

"Suv. Suvning fizikaviy va kimyoviy xossalari"

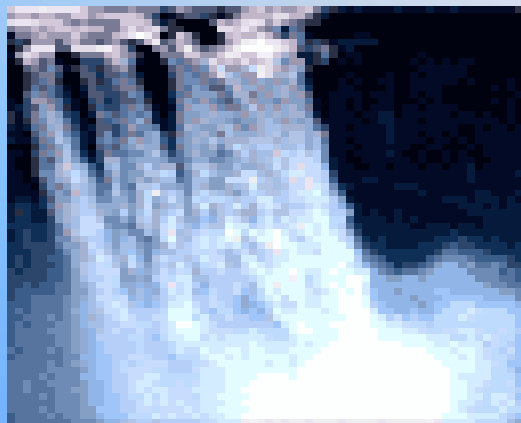
Muallif: Q. O'. Komilov

Reja

- Suv molekulası tarkibi va fizikaviy xossalari
- Suvning kimyoviy xossalari
- Suvning tabiatdagi va inson hayotidagi ahamiyati
- Suvning qo'llanilishi



Tabiatda uchta agregat holatda mavjud bo'ladigan
birdan-bir modda



Suyuq

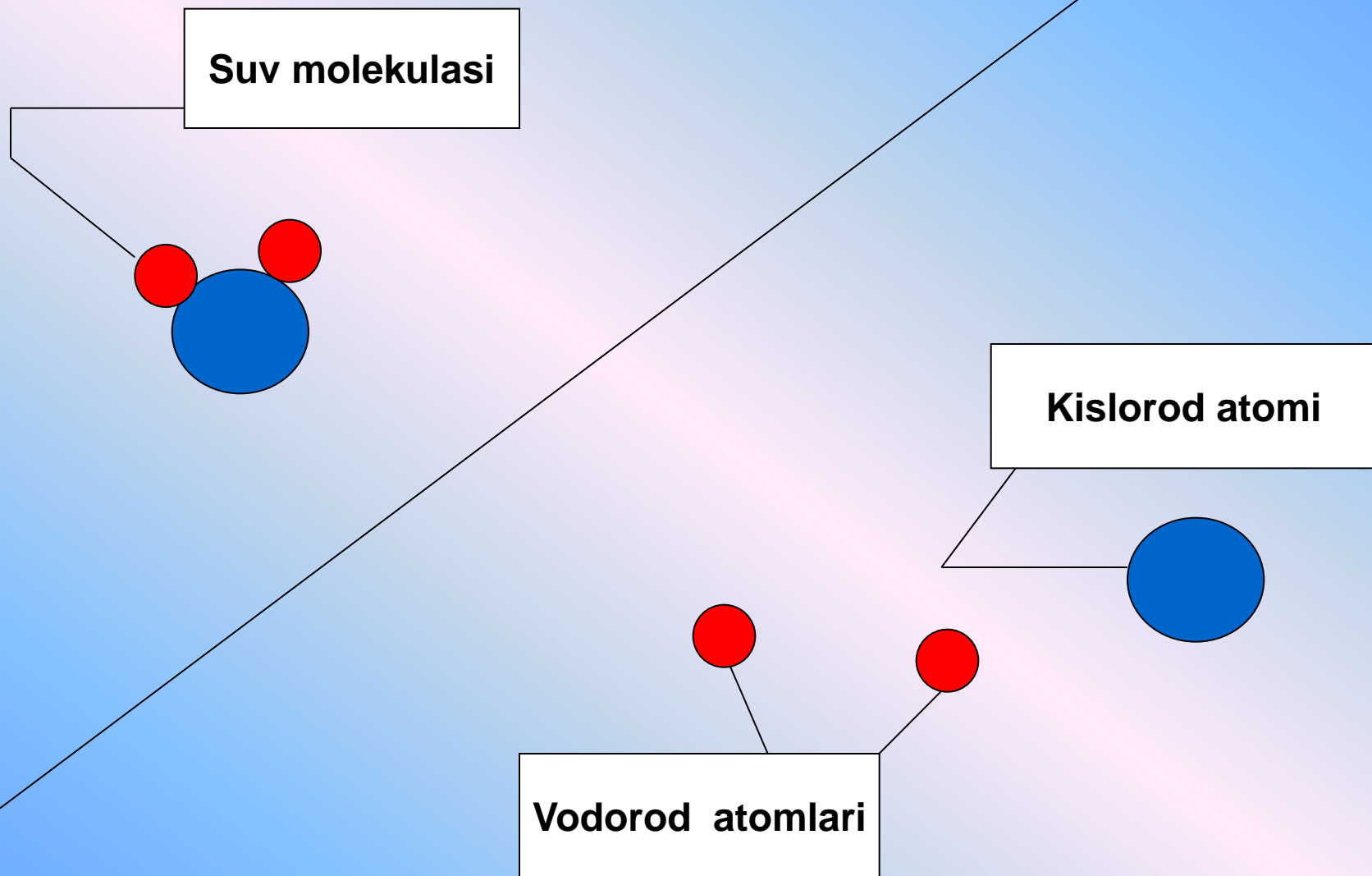


Qattiq



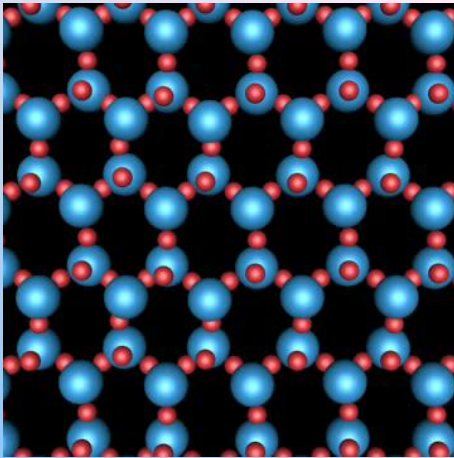
Gaz

Har bir suv molekulasini bir – biri bilan kimyoviy bog'lar orqali bog'langan ikki atom vodorod va bir atom kisloroddan iborat

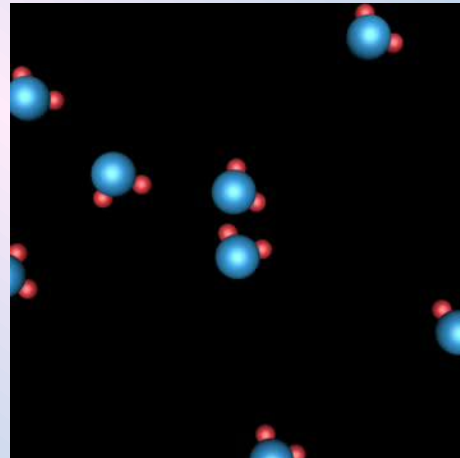


Suvning fizikaviy xossalari

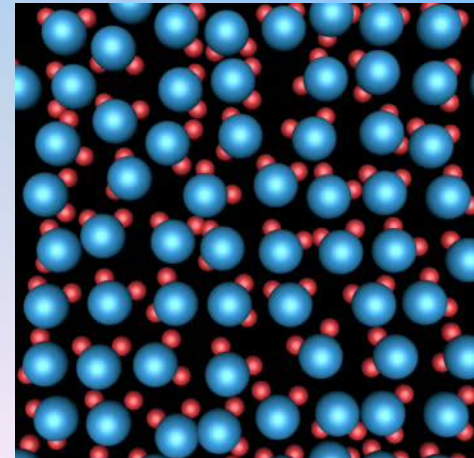
Suvning agregat holati



Qattiq
(muz)



