(\text{OH})_3 + 4\text{H}_2\text{SO}_4 \rightarrow 4\text{CoSO}_4 + \text{O}_2 + 10\text{H}_2\text{O}$
$\text{Co}_2\text{O}_3 + 6\text{HCl} \rightarrow 2\text{CoCl}_2 + \text{Cl}_2 + 3\text{H}_2\text{O}$
$\text{Co}_3\text{O}_4 + 2\text{C} \rightarrow 3\text{Co} + 2\text{CO}_2$
$\text{Co}_3\text{O}_4 + 4\text{H}_2 \rightarrow 3\text{Co} + 4\text{H}_2\text{O}$
$\text{Cr}_2\text{O}_3 + 2\text{Al} \rightarrow \text{Al}_2\text{O}_3 + 2\text{Cr}$
$\text{CrCl}_2 + 2\text{H}_2\text{O} \rightarrow \text{Cr}(\text{OH})_2 + 2\text{HCl}$
$\text{CrO}_3 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{CrO}_4$ xromat kislota
$\text{CuO} + \text{H}_2\text{S} = \text{Cu}_2\text{S} + \text{H}_2\text{O}$
$\text{Fe} + 2\text{HCl} = \text{FeCl}_2 + \text{H}_2\text{S}$
$\text{Fe} + \text{CuSO}_4 \rightarrow \text{Cu} + \text{FeSO}_4$
$\text{Fe} + \text{Hg}(\text{NO}_3)_2 \rightarrow \text{Hg} + \text{Fe}(\text{NO}_3)_2$
$\text{Fe} + \text{S} \rightarrow \text{FeS}$

$\text{Fe}(\text{CrO}_2)_3 + 4\text{CO} \rightarrow \text{Fe} + 2\text{Cr} + 4\text{CO}_2$
$\text{Fe(OH)}_3 + 3\text{OH}^- \rightarrow [\text{Fe(OH)}_6]^{3-}$
$\text{FeCl}_2 + 2\text{NaOH} \rightarrow \text{Fe(OH)}_2 + 2\text{NaCl}$
$\text{FeCl}_3 + 3\text{NaCNS} \rightarrow \text{Fe(CNS)}_3 + 3\text{NaCl}$
$\text{FeCl}_3 + 3\text{NaOH} \rightarrow \text{Fe(OH)}_3 + 3\text{NaCl}$
$\text{FeCl}_3 + 3\text{NH}_4\text{CNS} \rightarrow \text{Fe(CNS)}_3 + 3\text{NH}_4\text{Cl}$
$\text{FeCl}_3 + \text{NaCNS} \rightarrow \text{Fe(CNS)}_3 + 3\text{NaCl}$
$\text{FeS}_2 \rightarrow \text{FeS} + \text{S}$
$\text{H}_2\text{S} + \text{Cl}_2 = 2\text{HCl} + \text{S}$
$\text{H}_2\text{S} + \text{H}_2\text{SO}_3 = 3\text{S} + 3\text{H}_2\text{O}$
$\text{H}_2\text{S} + \text{HNO}_3 \rightarrow \text{H}_2\text{SO}_4 + \text{NO} + \text{H}_2\text{O}$
$\text{H}_2\text{S} + \text{I}_2 = 2\text{HI} + \text{S}$
$\text{H}_2\text{SO}_3 + 2\text{H}_2\text{S} = 3\text{S} + 3\text{H}_2\text{O}$
$\text{H}_2\text{SO}_3 + \text{Cl}_2 + \text{H}_2\text{O} = \text{H}_2\text{SO}_4 + 2\text{HCl}$
$\text{H}_2\text{SO}_4 + \text{C} = \text{CO}_2 + 2\text{SO}_2 + 2\text{H}_2\text{O}$
$\text{HCl} + \text{KMnO}_4 \rightarrow \text{MnCl}_2 + \text{Cl}_2 + \text{KCl} + \text{H}_2\text{O}$
$\text{Hg} + 2\text{H}_2\text{SO}_4 \rightarrow \text{HgSO}_4 + \text{SO}_2 + 2\text{H}_2\text{O}$
$\text{Hg} + 2\text{H}_2\text{SO}_4 \rightarrow \text{HgSO}_4 + \text{SO}_2 + 2\text{H}_2\text{O}$
$\text{Hg} + 4\text{HNO}_3 \rightarrow \text{Hg(NO}_3)_2 + 2\text{NO}_2 + 2\text{H}_2\text{O}$
$\text{Hg}_2(\text{NO}_3)_2 + 2\text{NaCl} \rightarrow \text{Hg}_2\text{Cl}_2 + 2\text{NaNO}_3$
$\text{Hg}_2\text{Cl}_2 + 2\text{NaOH} \rightarrow \text{Hg}_2\text{O} + 2\text{NaCl} + \text{H}_2\text{O}$

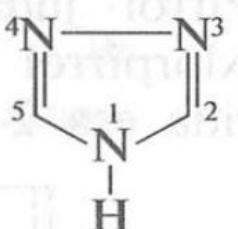
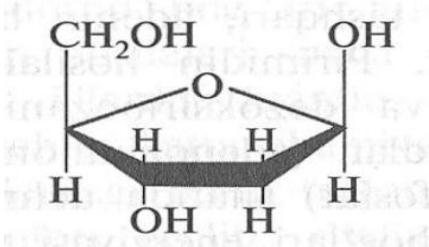
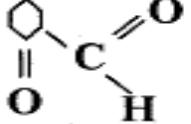
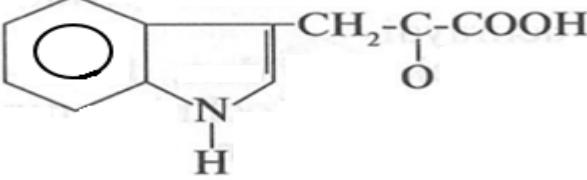
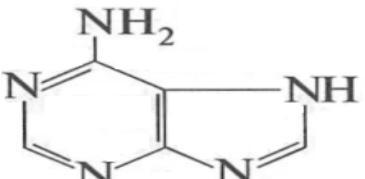
$\text{Hg}_2\text{SO}_4 + 2\text{NaCl} \rightarrow \text{Na}_2\text{SO}_4 + \text{HgCl}_2$
$\text{HgS} + \text{Fe} \rightarrow \text{Hg} + \text{FeS}$
$\text{HgS} + \text{O}_2 \rightarrow \text{Hg} + \text{SO}_2$
$\text{HNO}_3 + 3\text{HCl} \rightleftharpoons \text{NOCl}(\text{nitrozil xlorid}) + \text{Cl}_2 + 2\text{H}_2\text{O}$
$\text{HPO}_3 + \text{H}_2\text{O} \rightarrow \text{H}_3\text{PO}_4$
$\text{I}_2 + \text{H}_2\text{O} \rightarrow \text{HI} + \text{HIO}$
$\text{K}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + 2\text{CrO}_3 + \text{H}_2\text{O}$
$\text{K}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{H}_2\text{O}(\text{dala shpati}) + \text{CO}_2 \rightarrow \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}(\text{kaolin}) + 4\text{SiO}_2(\text{quartz}) + \text{K}_2\text{CO}_3$
$\text{KClO} + \text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{KHCO}_3 + \text{HClO}$
$\text{KClO}_3 + \text{I}_2 \rightarrow \text{KIO}_3 + \text{Cl}_2 \uparrow$
$\text{KI} + \text{I}_2 \rightarrow \text{KI}_3$
$\text{KNO}_2 + \text{KMnO}_4 + \text{H}_2\text{O} \rightarrow \text{KNO}_3 + \text{MnO}_2 + \text{KOH}$
$\text{KNO}_2 + \text{KMnO}_4 + \text{H}_2\text{SO}_4 \rightarrow \text{KNO}_3 + \text{MnSO}_4 + \text{HOH}$
$\text{KNO}_2 + \text{KMnO}_4 + \text{KOH} \rightarrow \text{KNO}_3 + \text{K}_2\text{MnO}_4 + \text{HOH}$
Kobalt oksidi shishani ko'k ranga, xrom oksidi och yashil ranga, marganets (II) oksidi to'q qizil ranga bo'
Ligandlar yana adendlar deb ataladi.
$\text{Mg}_2\text{OCl}_2 + 2\text{HCl} \rightarrow 2\text{MgCl}_2 + \text{H}_2\text{O}$
$\text{Mg}_2\text{OCl}_2 + 2\text{HCl} \rightarrow 2\text{MgCl}_2 + \text{H}_2\text{O}$
$\text{MnO}_2 + \text{H}_2\text{SO}_3 = \text{MnSO}_4 + \text{H}_2\text{O}$