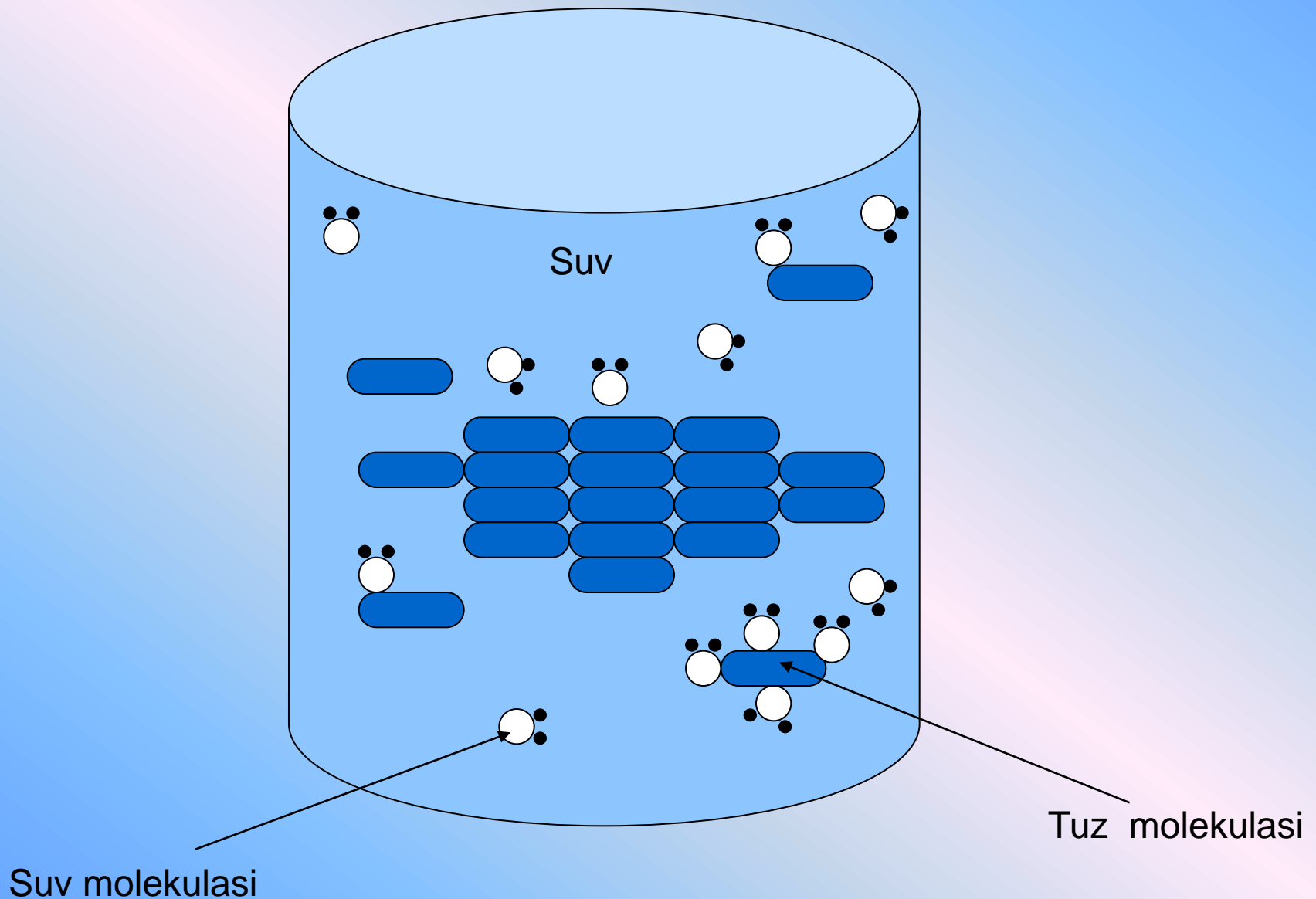
Gazsimon
(bug')



Suyuq
(suv)

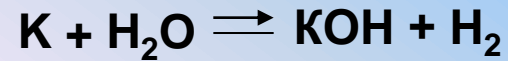
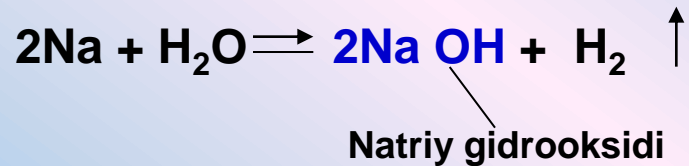
- rangsiz, ta'msiz, hidsiz, tiniq
- kuchsiz elektr o'tkazuvchanlikka ega
- $t_{qay} = 100\text{ }^{\circ}\text{C}$, $t_{suyq} = 0\text{ }^{\circ}\text{C}$