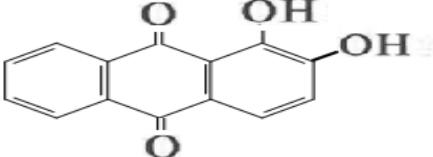
$\text{MoO}_3 + 3\text{H}_2 \rightarrow \text{Mo} + 3\text{H}_2\text{O}$
$\text{N}_2\text{O}_3 (25^0) \rightarrow \text{NO} + \text{NO}_2$
$\text{Na}_2\text{Al}_2\text{S}_2\text{O}_8 * \text{nH}_2\text{O} + \text{CaSO}_4 \rightarrow \text{CaAl}_2\text{S}_2\text{O}_8 * \text{nH}_2\text{O} + \text{Na}_2\text{SO}_4$
$\text{Na}_2\text{CO}_3 + 2\text{C} \rightarrow 2\text{Na} + 3\text{CO}$
$\text{Na}_2\text{CO}_3 + 6\text{SiO}_2 + \text{CaCO}_3 \rightarrow \text{Na}_2\text{O} \cdot \text{CaO} \cdot 6\text{SiO}_2 + 2\text{CO}_2$
$\text{Na}_2\text{Cr}_2\text{O}_7 + 2\text{NaOH} \rightarrow 2\text{Na}_2\text{CrO}_4 + \text{H}_2\text{O}$
$\text{Na}_2\text{O}_2 + 2\text{H}_2\text{O} (\text{sov uq}) \rightarrow 2\text{NaOH} + \text{H}_2\text{O}_2$
$\text{Na}_2\text{SO}_3 + \text{I}_2 + \text{H}_2\text{O} \rightarrow \text{Na}_2\text{SO}_4 + 2\text{HI}$
$\text{Na}_2\text{SO}_4 + 2\text{C} \rightarrow \text{Na}_2\text{S} + 2\text{CO}_2 \uparrow$
$\text{NaNO}_2 + 2\text{HNO}_3 \rightarrow \text{NaNO}_3 + \text{N}_2\text{O}_3 + \text{H}_2\text{O}$
$\text{NaOH} + \text{Al(OH)}_3 = \text{NaAlO}_2 + 2\text{H}_2\text{O}$
$\text{NH}_3 + \text{HCl} + \text{H}_2\text{O} = \text{NH}_4\text{Cl} + \text{H}_2\text{O}$
$\text{NH}_4\text{NO}_2 = 2\text{H}_2\text{O} + \text{N}_2 \uparrow$
$\text{NH}_4\text{NO}_2 = 2\text{N}_2 + \text{O}_2 + 4\text{H}_2\text{O}$
$\text{NH}_4\text{NO}_3 = \text{N}_2\text{O} + 2\text{H}_2\text{O}$
$\text{NiO} + \text{C} \rightarrow \text{Ni} + \text{CO}$
$\text{NOCl} (\text{nitrozil xlorid}) \rightarrow 2\text{NO} + \text{Cl}_2$
$\text{P}_2\text{O}_3 + 3\text{H}_2\text{O} \rightarrow 2\text{H}_3\text{PO}_3$
$\text{P}_2\text{O}_5 + 4\text{CaO} \rightarrow \text{Ca}_3(\text{PO}_4)_2 * \text{CaO}$
$\text{P}_2\text{O}_5 + \text{H}_2\text{O} \rightarrow 2\text{HPO}_3$
$\text{PbO}_2 + \text{KCl} \rightarrow \text{PbCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
$\text{PBr}_3 + 3\text{H}_2\text{O} \rightarrow \text{H}_3\text{PO}_3 + 3\text{HBr}$
$\text{PbS} + 2\text{O}_3 \rightarrow \text{PbSO}_4 + \text{O}_2 \uparrow$
$\text{PH}_3 + \text{HCl} \rightarrow \text{PH}_4\text{Cl}$
$\text{PI}_3 + 3\text{H}_2\text{O} \rightarrow \text{H}_3\text{PO}_3 + 3\text{HI}$
$\text{S} + 2\text{HNO}_3 \rightarrow 2\text{H}_2\text{SO}_4 + 2\text{NO} \uparrow$
$\text{S} + \text{Na}_2\text{SO}_3 \rightarrow \text{Na}_2\text{S}_2\text{O}_3$
$\text{S} + \text{Na}_2\text{SO}_3 \rightarrow \text{Na}_2\text{S}_2\text{O}_3$

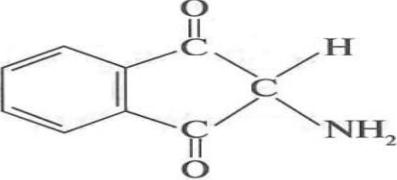
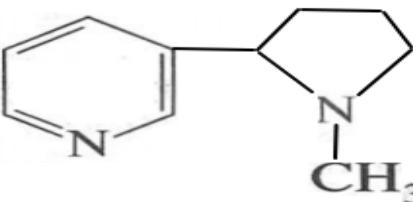
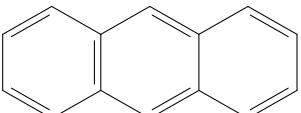
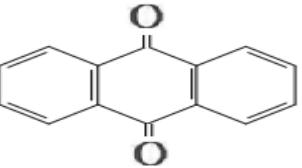
$\text{Sb(OH)}_2\text{Cl} \rightarrow \text{SbOCl} + \text{H}_2\text{O}$
$\text{Sb}_2\text{O}_3 + 2\text{NaOH} \rightarrow 2\text{NaSbO}_2 + \text{H}_2\text{O}$
$\text{Si} + 2\text{Cl}_2 \rightarrow \text{SiCl}_4$
$\text{Si} + 2\text{F}_2 \rightarrow \text{SiF}_4$
$\text{Si} + 2\text{Mg} \rightarrow \text{Mg}_2\text{Si}$
$\text{Si} + 2\text{NaOH} + \text{H}_2\text{O} \rightarrow \text{Na}_2\text{SiO}_3 + 2\text{H}_2 \uparrow$
$\text{SiO}_2 + 2\text{C} \rightarrow 2\text{CO} + \text{Si}$
$\text{SiO}_2 + 2\text{Mg} \rightarrow 2\text{MgO} + \text{Si}$
$\text{SiO}_2 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SiO}_3 + 2\text{H}_2\text{O}$
$\text{SiO}_2 + 3\text{C} \rightarrow 2\text{CO} + \text{SiC} (\text{karborund})$
$\text{SiO}_2 + \text{K}_2\text{CO}_3 \rightarrow \text{K}_2\text{SiO}_3 + \text{CO}_2$
$\text{SiO}_2 + \text{C} \rightarrow \text{Si} + 2\text{CO}$
$\text{SO}_2 + 2\text{C} (800^0) = \text{S} + 2\text{CO}$
$\text{SO}_2 + 2\text{H}_2 (500^0) = \text{S} + 2\text{H}_2\text{O}$
$\text{SO}_2 + \text{H}_2\text{O} + \text{NO}_2 = \text{H}_2\text{SO}_4 + \text{NO}$
$\text{Ti} + 2\text{H}_2\text{O} \rightarrow \text{TiO}_2 + 2\text{H}_2$
$\text{Ti} + 2\text{H}_2\text{SO}_4 \rightarrow \text{TiSO}_4 + \text{SO}_2 + \text{H}_2\text{O}$
$\text{Ti} + \text{H}_2\text{SO}_4 \rightarrow \text{TiSO}_4 + \text{H}_2$
$\text{TiCl}_4 + 2\text{Mg} \rightarrow \text{Ti} + 2\text{MgCl}_2$
$\text{TiCl}_4 + 4\text{Na} \rightarrow \text{Ti} + 4\text{NaCl}$
$\text{TiO}_2 + 2\text{Cl}_2 + 2\text{C} \rightarrow \text{TiCl}_4 + 2\text{CO}$
$\text{XeF}_4 + 2\text{H}_2\text{O} \rightarrow \text{Xe} + \text{O}_2 + 4\text{HF}$
$\text{XeF}_6 + 2\text{H}_2\text{O} \rightarrow \text{XeO}_2\text{F}_2 + 4\text{HF}$
$\text{XeF}_6 + 3\text{H}_2\text{O} \rightarrow \text{XeO}_3 + 6\text{HF}$
$\text{XeF}_6 + \text{H}_2\text{O} \rightarrow \text{XeOF}_4 + 2\text{HF}$
$\text{XeO}_3 + 4\text{NaOH} + \text{O}_3 \rightarrow \text{Na}_4\text{XeO}_6 + \text{O}_2 + 2\text{H}_2\text{O}$
$\text{Zn} + 2\text{KOH} + 2\text{H}_2\text{O} \rightarrow \text{K}_2[\text{Zn}(\text{OH})_4] + \text{H}_2$
$\text{Zn} + 2\text{NaOH} \rightarrow \text{Na}_2\text{ZnO}_2 + \text{H}_2 \uparrow$
$\text{Zn} + 2\text{NaOH} \rightarrow \text{Na}_2\text{ZnO}_2 + \text{H}_2 \uparrow$



MODDALAR FORMULASI.

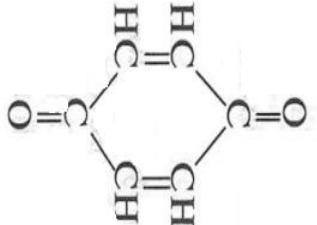
1,3,4 trizol		
2-dezoksi-(β-D-ribofuranosa)		
2-formil siklogeksanon		126
3 indolpirouzum kislota		
Ablest	$3\text{MgO} \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}$	276
Achchiqtosh	$\text{KAl}(\text{SO}_4) \cdot 12\text{H}_2\text{O}$	294
Achchiqtuz	$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	246
Adenin		
Adipin kislata	$\text{HOOC}-(\text{CH}_2)_4-\text{COOH}$	146
Agat	SiO_2	60
Akril kislota	$\text{H}_2\text{C}=\text{CHCOOH}$	
Akril kislota nitrili	$\text{CH}_2=\text{CHCN}$	53
Akrilamid	$\text{CH}_2=\text{CH-CO-NH}_2$	71
Akrilonitril	CH_2CHCN	53
Akrolein	$\text{H}_2\text{C}=\text{CHCOH}$	

Alanin	$\text{CH}_3\text{CH}(\text{NH}_2)\text{COOH}$	89
Albaster	$2\text{CaSO}_4 \cdot \text{H}_2\text{O}$	290
Albit	$[\text{Na}(\text{AlSi}_3\text{O}_8)]$ yoki $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2$	524
Albit	$[\text{Na}(\text{AlSi}_3\text{O}_8)]$	262
Aldol	$\text{CH}_3 - \text{CH}(\text{OH}) - \text{CH}_2 - \text{COH}$	88
Alebaster	$\text{CaSO}_4 \cdot 0,5\text{H}_2\text{O}$	145
Alfaoksipropion kislota nitrili	$\text{CH}_3\text{-CH}(\text{CN})\text{-OH}$	
Alizarin		
Alkogolat	$\text{C}_3\text{H}_7\text{-OK}$	98
Allen	$\text{CH}_2 = \text{C} = \text{CH}_2$	40
Allil radikali	$\text{CH}_2 = \text{CH-CH}_2\text{-}$	
Allil spirt	$\text{CH}_2 = \text{CH-CH}_2\text{-OH}$	
Allil xlorid	$\text{CH}_2 = \text{CH-CH}_2\text{-Cl}$	
Alumosilikat	$\text{Na}_2\text{Al}_2\text{Si}_4\text{O}_{12}$	394
Alunit	$\text{K}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 2\text{Al}_2\text{O}_3 \cdot 6\text{H}_2\text{O}$	828
Alyumel	$\text{Ni}[95\%] \cdot \text{Al}[1,8-2,5\%] \cdot \text{Mn}[1-2,2\%] \cdot \text{Si}[0,88-1,15\%]$	
Alyuminiy achchiqtosh	$\text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$	474
Alyuminiy arsenat	AlAsO_4	166
Alyuminiy borat	$2\text{Al}_2\text{O}_3 \cdot \text{B}_2\text{O}_3 \cdot \text{H}_2\text{O}$	292
Alyuminiy bromid	AlB_2	49
Alyuminiy dixromat	$\text{Al}_2(\text{Cr}_2\text{O}_7)_3$	702
Alyuminiy radanit	$\text{Al}(\text{CNS})_3$	201
Amakinit	Fe(OH)_2	90
Amblironit	$\text{LiAl}(\text{PO}_4)\text{F}$	148
Amigdalin	$\text{C}_{20}\text{H}_{27}\text{O}_{11}\text{N} \cdot \text{H}_2\text{O}$	
Amil spirt	$\text{C}_5\text{H}_{11}\text{OH}$	
Amilen	C_5H_{10}	70
Aminobenzol	$\text{C}_6\text{H}_5\text{NH}_2$	93

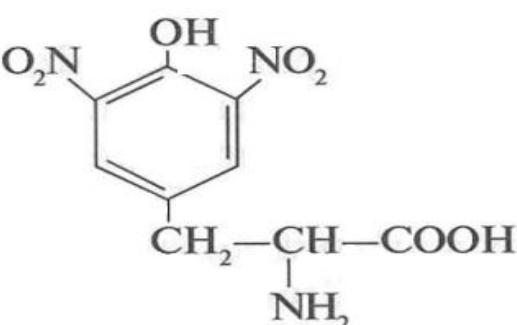
Aminodiketogidrinden Diketogidrindamin		
Amitist(agit)	SiO_2	60
Ammiakli selitra	NH_4NO_3	80
Ammofos	$\text{NH}_4\text{H}_2\text{PO}_4 \cdot (\text{NH}_4)_2\text{HPO}_4$	247
Ammoniy atsetat	$\text{CH}_3\text{COONH}_4$	77
Ammoniy dixromat	$(\text{NH}_4)_2\text{Cr}_2\text{O}_7$	252
Ammoniyli selitra	NH_4NO_3	78
Amorf qumtuproq	$\text{SiO}_2 \cdot n\text{H}_2\text{O}$	
Anabazin		
Anartit	$\text{Ca}[\text{Al}_2\text{Si}_2\text{O}_6]$ yoki $\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$	
Angidrit	CaSO_4	136
Anilin	$\text{C}_6\text{H}_5\text{NH}_2$	93
Anorganik benzol	$\text{B}_3\text{N}_3\text{H}_6$	81
Anorit	$\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ yoki $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$	278
Anortit	$\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$	278
Anortit	$[\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)]$	278
Antimonit	Sb_2S_3	340
Antratsen	 $\text{C}_{14}\text{H}_{10}$	178
Antraxinon		
Apatit	$\text{Ca}_3(\text{PO}_4)_2$	
Appatit	$\text{Ca}_5(\text{PO}_4)_3\text{F}_2(\text{OH})_2$	557
Arabinoza	$\text{C}_5\text{H}_{10}\text{O}_5$	150
Arahin kislota	$\text{C}_{19}\text{H}_{39}\text{COOH}$	
Araxidon kislota	$\text{C}_{19}\text{H}_{31}\text{COOH}$	304
Araxin kislota	$\text{CH}_3-(\text{CH}_2)_{18}-\text{COOH}$	312

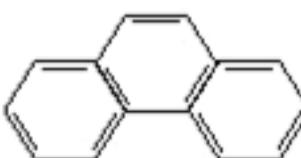
Arbutin glikozidi		
Argentit (kumush yaltirog'i)	Ag ₂ S	248
Aragonit	CaCO ₃	
Arsenat kislota	H ₃ AsO ₄	142
Arsenit kislata	H ₃ AsO ₃	126
Arsenopirit	FeAsS	166
Asbest	CaO • 3MgO • 4SiO ₂	416
Asetamid	CH ₃ CONH ₂	59
Asetanilid		133
Asetil sut kislota	$\text{CH}_3 - \underset{\text{OCOCH}_3}{\underset{ }{\text{CH}}} - \text{COOH}$	132
Aseton fenilgidrazoni	$\text{CH}_3 - \underset{\text{N} - \text{NH} - \text{C}_6\text{H}_5}{\underset{\parallel}{\text{C}}} - \text{CH}_3$	
Aseton oksimi	$\text{CH}_3 - \underset{\text{CH}_3}{\underset{ }{\text{C}}} = \text{N} - \text{OH}$	73
Asharit	2MgO•B ₂ O ₃ •H ₂ O	168
Askarbin kislota		175
Aslari mumi, palmitin kislotaning miritsil efiri	$\text{C}_{15}\text{H}_{31} - \text{C}^{\text{=O}} - \text{O} - \text{C}_{31}\text{H}_{63}$	690
Aspirin		
Astraxanit	Na SO ₄ · Mg SO ₄ · 4H ₂ O	311

ATF		
Atsetaldegid	CH ₃ CHO	44
Atsetat tola	[(C ₆ H ₇ O ₂)(OCOCH ₃) ₃] _n	
Atseton oksimi	CH ₃ C(CH ₃)NOH	59
Atseton,propanon	CH ₃ C(O)CH ₃	58
Atsetonitril	CH ₃ CN	41
Auratlar	KAuO ₃ •3H ₂ O	338
Azafoska	(NH ₄) ₃ PO ₄	149
Azelain kislata	HOOC(CH ₂) ₇ COOH	188
Azid kislata	HN ₃	43
Azoimid	HN ₃	43
Azot angidridi	NH ₃	17
Azurit	2CuCO ₃ ·Cu(OH) ₂	346
B ₆ vitamin		
Babbatlar	Pb[65%]•Sn[19-17%]•Sb[15-17%]•Cu[2%]	
Balost	CaSO ₄	136
Barit	BaSO ₄ (oq)	233
Barit suvi	Ba(OH) ₂	171
Bariy peroksid	BaO ₂	169
Bariy selenat	BaSeO ₄	280
Bariy sulfatning nordon tuzi	Ba(HSO ₄) ₂	331
Bariyli shpat	BaO•Al ₂ O ₃ •2SiO ₂	375
Bariyli suv	Ba(OH) ₂	171
Bastnezit	(Ce, La)FCO ₃	

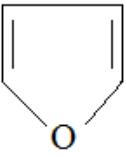
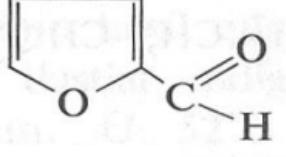
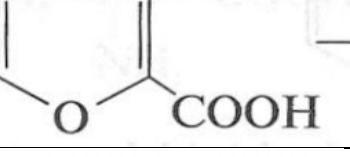
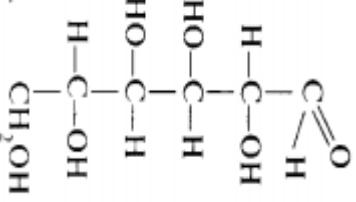
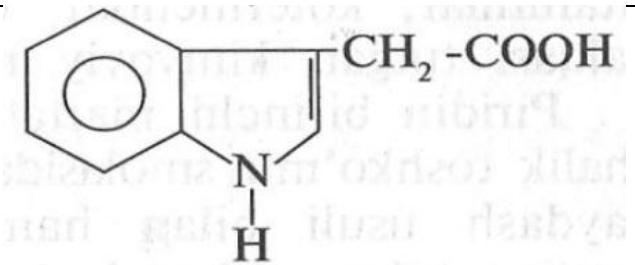
Benzil amin anilin	$C_6H_5NH_2$	93
Benzil spirti	$C_6H_5CH_2OH$	
Benzilamin	$C_6H_5CH_2NH_2$	
Benzol	C_6H_6	78
Benzoxinon		108
Benzoy kislota	C_6H_5COOH	122
Berill	$3BeO \cdot Al_2O_3 \cdot 6SiO_2$ yoki $(Be_3Al_2)Si_6O_{18}$	537
Berilliyy karbid	Be_3C	39
Berinit	H_2BeO_2	43
Berlin sarig'i	$Fe_4[Fe(CN)_6]_3$	860
Berlin siri yoki parij ko'ki	$Fe_4[Fe(CN)_6] \ K_4[Fe(CN)_6] \cdot nH_2O$	
Berlin zangorisi	$Fe_4[Fe(CN)_6]_3$	860
Bertole tuzi	$KClO_3$	122,5
Beshofit	$MgCl_2 \cdot 6H_2O$	203
Billur(xrustal)shish	$K_2O \cdot PbO_2 \cdot 6SiO_2$	693
Binafsha shisha	$Na_2O \cdot MnO_2 \cdot 6SiO_2$	509
Binopar(ohakli)qoti shma	$Ca(OH)_2$	74
Bipolyar ion	$[H_3N^+ - CH_2 - COO^-]$	
Bishofit	$MgCl_2 \cdot 6H_2O$	203
Biuret	$NH_2CONHCONH_2$	103
Boksid (gil tuproq)	$Al_2O_3 \cdot nH_2O$	
Bomit	Cu_5FeS_4	504
Bor	$CaCO_3$	100
Bor bromid	BBr_3	248
Bor gidrid	BH_3	14
Bor karbid	B_3C	45
Bor karbid	B_4C_3	80
Bor nitrid	BN yoki $(BN)_3$	25
Boran	B_2H_4	26