Suv - erituvvchi

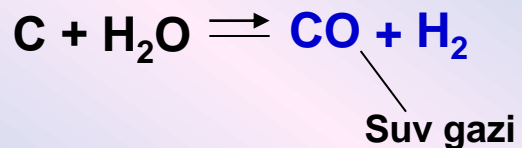


Suvning kimyoviy xossalari

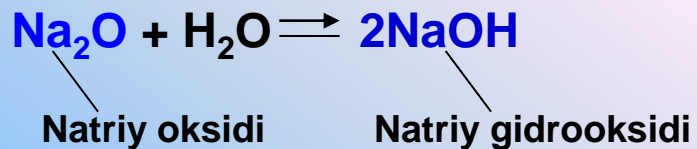
1. Suv faol metallar bilan ta'sirlashadi



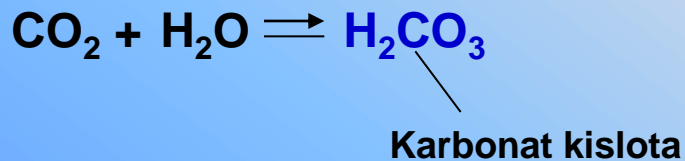
2. Suv metalmaslar bilan o'zaro ta'sirlashadi:



3. Suv asosli oksidlar bilan o'zaro ta'sirlashadi

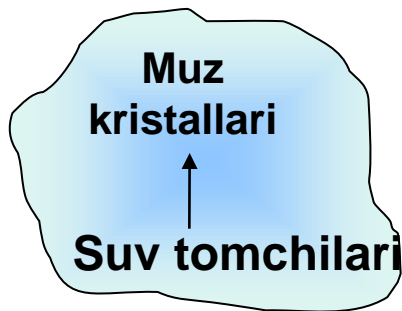


4. Suv kislotali oksidlar bilan ham reaksiyaga kirishadi

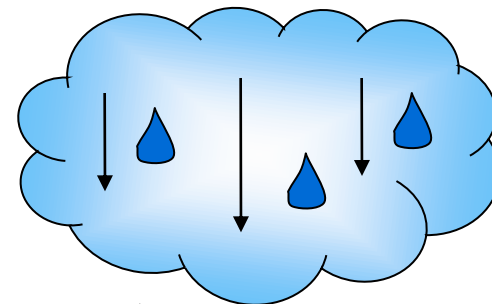


Suvning tabiatda aylanishi

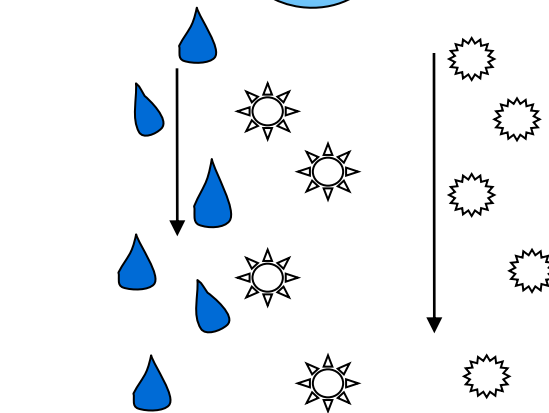
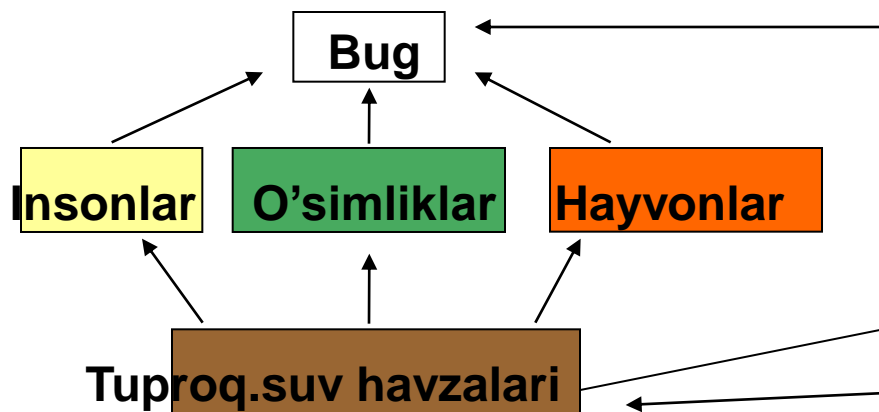
Sovuq havo