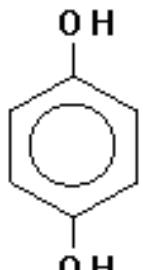
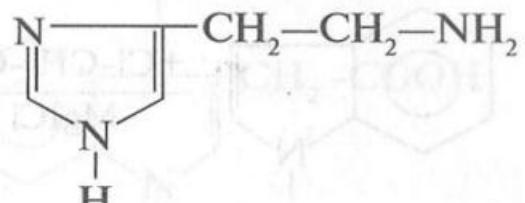
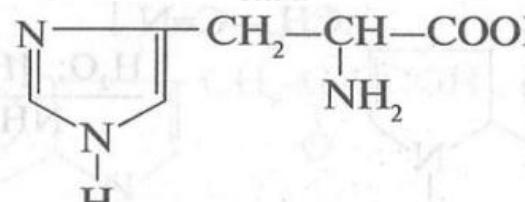
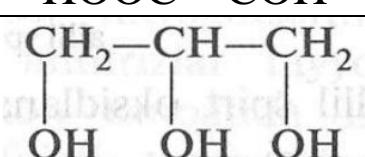
Boranlar	B_2H_6	28
Boratsit	$2Mg_3B_8O_{15} \cdot MgCl_2$	895
Braunit	Mn_2O_3	158
Brom sırka k-ta	$BrCH_2-COOH$	138
Bromaseton	$CH_3 - C(O) - CH_2Br$	
Bura	$Na_2B_4O_7 \cdot 10H_2O$	382
Butadiyen 1,3	$CH_2CHCHCH_2$	54
Butadiyen kauchuk	(-CH ₂ -CH=CH-CH ₂ -)	
Butadiyen stirol	(-CH ₂ -CH=CH-CH ₂ CH(C ₆ H ₆)CH ₂ -)	
Buten 2al	$CH_3-CH=CH-CHO$	70
Byotit	$K(Mg,Fe)_3AlSi_3O_{10}(OH)_2$	
Byuret	$NH_2-CO-NH-CO-NH_2$	103
Chili selitrası	$NaNO_3$	85
Cho'yan	[Fe 93%]•[C 4.5%]•[Si 0.5-2%]•[Mn 1.3%]•[P 0.02-2.5%]•[S 0.005-0.08%]	
Chumoli aldegid	$HCOH$	30
Chumoli kislota	$HCOOH$	46
Chumoli kislota amidi	$HCONH_2$	45
Dala shpati	[Na(AlSi ₃ O ₈)]	262
Dala shpati	[Ca(Al ₂ Si ₂ O ₈)]	278
Dala shpati	[K(AlSi ₃ O ₈)], 6SiO ₂ •K ₂ O•Al ₂ O ₃	278
Dala shpati	[Ba(Al ₂ Si ₂ O ₈)]	375
Datolit	$2CaO \cdot B_2O_3 \cdot 2SiO_2 \cdot H_2O$	320
Defoliant	$Mg(ClO_3)$	107. 5
Dekstrinlar	(C ₆ H ₁₀ O ₅) _m	
Deraza oynası	$Na_2O \cdot CaO \cdot 6SiO_2$	478
Detsilen	$C_{10}H_{20}$	
Diamid	N_2H_4	32
Diatseton spirt	$CH_3-C(OH)(CH_3)-CH_2-CO-CH_3$	116
Dietilfenilamin	(C ₂ H ₅) ₂ NC ₆ H ₅	
Dietilsulfat	$C_2H_5-O-SO_2-O-C_2H_5$	
Difenil efir	$C_6H_5-O-C_6H_5$	160
Difosfin	P_2H_4	66

Digidroksoalyumin iy karbonat	$[\text{Al}(\text{OH})_2]_2\text{CO}_3$	182
Digidroksoalyumin iy xlorid	$\text{Al}(\text{OH})_2\text{Cl}$	96.5
Diketen	$\text{CH}_2=\text{C} \begin{array}{c} \text{CH}_2 \\ \diagdown \\ \text{O} \\ \diagup \\ \text{C}=\text{O} \end{array}$	
Diketon		
Dikremniy kislata	$\text{H}_6\text{Si}_2\text{O}_7$ yoki $2\text{SiO}_2 \cdot 3\text{H}_2\text{O}$	174
Dikremniy kislota	$\text{H}_6\text{Si}_2\text{O}_7$	
Dimetil amin	$\text{CH}_3-\text{NH}-\text{CH}_3$	45
Dimetil efir	$\text{CH}_3-\text{O}-\text{CH}_3$	46
Dimetil formamid	$\text{H}-\text{C}(=\text{O})-\text{N}(\text{CH}_3)_2$	
Dimetilformamid	$\text{H}-\text{C}(\text{O})-\text{N}(\text{CH}_3)_2$	73
Dimetilnitroza amin	$(\text{CH}_2)_2\text{N}-\text{N}=\text{O}$	72
Dimetilsilikat kislota	$\text{H}_2\text{Si}_2\text{O}_5$ yoki $2\text{SiO}_2 \cdot \text{H}_2\text{O}$	138
Dimolibden kislota	$\text{H}_2\text{Mo}_2\text{O}_7$	306
Dinitril adipin kislota	$\text{N}\equiv\text{C}-(\text{CH}_2)_4-\text{C}\equiv\text{N}$	108
Dinitroselluloza	$[(\text{C}_6\text{H}_7\text{O}_2)(\text{OH})(\text{ONO}_2)_2]_n$	
Dinitrotirozin (sariq rangli)		
Dioksan	$\begin{array}{c} \text{CH}_2 & & \text{CH}_2 \\ & \text{---} & \text{---} \\ & & \\ \text{O} & & \text{O} \\ & \text{---} & \text{---} \\ & \text{CH}_2 & & \text{CH}_2 \end{array}$	88
Disian	C_2N_2	52
Divinil	$\text{CH}_2\text{CHCHCH}_2$	54
Divinil kauchuk	$\text{CH}_2=\text{CH}-\text{CH}=\text{CH}_2$	66

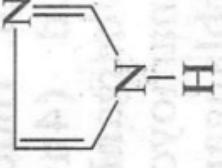
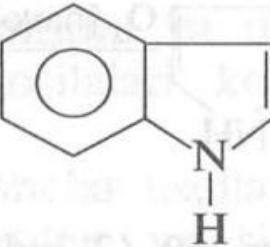
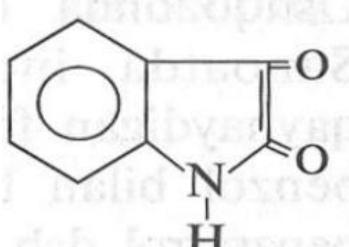
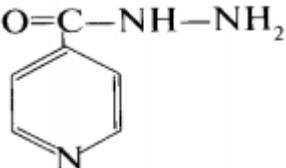
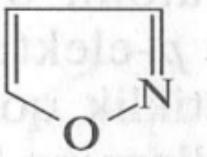
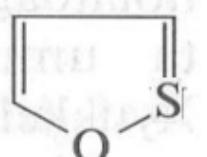
Diyuralyuminiy	$\text{Al}\cdot\text{Cu}[3.5\%]\cdot\text{Mg, Ni, Mn}[1\%]$	
Dizoksiriboza	$\text{C}_5\text{H}_{10}\text{O}_4$	134
Do'zax toshi	AgNO_3	170
Dodetsilamin	$\text{C}_{12}\text{H}_{25}\text{NH}_2$	185
Doimiy qattiqlik	$\text{CaSO}_4\cdot\text{MgSO}_4$	256
Dolomit	$\text{CaCO}_3\cdot\text{MgCO}_3$	184
Don(solod) shakari	$\text{C}_{12}\text{H}_{22}\text{O}_{11}$	342
Dulsit	$\begin{array}{c} \text{H} & \text{HO} & \text{H} \\ & & \\ \text{H}-\text{C} & -\text{C} & -\text{C}-\text{OH} \\ & & \\ \text{CH}_2\text{OH} & \text{H} & \text{HO} \end{array}$	
Ebonit	S[25-40%] Agar kauchukka S kop qoshilsa kauchuk qattiq mo'rt va elastikligini yoqotadi. Xosil bolgan modda ebonit deyiladi	
Enant kislota	$\text{CH}_3\text{-}(\text{CH}_2)_5\text{-COOH}$	130
Eruvchan shisha	$\text{K}_2\text{O}\cdot\text{Na}_2\text{O}\cdot 6\text{SiO}_2$	376
Eruvchan shisha	$\text{Na}_2\text{SiO}_3\text{K}_2\text{SiO}_3$	376
Etanol	$\text{C}_2\text{H}_5\text{OH}$	46
Etilasetat	$\text{CH}_3\text{-O-C(O)-C}_2\text{H}_5$	88
Etilendiamin	$\text{NH}_2\text{-CH}_2\text{-CH}_2\text{-NH}_2$	
Etilenoksid	$\begin{array}{c} \text{H}_2\text{C} & \text{CH}_2 \\ & \diagdown \\ & \text{O} \end{array}$	
Etilenxlor gidrin	$\text{Cl-CH}_2\text{CH}_2\text{ON}$	93.5
Etiletanoat	$\text{CH}_3\text{-C(O)-O-C}_2\text{H}_5$	88
Etilnitrat o'rta efiri	$\text{C}_2\text{H}_5\text{-O-NO}_2$	91
Etilsulfat kislota	$\text{C}_2\text{H}_5\text{OSO}_3\text{H}$	
Etoksiyan (Dietilefir)	$\text{C}_2\text{H}_5\text{-O-C}_2\text{H}_5$	74
Eykozan	$\text{C}_{20}\text{H}_{42}$	
Farmaldegid	HCONH_2	45
Fenantren		

Fenilammoniy xlorid	$[C_6H_5NH_3]Cl$, $C_6H_5NH_2 - HCl$	129.5
Anilin xlorid		
Fenilgidrosilamin	C_6H_5NHOH	109
Fenol	C_6H_5OH	
Fenolftolein		302
Fernikel	$NiAs$	134
Ferrat	K_2FeO_4	198
Ferrat kislota	H_2FeO_4	122
Feruza toshi	$CuAl_2(OH)_2(PO_4) \cdot 5H_2O$	337
Floroglyutsin		
Floroglyutsin		
Flus	$CaCO_3$	100
Flyuorit	$CaFe$	96
Formalin	$HCOH$	30
Fosfarit	$Ca_3(PO_4)_2$	310
Fosfat kislota xlorangidridi	PCl_5	208.5
Fosfin	PH_3	34
Fosfit kislota	H_3PO_3	82
Fosforit	$Ca_3(PO_4)_4$	310
Fosforit uni	$Ca_3(PO_4)_2 \cdot CaCO_3$ va $Ca_3(PO_4)_2 \cdot CaF_2$ ning Fe, Al birikmalarda 50 % NaCl	
Fosgen	$COCl_2$	99
Freon	CF_2Cl_2	121
Fruktoza	$CH_2(OH)-(CH(OH))_3-C(O)-CH_2-OH$	180
Ftor apatit	$3Ca_3(PO_4)_2 * CaF_2$	628
Ftor borat kislota		

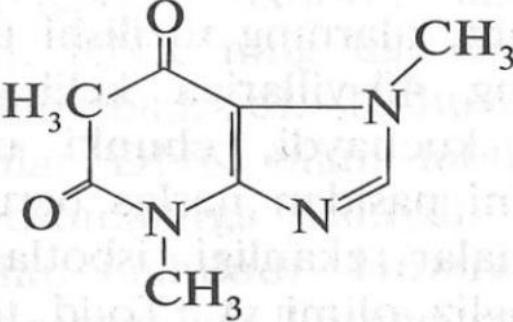
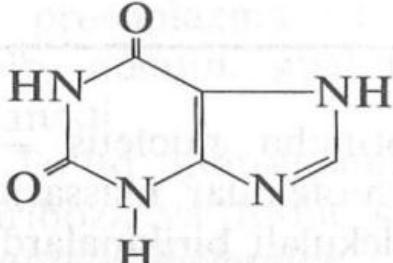
Ftor sirka k-ta	$\text{FCH}_2\text{-COOH}$	78
Fumar kislota (trans izomer)	HOOC-CH=CH-COOH	116
Furan	$\text{C}_4\text{H}_4\text{O}$ 	68
Furfurol		
Furilkarbon kislota		
Galaktoza		
Galenit (qo'rg'oshin yaltirog'i)	PbS	239
Galit	NaCl	58,5
Galmey	ZnCO_3	125
Gaustanit	Mn_3O_4	229
Geksametilendiamin	$\text{H}_2\text{N-(CH}_2)_6\text{-NH}_2$	116
Gematit	Fe_2O_3	160
Gemimorfit	$\text{Zn}_4\text{Si}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$	464
Geminal	Alkanlarda ikkala galogen atomlari bitta uglerod atomiga birikkan xosila	
Geptokozan	$\text{C}_{27}\text{H}_{56}$	
Geteroauksin		