Bulutlarga aylanadi
Havo oqimida



Iliq havo



Yomg'ir Qor Do'l



G'itrosfera

Ichimlik suvi



sho'r suv

4%

95%

atmosferadagi suv

1%



Muzliklar Yer osti suvlari



49%



47%

Quruqlik suvlari

1%



1%



1%



Ko'llar

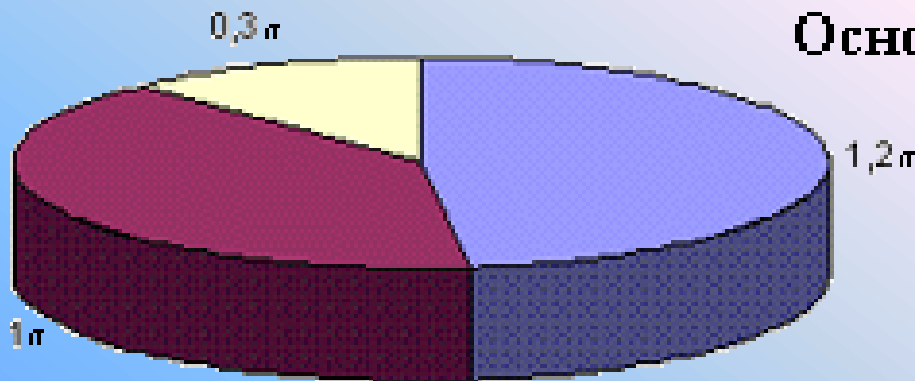
Daryolar

Botqoqliklar

Inson uchun suvning ahamiyati

To'g'ridan-to'g'ri suyuqlik sifatida (turli chanqov bosdi ichimlik yoki suyuq ovqat ko'rinishida) o'rta yashar odam bir kecha kunduzda o'rtacha 1,2 l. cha suv iste'mol qiladi (kunlik me'yorning 48%).

nonda tarkibida - 50% atrofida, go'shtda - 58-67% gacha, baliqda - 70%, meva va sabzavotlarda - 90% gacha suv bo'ladi.