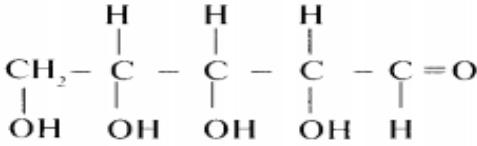
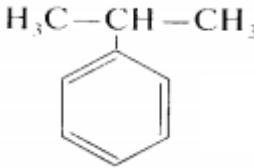
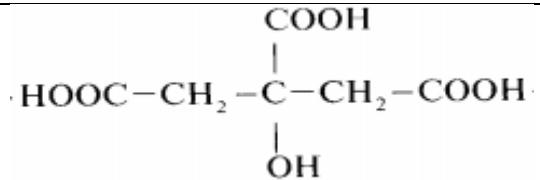
Gidrazin	N_2H_4	32
Gidrol	H_2O ni dissosiyalanmagan molekulasi	
Gidrolit	CaH_2	42
Gidroxinon		
Gil	$Al_2O_3 \cdot 2AlO_2 \cdot 2H_2O$	256
Giltuproq	$Al_2O_3 \cdot nH_2O$	134
Gipofosfit kislota	H_3PO_2	66
Giponitrid kislota	$H_2N_2O_2$	62
Gipoxlorit angidrid	Cl_2O	87
Gips	$CaSO_4 \cdot 2H_2O$	172
Gistamin		
Gistidin		
Glauber tuzi	$Na_2SO_4 \cdot 10H_2O$	322
Glauberit	$NaSO_4 \cdot CaSO_4$	278
Glazerit	$NaSO_4 \cdot 3K_2SO_4$	664
Glikogen	$(C_6H_{10}O_5)_n$	
Glikokol	NH_2-CH_2-COOH	75
Glikol kislota	$CH_2(OH)COOH$	76
Glioksal	$HOC - COH$	
Glioksil kislota	$HOCCOOH$	74
Glioksil kislota	$HOOC - COH$	
Glitserin		
Glukon kislota	$CH_2(OH)-(CH(OH))_4-COOH$	

Glukoza (uzum shakari)	$C_6H_{12}O_6$	180
Glukoza kristalgidrati	$C_6H_{12}O_6 \cdot H_2O$	
Glukozaning α -shakli		
Glukozaning β -shakli		
Glutar kislota	$HOOC-(CH_2)_3-COOH$	132
GMF		
Grinyar reaktivi	CH_3HgJ	343
Guanin		
Gyotit	$FeO(OH)$	89
Ichimlik soda	$NaHCO_3$	84
Ilmenit	$FeTiO_3$	152
Ilminit	$FeO \cdot TiO_2$	152

Imidazol	 $C_3H_4N_2$	68
Indol		
Infimiz tuzi	$MgSO_4 \cdot 7H_2O$	246
Izaton		
Izobutan	$CH_3CH(CH_3)CH_3$	58
Izoniazid		
Izooksazol		
Izopren	$CH_2=C(CH_3)CH=CH_2$	68
Izotiazol		
Javel suvi	$KCl + KClO + H_2O$	181
Kainit	$KCl \cdot MgSO_4 \cdot 3H_2O$	248. 5
Kaliy – temir achchiqtosh	$K_2SO_4 \cdot Fe(SO_4)_3 \cdot 24H_2O$	950
Kaliy amid	KNH_2	55
Kaliy arsenat	K_2AsO_4	217
Kaliy auriti	$K[AuO_2] \cdot 3H_2O$	322
Kaliy azid	KN_3	81

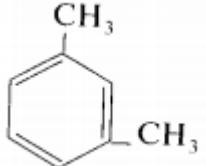
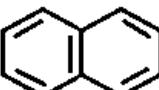
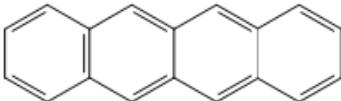
Kaliy azonid	KO_4	103
Kaliy digidrofosfat	KH_2PO_4	137
Kaliy dixromat	$\text{K}_2\text{Cr}_2\text{O}_7$	294
Kaliy gidrofosfat	K_2HPO_4	175
Kaliy gidrokarbonat	KHCO_3	100
Kaliy gidrosulfat	KHSO_4	136
Kaliy gipoxlorid	KClO	90.5
Kaliy meta alyuminat	KAlO_2	98
Kaliy peroksid	K_2O_4	142
Kaliy persulg'fat	$\text{K}_2\text{S}_2\text{O}_8$	270
Kaliy perxlorat	KClO_4	138. 5
Kaliy peryodad	KJO_4	230
Kaliy silikat	$\text{K}_2\text{SiO}_3 \cdot \text{H}_2\text{O}$	133
Kaliy tetraxloroplatinat	$\text{K}_2[\text{PtCl}_4]$	415
Kaliy xromat	K_2CrO_4	194
Kaliyli selitra	KNO_3	101
Kaliyli soda	$\text{KAl}_2[\text{AlSi}_3\text{O}_m(\text{OH})]$	
Kalsit	CaCO_3	
Kalsiy peroksid	CaO_2	72
Kalsiy diamid	$\text{Ca}(\text{NH}_2)_2$	72
Kalsiy gidrid	CaH_2	42
Kalsiy glukonat	$(\text{CH}_2(\text{OH})-(\text{CH}(\text{OH}))_4-\text{COO})_2\text{Ca}$	
Kalsiy karbid	CaC_2	64
Kalsiy yodat	$\text{Ca}(\text{JO}_3)_2$	390
Kaolinit	$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$	182
Kapril kislota	$\text{C}_7\text{H}_{15}\text{COOH}$	144
Kaprolaktam	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2 - \text{CH}_2 - \text{C} \\ \quad \diagdown \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \end{array} \quad \text{N} - \text{H}$	
Karbamin kislota	$\text{O}=\text{C}(\text{OH})(\text{NH}_2)$	61
Karbinol	CH_3OH	48

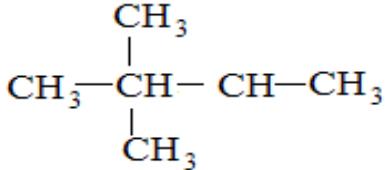
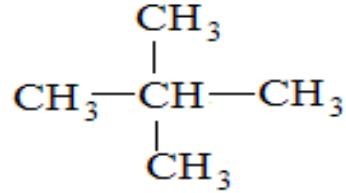
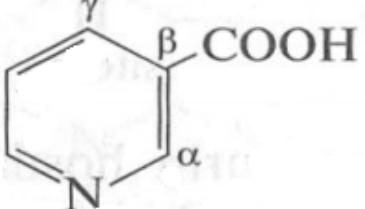
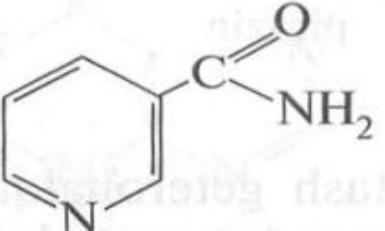
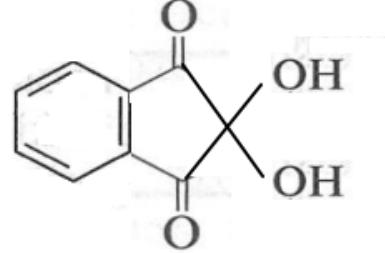
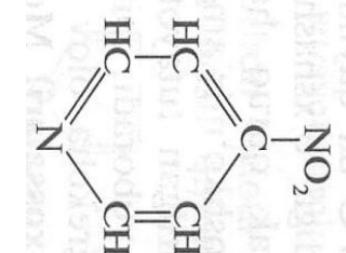
Karboraund	SiC	40
Karnallit	$\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ (qisman NaCl)	277. 5
Karnotit	$\text{K}_2\text{O} \cdot 2\text{UO}_2 \cdot \text{U}_2\text{O}_5 \cdot 3\text{H}_2\text{O}$	1276
Kaustik soda	NaOH	40
Kernit	$\text{Na}_2\text{B}_4\text{O}_7 \cdot 4\text{H}_2\text{O}$	274
Kinovar	HgS	233
Kislota galogen angidridi	R-C(Cl)-C=O	
Kizirit	$\text{Mg SO}_4 \cdot \text{H}_2\text{O}$	138
Kobalt yaltirog'i	CoAsS	166
Kobaltn	CoAsS	166
Kodaverin	$\text{NH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$	
Kofein		
Kolemanit	$\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 5\text{H}_2\text{O}$	412
Korunol		
Kraxmal	$(\text{C}_6\text{H}_{12}\text{O}_5)_n$	
Kremniy kislota xlorangidridi	SiCl ₄	170
Kriolit	$\text{Na}_3[\text{AlF}_6]$	210
Kristal soda	$\text{NaCO}_3 \cdot 10\text{H}_2\text{O}$	263
Krokoit	PbCrO ₄	327
Kroton aldegid	CH ₃ -CH=CH-CHO	70
Ksantin (2,6 dioksi purin)		
Ksenon tetraftorid	XeF ₄	207

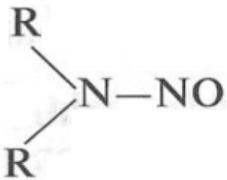
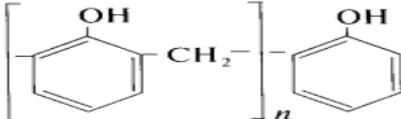
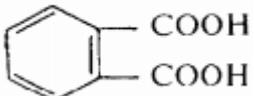
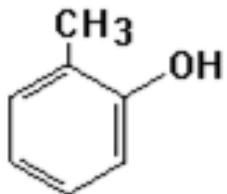
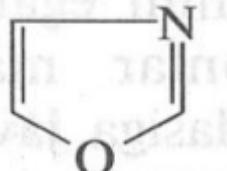
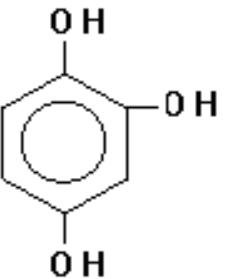
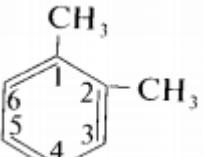
Ksiloza		
Kuldiruvchi gaz	N ₂ O	62
Kumol , izopropil benzol		120
Kumush yaltirog'i	Ag ₂ S	248
Kuporos moyi	H ₂ SO ₄	98
Kuprit	Cu ₂ O	144
Kuydirilgan gips	2Ca SO ₄ · H ₂ O yoki Ca SO ₄ · 0,5H ₂ O	145
Kuydirilgan oxak	CaO	56
Kvarts	SiO ₂	60
Laktoza	C ₁₂ H ₂₂ O ₁₁	
Lautarit	Ca(JO ₃) ₂	390
Lavrentsit	FeCl ₂	127
Lazuri	Fe ₄ [Fe(CN) ₆] ₃	860
Lepidolit	Li ₂ KAl [Si ₄ O _m (F,H ₂ O) ₂]	
Levingstanit	HgS · 2Sb ₂ S ₃	913
Levulin aldegidi	CH ₃ -C(O)-CH ₂ -CH ₂ -COH	100
Liapis	AgNO ₃	170
Lignoserin kislota	C ₂₃ H ₄₇ COOH	
Limon kislota		
Limonit	2Fe ₂ O ₃ · H ₂ O	338
Linol kislota	CH ₃ (CH ₂) ₄ CH=CH-CH ₂ -CH=CH(CH ₂) ₇ COOH	
Linolen kislota	CH ₃ CH ₂ CH=CHCH ₂ CH=CHCH ₂ CH=CH(CH ₂)COOH	
Lipoton (oq bo'yoq)	BaSO ₄ + ZnS	
Machevina karbamid	CO(NH ₂) ₂	56
Magnezial sement	MgOHCl	60.5

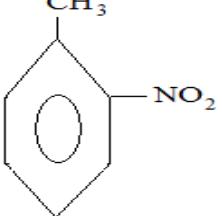
Magnezial tsement	$n\text{MgO} \cdot m\text{MgCl} \cdot \text{PH}_2\text{O}$	
Magnezit	MgCO_3	84
Magnit temirtosh (magnetit)	Fe_3O_4	232
Magniy nitrid	Mg_3N_2	100
Magniy oksixlorid	Mg_2OCl_2	135
Magniy peroksid	MgO_2	56
Magniyli silikat	$(\text{Ni},\text{Mg})_6(\text{OH})_8\text{Si}_4\text{O}_{10}$	906
Malaxit	$\text{CaCO}_3 \cdot \text{MgCO}_3$	184
Malein kislota (sis izomer)	HOOC-CH=CH-COOH	116
Malon kislota	$\text{HOOC-CH}_2\text{-COOH}$	104
Maltoza	$\text{C}_{12}\text{H}_{22}\text{O}_{11}$	342
Manganat kislota	H_2MnO_4	121
Manganit	$\text{Mn}_2\text{O}_3 \cdot \text{H}_2\text{O}$	176
Mannit	$\begin{array}{c} & & \text{HO} & & \text{HO} \\ & & & & \\ & & \text{H}-\text{C} & -\text{C}-\text{H} & \text{C}-\text{H} \\ & & & & \\ \text{CH}_2\text{OH} & \text{HO} & \text{H} & \text{HO} & \text{CH}_2\text{OH} \end{array}$	
Mannon kislota	$\begin{array}{c} & & \text{HO} & & \text{HO} \\ & & & & \\ & & \text{H}-\text{C} & -\text{C}-\text{H} & \text{C}-\text{H} \\ & & & & \\ \text{CH}_2\text{OH} & \text{HO} & \text{H} & \text{HO} & \text{COOH} \end{array}$	
Mannoshakar kislota	$\begin{array}{c} & & \text{HO} & & \text{HO} \\ & & & & \\ & & \text{H}-\text{C} & -\text{C}-\text{H} & \text{C}-\text{H} \\ & & & & \\ \text{COOH} & \text{OH} & \text{H} & \text{HO} & \text{COOH} \end{array}$	
Mannoza	$\begin{array}{ccccc} & \text{H} & & \text{OH} & \text{OH} \\ & & & & \\ \text{CH}_2\text{OH} & -\text{C} & -\text{C} & -\text{C} & -\text{C}-\text{C}=\text{O} \\ & & & \text{H} & \text{H} \end{array}$	
Marganesli shpat	MnCO_3	115
Margarin kislota	$\text{C}_{16}\text{H}_{33}\text{COOH}$	272

Marmar tosh (kuydirilmagan oxak)	CaCO_3	100
Massikot	PbO sariq shakl o'zgarishi	223
Meta borat kislota	HBO_3	44
Metakremniy kislota	H_2SiO_3	78
Metakril kislata	$\text{CH}_2=\text{CH-COOH}$	
Metakrilat	$\text{CH}_2=\text{CH-COOCH}_3$	86
Metan	CH_4	16
Metanal	CH_3CHO	44
Metanol	CH_3OH	32
Metil benzol	$\text{C}_6\text{H}_5\text{CH}_3$	92
Metil etil efir	$\text{CH}_3\text{-O-C}_2\text{H}_5$	76
Metil formiat	HCOOCH_3	60
Metiletilmalon kislota	$\text{HOOC-C(CH}_3\text{)(C}_2\text{H}_5\text{)-COOH}$	146
Metilgeksadetsilketon	$\text{CH}_3\text{-C(O)-C}_{14}\text{H}_{29}$	240
Metilizopriliketon	$\text{CH}_3\text{-C(O)-CH(CH}_3\text{)}_2$	86
Metilmalon kislota	$\text{HOOC-CH(CH}_3\text{)-COOH}$	118
Metilmetakrilat	$\text{CH}_2=\text{C(CH}_3\text{)-COOCH}_3$	100
Metilmetanoat	H-C(O)-O-CH_3	60
Metoksimetan (Metiletilefir)	$\text{CH}_3\text{-O-CH}_3$	46
Miritsin kislota	$\text{C}_{13}\text{H}_{27}\text{COOH}$	
Mis (II) glitserat	$\text{C}_3\text{H}_6\text{O}_3\text{Cu}$	154
Mis gidrid	$\text{CuH}_2, \text{Cu}_2\text{H}_2$	66, 130
Mis kolchedani	CuFeS_2	184
Mis kuporosi	$\text{CuSO}_4\bullet 5\text{H}_2\text{O}$	250
Mis kuprit	Cu_2O	
Mis nitrid	Cu_3N	206
Mis yaltirog'i	Cu_2S	160
Mis(II)-atsetilenid	Cu_2C_2	152
Mis(II)-oksid	Cu_2O_3	176

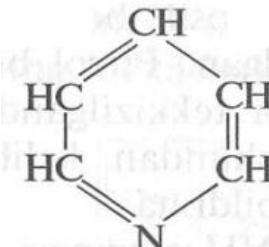
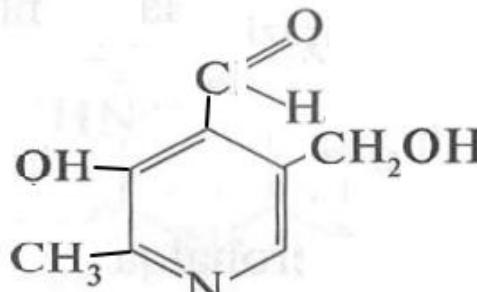
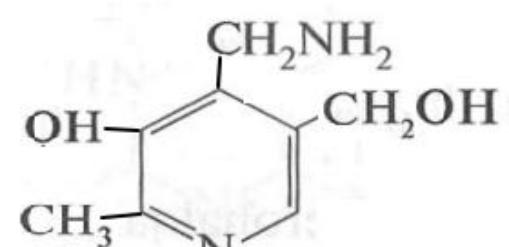
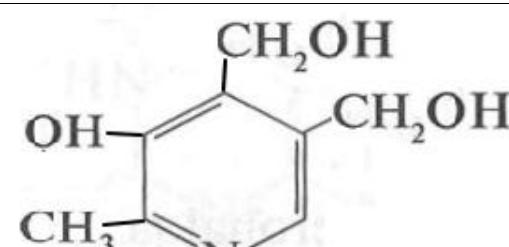
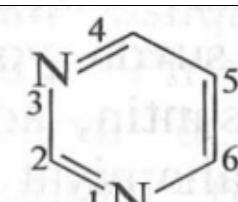
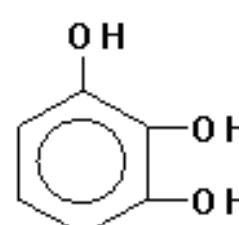
m-ksilol		106
Mochevina	NH ₂ C(O)NH ₂	60
Molebdenit	MoS ₂	160
Molizit	FeCl ₃	162. 5
Monoxlorsiklogeks an	C ₆ H ₁₁ Cl	
Mor tuzi	(NH ₄) ₂ SO ₄ · FeSO ₄ · 6H ₂ O yoki Fe(NH ₄) ₂ (SO ₄) ₂	
Moy kislota	C ₃ H ₇ COOH	88
Muskovit	KAl ₂ AlSi ₃ O _m) ₂ (OHF) ₄	
Naftalin	 C ₁₀ H ₈	128
Naftatsen		
Nasturan	U ₂ O ₃	842
Natriy amid	NaNH ₂	39
Natriy angidrid	Na ₂ O ₃	94
Natriy atsetat	CH ₃ -COONa	82
Natriy bikarbonat	NaHCO ₃	
Natriy borat	NaBO ₃	82
Natriy disulfid	Na ₂ S ₂	110
Natriy oksalat	(COONa) ₂	134
Natriy stearat	CH ₃ -(CH ₂) ₁₆ -COONa	306
Natriy stearat	C ₁₇ H ₃₅ COONa	306
Natriy tetragidroksiberillat	Na ₂ [Be(OH) ₄]	123
Natriy trisulfid	Na ₂ S ₃	142
Natron ohak	Ca(OH) ₂ va NaOH aralashmasi	
Navshadil spirt	NH ₄ OH	35
Nefelin	Na ₂ O · Al ₂ O ₃ · 2SiO ₂	284