Основные пути поступления воды в организм

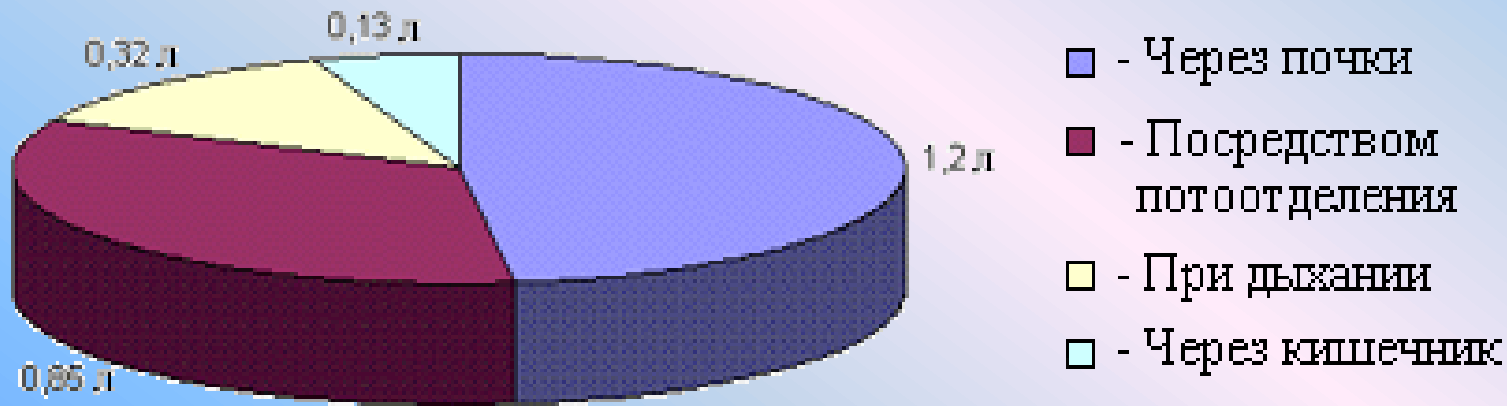
■ - Поступает в виде жидкости

■ - Поступает в виде пищи

■ - Образуется в организме

Suv inson organizmidan asosan buyraklar orqali chiqib ketadi, umumiy hajmga nisbatan 48% yoki o'rtacha bir kecha - kunduzda 1,2 l, shu bilan birga terlash bilan (0,85 l.- 34%). Bir qism suv organizmdan nafas olish bilan chiqib ketadi (0,32 l., sutkada - 13%) va ichaklar orqali (0,13 l. - 5%).

Пути выведения воды из организма



Sizning og'irligingiz (kg.)	Suvga bo'lgan kecha-kunduzlik ehtiyoj, l.		
	Quyi fizik faollikda	O'rtacha fizik faollikda	Yuqori fizik faollikda
50	1,55 l	2,00 l	2,30 l
60	1,85 l	2,30 l	2,65 l
70	2,20 l	2,55 l	3,00 l
80	2,50 l	2,95 l	3,30 l
90	2,80 l	3,30 l	3,60 l
100	3,10 l	3,60 l	3,90 l

Suv – yoqilg'i

Ilmiy – fantastik kelajak asta sekinlik bilan uylarimizga kirib kelmoqda. Hozirga kelib oddiy suvdan elektr energiyasi olib ishlaydigan soatlarni bimalol xarid qilish mumkin.

Bunday soatlar qanday ishlaydi? Ularga o'rnatilgan konvertor suyuqlik molekulasidan elektroni ajratib olib, soat uchun yoqilg'i yacheykasi sifatida xizmat qiladi. Suv sarf juda kam. Soatning to'xtovsiz ishida rezervuardagi suv bir necha haftaga yetadi.



Mustaqil ish

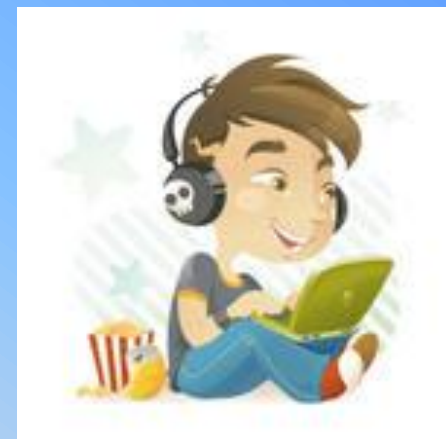
Suv qanday moddalar bilan reaksiyaga kirishadi?

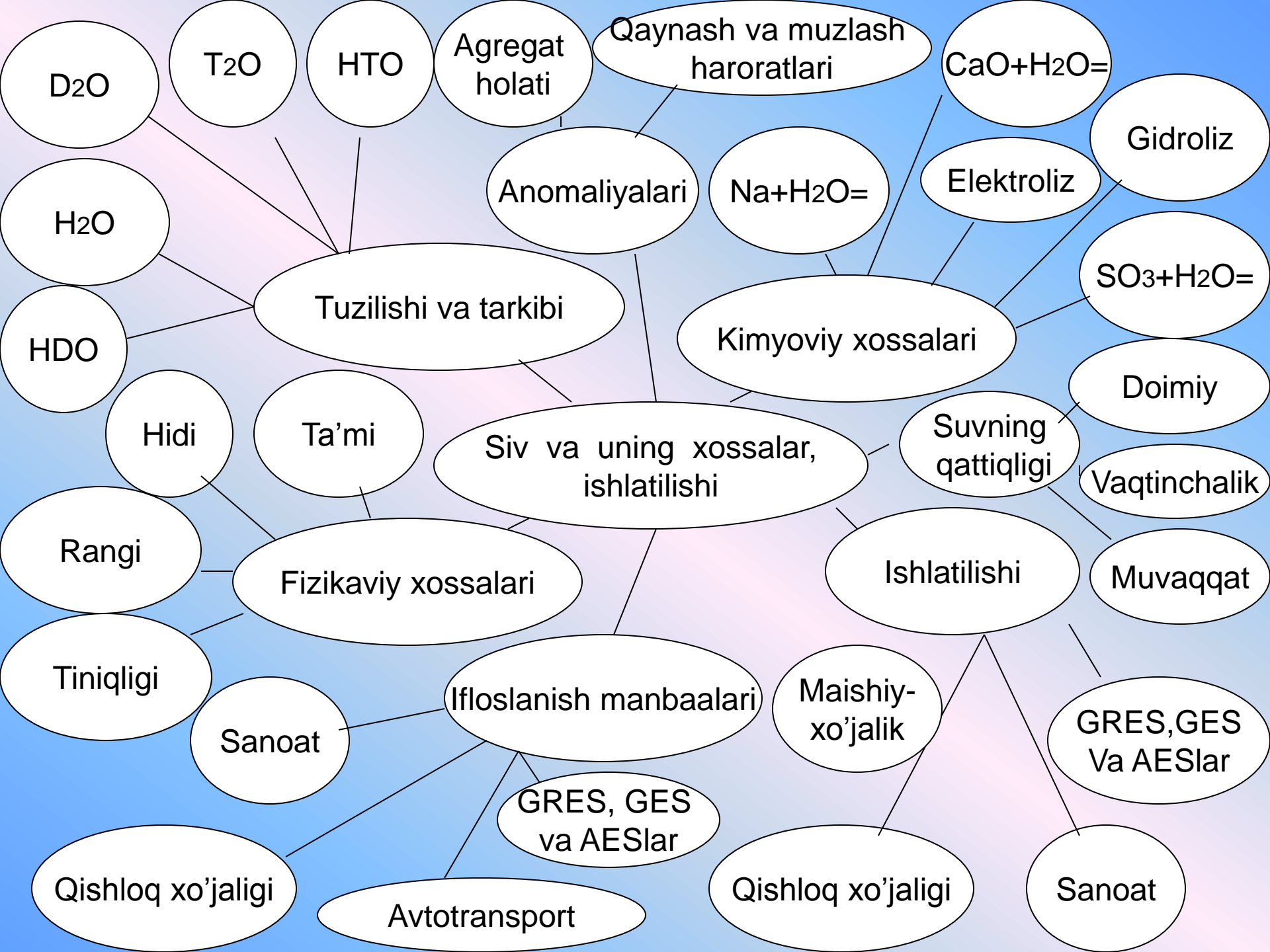
K	Cu	Na ₂ O
SO ₃	Al ₂ O ₃	Ca
Au	CaO	CO ₂

SO ₂	CuO	Cu
Fe ₃ O ₄	Ag	Na ₂ O
SO ₃	CaO	K

Mustaqil tanlov vazifasi:

- 1) "Tabiatda suvning roli" mavzusida keys yozing.
- 2) Suv mavzusiga krosvord tuzing.
- 3) Suv mavzusida insho yozing.





Toifalash Jadvali

Tarkibi, tuzilishi, fizikaviy xossalari	Kimyoviy xossalari	Ishlatilishi, iflaslanish manbalari

B/B/B jadvali

Bilaman	Bilishni xoxlayman	Bilib oldim
Suvning fizikaviy va kimyoviy xossalari: Ifloslanishini	Metallar bilan r- yasini Asosli va kislotali oksidlar bilan r- ysini Ifloslanish manbalarini:	

Einzigartige Uebung

Lawlat