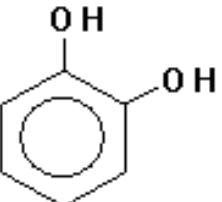
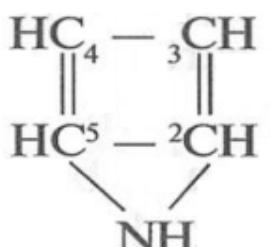
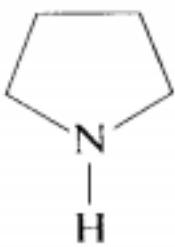
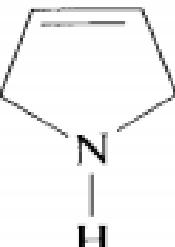
Neogeksan		76
Neopentan		72
Neyzelberg qotishmasi	65% Cu, 20% Ni, 15% Zn	
Nikelning melixor qotishmasi	53% Cu, 27% Ni, 20% Zn	
Nikotin kislota Piridin karbon kislota		
Nikotin kislota amidi Vitamin PP		
Ningidrin		
Nitrometan	CH_3NO_2	61
Nitropiridin		

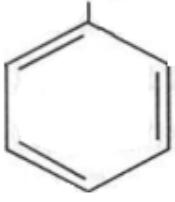
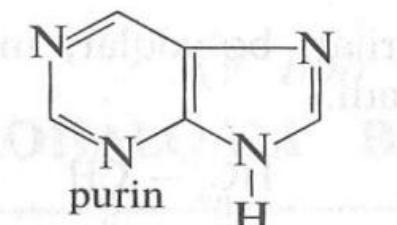
Nitrozaamin		
Nitrozil xlorid	NOCl	65.5
Nitrozobenzol	C ₆ H ₅ -N=O	107
Nonakozan	C ₂₉ H ₆₀	
Novolak smola		
Oddiy superfosfat	Ca(H ₂ PO ₄) ₂ + 2CaSO ₄	506
o-ftal kislota		166
Og'ir suv	D ₂ O	
o-krezol		108
Oksalat Kislota	HOOC-COOH	90
Oksazol		
Oksiatsetaldegid	HO-CH ₂ COH	60
Oksietil peroksid	CH ₃ -CH ₂ -CH(OH)-O-O(OH)-CH-CH ₃	135
Oksigidroxinon		
o-ksilol		106
Oksimetiletiketon		
Oktakozan	C ₂₈ H ₅₈	

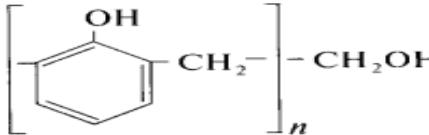
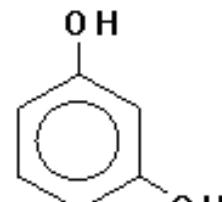
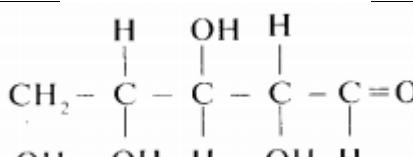
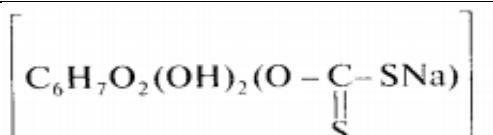
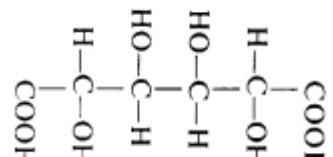
Oktodetsin	$\text{HC}\equiv\text{C}-(\text{CH}_2)_{15}-\text{CH}_3$	
Olein kislota	$\text{C}_{17}\text{H}_{33}\text{COOH}$	282
Olein triglitseridi		
Olevin	Mg_2SiO_4	140
Olma kislota	$\text{HOOC}-\text{CH}_2-\text{CH(OH)}-\text{COOH}$	134
Oltin kislotasi	$\text{H}[\text{AuCl}_4]$	340
Oltin telurid	AuTe_2	453
o-nitro toluol		
Oq loy	CaCO_3	100
Oq magneziya	$3\text{MgCO}_3 \cdot \text{Mg}(\text{OH})_2 \cdot 3\text{SiO}_2$	454
Ortaklaz (dala shpati)	$\text{K}[\text{AlSi}_3\text{O}_8]$ yoki $\text{K}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2$	278
Ortakremniy kislota	H_4SiO_4	96
Ortamanganat kislota	H_4MnO_4	123
Ortayodad kislota	H_5JO_6	228
Orto borat kislota	H_3BO_3	62
Ortosilikat kislota	H_4SiO_4	96
Oxaktosh	CaCO_3	100
Oxakli suv	$\text{Ca}(\text{OH})_2$	74
Palmitin	$\text{C}_{15}\text{H}_{31}\text{COOH}$	256
Palmitoolein kislota	$\text{CH}_3(\text{CH}_2)_5\text{CH}=\text{CH}(\text{CH}_2)_5\text{COOH}$	
Paraform	$n\text{HCHO} \leftrightarrow (\text{HCHO})_n$	
Pardermit	$\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 3\text{H}_2\text{O}$	376
Pellargon kislota	$\text{C}_8\text{H}_{17}\text{COOH}$	158
Pentlantid	NiSFeS	179
Permanganat kislota	HMnO_4	120
Perovskit (Kalsiy titanat)	CaTiO_3	136

Persulfat kislata	$\text{H}_2\text{S}_2\text{O}_8$	194
Perxlorat angidrid	Cl_2O_7	183
Peryodad kislota	HJO_4	192
Pikrin kislota		
p-indolil sirka kislota		
Piolyuzit	MnO_2	87
Piperidin		
Piran		
Pirargirit	$3\text{Ag}_2\text{SSb}_2\text{S}_3$	1764
Pirazin		
Pirazol		

Piridin		
Piridoksal		
Piridoksamín		
Piridoksin		
Pirimidin		
Pirit	FeS ₂	120
Pirogallol		

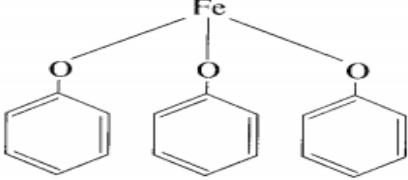
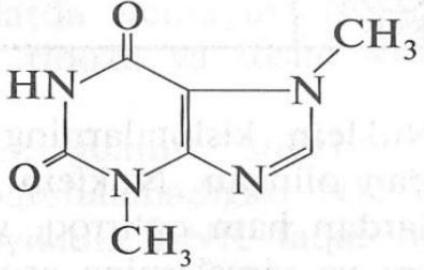
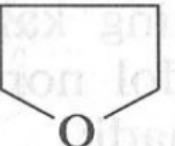
Pirokatexin		
Pirolyuzit	$MnO_2 \cdot xH_2O$	
Pirosulfat	$H_2S_2O_7$	178
Pirouzum kislota	$CH_3C(O)C(O)COOH$	116
Pirrol		67
Pirrolidin		
Pirrolin		
p-ksilol		106
Plavik shpati	CaF_2	
Poliizobutilen, oppanol, vistaneks, polibuten	$CH_2=C(CH_3)-CH=CH_2$	
Polimeta silikat kislota	H_2SiO_3	78

Polistirol	$\text{CH}=\text{CH}_2$ 	
Pollutsit	$\text{CsAl}(\text{SiO}_3)_2$	312
Porox	$\text{Pb}(\text{N}_3)_2$	291
Potash	K_2CO_3	99
Prapanon, atseton, dimetilketon	$\text{CH}_3\text{C}(\text{O})\text{CH}_3$	58
Pretsipitat	$\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$	172
Propilbutanoat	$\text{C}_3\text{H}_7\text{-C}(\text{O})\text{-O-C}_3\text{H}_7$	130
Propka kislota	$\text{HOOC-(CH}_2)_5\text{-COOH}$	
Psevdobutilen	C-C=C-C	
Psevdonitril		
Purin		
Putressin , tetrametilen diamin	$\text{NH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$	
Qalay oksixlorid	SbOCl	173, 5
Qalg'diroq gaz	NO	30
Qizil mis rudasi (kuprit)	Cu_2O	144
Qizil qon tuzi	$\text{K}_3[\text{Fe}(\text{CN})_6]$	329
Qizil temirtosh (gematit)	Fe_2O_3	160
Qo'ng'ir temirtosh	$\text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$	214
Qo'rg'o yal-g'i	PbS	239
Qo'sh superfosfat	$\text{Ca}(\text{H}_2\text{PO}_4)_2$	234
Qo'shaloq superfosfat	$\text{Ca}(\text{H}_2\text{PO}_4) \cdot \text{H}_2\text{O}$ qisman H_3PO_4	

Qora poroh	75% KNO ₃ 15%C	
Qorg'oshin yaltirog'i	PbS	239
Qumtuproq	SiO ₂	60
Quruq muz	SO ₂	64
Rezol smola		
Rezorsin		
Riboza		
Ruh aldamasi	ZnS	97
Sariq qon tuzi	K ₄ [Fe(CN) ₆]	368
Saxaroza izomeri	C ₁₂ H ₂₂ O ₁₁	342
Sebatsin kislota	HOOC-(CH ₂) ₆ -COOH	
Segler-natt katalizatori	TiCl ₄ . Al(CH ₃) ₃	262
Selestin	SrSO ₄	184
Selluloza	[C ₆ H ₇ O ₂ (OH) ₃] _n	
Selluloza ksantogenati		
Selzian	[Ba(Al ₂ Si ₂ O ₈)]	375
Sementit	Fe ₃ C	180
Serin	CH ₂ (OH)-CH(NH ₂)-COOH	91
Sfen	CaTiSiO ₃	164
Shavel kislota	HOOC-COOH	90
Shilliq kislota		

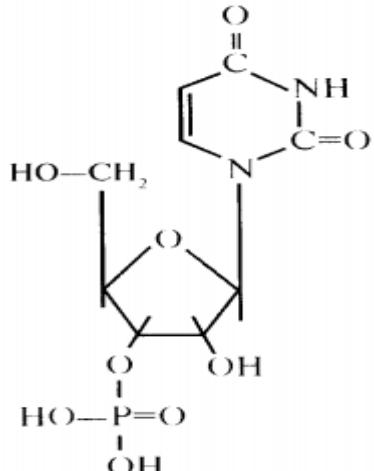
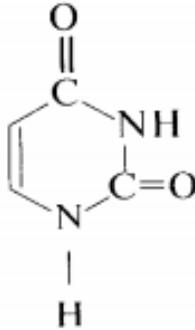
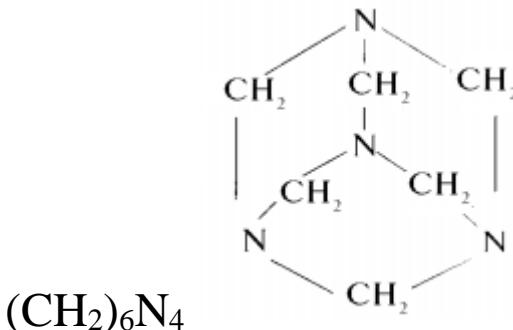
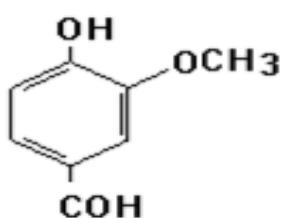
Shisha	$\text{Na}_2\text{O} \cdot \text{CaO} \cdot 6\text{SiO}_2$	478
Shveyster reaktivi	$\text{Cu}(\text{OH})_2$ ning ammikdagi eritmasi	
Sian	CN	26
Siangidrin	$\begin{array}{c} \text{OH} \\ \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{C}(=\text{O}) - \text{OC}_2\text{H}_5 \\ \\ \text{CN} \end{array}$	
Siderit	FeCO_3	116
Siklo butan	C_4H_8	56
Siklo pentan	C_5H_{10}	70
Siklo propan	C_3H_6	42
Siklogeksan	C_6H_{12}	84
Silan	SiH_4	32
Silvin	KCl	74,5
Silvinit	$\text{NaCl} \cdot \text{KCl}$	133
Sing'ka	$\text{Na}_2\text{Al}_2\text{S}_2\text{O}_4$	228
Sintez gazi	$\text{CO} + 2\text{H}_2$	28+4
Sirka aldegid	CH_3CHO	44
Sirka aldegidmi metil asetali	$\begin{array}{c} \text{OCH}_3 \\ \diagup \quad \diagdown \\ \text{CH}_3 - \text{CH} \\ \diagdown \quad \diagup \\ \text{OCH}_3 \end{array}$	
Sirka etil efiri	$\text{CH}_3\text{-COOC}_2\text{H}_5$	88
Sirka kislataning mazi	CH_3CONH_2	59
Sirka kislota angdriti	$\text{CH}_3\text{-C(O)-O-C(O)-CH}_3$	102
Sirka kislota oksimi	$\text{CH}_3\text{-CH=N-OH}$	59
Sirka kislataning butil efiri	$\text{C}_4\text{H}_9\text{-O-C(O)-CH}_3$	116
Sistein	$\begin{array}{c} \text{CH}_2\text{-SH} \\ \\ \text{CH}-\text{NH}_2 \\ \\ \text{COOH} \end{array}$	

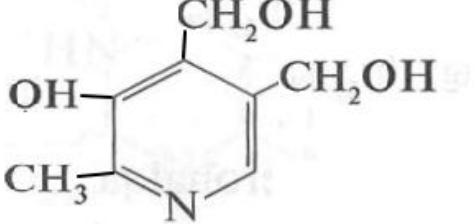
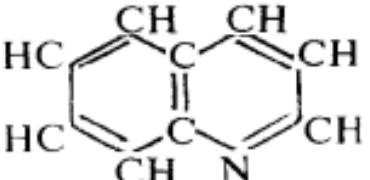
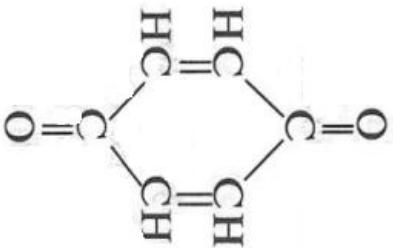
Sitozin		
Siydik kislata		
SMF		
So'ndirilgan ohak	$\text{Ca}(\text{OH})_2$	74
Soda	Na_2CO_3	106
Sorbit	$\text{CH}_2(\text{OH})(\text{CH}(\text{OH}))_4 \text{CH}_2\text{OH}$	178
Sovun (qattiq)	$\text{C}_{17}\text{H}_{35}\text{COONa}$	306
Spodumen	$\text{LiAl}(\text{SO}_4)_2$	226
Stannan	SnH_4	123
Stearin	$\text{C}_{17}\text{H}_{35}\text{COOH}$	284
Stearin kislota	$\text{CH}_3-(\text{CH}_2)_{16}-\text{COOH}$	284
Stearin kislotaning triglitseriti (Tristearin)		890
Strontsianit	SrCO_3	148
Sulema	HgCl_2	272
Sulfat kislotaning metil efiri	$\text{CH}_3-\text{O-S(O)}_2-\text{OH}$	112

Sulfatli efir	$\text{C}_2\text{H}_5\text{O-SO}_3\text{H}$	126
Surik (xrom sarig')	PbCrO_4	323
Surma indiy	InSb	237
Surna alyuminiy	AlSb	149
Susal oltin	SnS_2	183
Sut kislota	$\text{CH}_3\text{-CH(OH)-COOH}$	90
Suv gazi	CO va H_2	
Suyak tolqoni	$\text{Ca}_3(\text{PO}_4)_2$	310
Suyak uni	$\text{Ca}_3(\text{PO}_4)_2 \cdot \text{CaCO}_3$	412
Tahir tuz	$\text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O}$	246
Talk	$3\text{MgO} \cdot 4\text{SiO}_2 \cdot \text{H}_2\text{O}$	378
Tanakor	$\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$	382
Taxir tuz	$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	246
Teflon	C_2F_4	100
Temir (II) kuporosi	$\text{FeSO}_4 \cdot 2\text{H}_2\text{O}$	188
Temir (II)geksa tsianofferat	$\text{K}_4[\text{Fe}(\text{CN})_6]$	368
Temir (II)-gidrosulg'fid	$\text{Fe}(\text{SH})_2$	122
Temir (II,III)-geksatsianofferat	$\text{K}_3[\text{Fe}(\text{CN})_6]$	329
Temir (III) fenolyat		
Temir karbid yoki Tsementit	Fe_3C	180
Temir kolchedani	FeS_2	120
Teobromin		
Tetragidrofuran		

Tetrayodpirrol		
Tiazol		85
Timin		
Tiofen		84
Tionil xlorid	O=S(Cl) ₂	119
Tiopiran		
Tiotsionat kislota	HSCN	59
Tirozin		
Titan magnetitlari	FeTiO ₃ •Fe ₃ O ₄	384
Titanul	TiO ₂	
Toluol	C ₆ H ₅ CH ₃	
Tortveytit	(Y,Se) ₂ Sr ₂ O	
Triakontan	C ₃₀ H ₆₂	
Trietilamin	(C ₂ H ₅) ₃ N	101

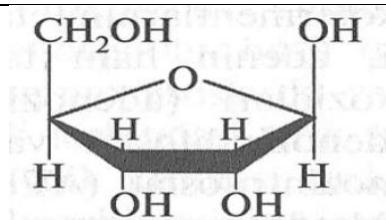
Triketoindan		
Trinitrotoluol		
Trioksimetilen		90
Triozonid		222
Triptamin		
Triptofan		
Trotil		
Tulki dumi	NO_2	46
Turibil ko'ki	$\text{K}_3[\text{Fe}(\text{CN})_6]$	329
Tuyamunit	$\text{CaO} \cdot 2\text{UO}_2 \cdot \text{U}_2\text{O}_5 \cdot 3\text{H}_2\text{O}$	1280

Ulmanit	NiAsSb	256
UMF		
Uran qorasi	$(\text{UO}_2 \cdot \text{UO})_2$	1572
Uranit	$(\text{U}_3\text{Th})\text{O}_2$	502
Uratsil		
Urotropin; Geksametilendiamin	 $(\text{CH}_2)_6\text{N}_4$	140
Uzum kislota	HOCHCOOH HOCHCOOH	150
Uzum shakari	$\text{C}_6\text{H}_{12}\text{O}_6$	180
Valerian kislota	$\text{C}_4\text{H}_9\text{COOH}$	
Valerian kislota	$\text{C}_4\text{H}_9\text{COOH}$	102
Vanilin		
Villemite	$\text{Zn}_2\text{SiO}_4 \cdot \text{H}_2\text{O}$	242
Vinil radikali	$\text{CH}_2=\text{CH}-$	

Vinilbenzol	$\text{CH}_2=\text{CH-C}_6\text{H}_5$	104
Vinilbenzol, stirol,	$\text{CH}_2=\text{CH-C}_6\text{H}_5$	104
Vinilefir	$\text{CH}_2=\text{CH-O-R}$	
Vinilxlorid	$\text{CH}_2=\text{CH-Cl}$	
Vino spirti	$\text{C}_2\text{H}_5\text{OH}$	46
Vitamin B6		
Viterit	BaCO_3	197
Vizinal	Alkanlarda galogen atomlari ikki qo'shni atomga birikkan xosila	
Vodorod peroksid	H_2O_2	34
Vulg'ferin	PbMoO_4	367
Xalg'kopirit (mis klchedani)	CuFeS_2	184
Xalkopirit	$\text{Cu}_2\text{S} \cdot \text{Fe}_2\text{S}_3$	368
Xalkozen (mis yaltirog'i)	Cu_2S	160
Xinolin		
Xinon		108
Xlor kristal hidrat	$\text{Cl}_2 \cdot 8\text{H}_2\text{O}$	215
Xloral	$\text{Cl}_3\text{C}-\text{COH}$	
Xloralgidrat	$\text{Cl}_3\text{C-CH(OH)}_2$	
Xlorli ohak	CaOCl_2	127
Xloroform	CHCl_3	119, 5
Xloropren	$\text{CH}_2=\text{C(Cl)-CH=CH}_2$	88,5

Xrom kaliyli achchiqtosh	$K_2SO_4 \cdot Cr_2(SO_4)_3 \cdot 24H_2O$	998
Xromit	$Fe(CrO_2)_2$	224
Xromli temirtosh	$Fe(CrO_2)_2$	224
Xromtemirtosh	$FeO \cdot Cr_2O_3$	224
Yodargirit	AgJ	235
Yodat angidridi	J_2O_5	334
Zar suvi	$3HCl \cdot HNO_3$	172.5
Zargarlik tanakori	$Na_2B_4O_7 \cdot 5H_2O$	292
Zumrad	$[3BeO \cdot Al_2O_3 \cdot 6SiO_2]$	537
α -bromfuran		
α -brompropion kislota	$CH_3-CH(Br)-COOH$	153
α -furilkarbon kislota		
α -glukopiranoza		
α -glukopiranoza		
α -penametil glukopiranoza		

β -D-ribofuranoza



Imtihon taassurotlari uchun maxsus joy!!!

Hohlaser imtihon paytda yoz.

Hamma ayb bollardaaaa!!!!!!!