

MyH^Hna^bHoe Srog^eTHoe o6^eo6pa30BaTe^bHoe ynpе^geHHe
"CpegHHH o6^eo6pa30BaTe^bHaH wbo.ia n. BHTHM"

Boda -
ee^ecmeo npuebTHoe
u HeodbTHoe



Pa6oTy BMno^HHna:
yneHH^ 8 «A» Kaacca
nogoaH noaHHa

BHTHM 2021 r.

Bofla - Beu^ecTBO, 6e3 KOtoporo >KM3Hb Ha HeB03 MO>KHa no MMGHH 3eM/m.



Boga - ogHo U3 caMHx pacnocrpaHeHHwx Be^ecra B npupoge (rurroc^epa 3aHUMaeT 71 % noBepxHocpy 3eMau). Boge npuHagae^uT Ba^Heamaa poab B reoaopuu, ucropuu naaHeTw. Ee3 Bogw HeBo3Mo*Ho cy^ecraoBaHue *HBUX opapu3MoB. Hu gaa Kopo He ceKpeT, HTO aeaoBeK COCTOUT Ha 80% U3 Bogw. ^TO 3ByauT ygyBureabHo, HO ^TO TaK. PacnpegaeHa Boga B opapu3Me HepaBHoMepHo. Eoabme Bcero Bogw cogep^uT Mo3p aeaoBeKa — OH COCTOUT U3 Bogw Ha 95%, KpoBb — Ha 82% u aerKue — Ha 90% . npaKTuaecku Bce gyoxuMuaeckue pea^uu B Ka^gon *UBOH KaeTKe - ^TO pea^uu B BogHwx pacTBopax. B pacTBopax *e (npeHMy^ecraeHHo BogHwx) npoTeKaer 6oabmuHcTBa TexHooapuaeckux npo^ccoB Ha npegnpuaTyax xyMuaeckOH npoMwmaeHHocpy, B npou3BorTBe aeKacTBaHHwx npenapaToB u nu^eBbix nporyKToB. H B MeTaaupuu Boga ape3BaaHHo Ba*Ha, npuaeM He ToabKo gaa oxaa^geHua. He cayaaHHo rugpoMeTaaupua - u3BaeaeHue MeTaaaoB u3 pyr u KoH^mpaTOB c noMo^bK pacTBopoB pa3auHHwx peapeHToB - cpaaa Ba^Hoa oTpacabK npoMwmaeHHocpy.

«Bo BceM Mye HeT Huaepo 6oae MarKopo u noraTauBopo, aeM Boga. Ho oHa ToauT TBeproe u KpenKoe. HHKTO He Mo*eT ee ogoaeTb, xoTa apooa Mo*eT ee no6eryTb. nogaTauBoe no6e*gaeT KpenKoe. MarKoe ogoaeBaeT TBeproe. Bce ^TO 3HaKT, HO HHKTO He ocMeuBaeTca geacTBaTb TaK», - nucaa o Boge 6oae gByx c noaoBUHa TwcaaeaeTua Ha3ag KUTaacKua \$uaoco\$ Hao^w.

YaeHwe a6coapopa npaBw: HeT Ha 3eMaee Be^ecraa, 6oae Ba^Horo gaa Hac, aeM o6wKHobeHHaa Boga, u B To*e BpeMa He cy^ecrayeT gpyopo TaKopo Be^ecraa, B cBoacpaax KoTopopo 6wao 6w croabKo npoTUBopeaua u aHoMaaua, cKoabKo B ee cBoacpaax.

Вода Вещество ОбиННое МЖМ

- **риОТМ %** **ноРерНОСТМ** **Hanzen** **nnaHeTbi**
3aHHO OkeaHMM **Н** **МОпаММ.** **ТBepfIOM**
BOflOM —

CHepOM **Н** **nbflOM** — **ноKpbuo** **20% CyillM.** **OT**
BOflbi **33BHCT** **KJIMMaT** **nnaHeTbi.**
reocpн3m<n **γTBep>KqaKDT,** **MTO** **3eMnn**
ABBHO **6bi** **ocTbina** **Н** **npeBpamnacb** **В**
6e3>KM3HeHHbm **KyCOK** **K3MHH,** **ecjin**
6bi **He** **BO,qa.** **γ** **Hee** **oneHb** **SonbLuan**
TenneMKOCTb. **HarpeBancb,** **OHa**
nornou^aeT **Tenno;** **ocTbiBan,** **OT,qaET** **ero.**
3eMHan **BO,qa** **Н** **nornou^aeT,** **Н**
B03BpamaeT **MHOTO** **Tenna** **Н** **TeM**
caMbiM **"BbipaBHHBaeT"** **KnmviaT.**

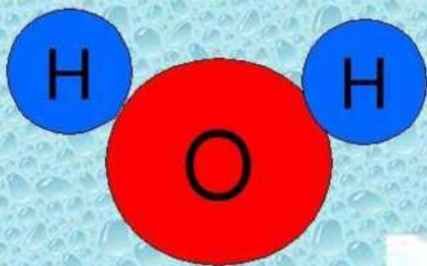
OT **KOCMHneckoro** **xonofla** **npefloxpaHeT**
3eivmio **Te** **MoneKynbi** **BOflbi,** **KOTopbie**
paccenHbi **В** **aTMOccjDepe-** **o6naKa** **Н** **napbi**



«наМHTb» BOgbl

Boga - nojyiMHНое nyго npupogbi.

• **CTpoeHne MoneKynbi** **BOflbi.**



OHa **COCTOMT** **M3** **AByX** **aTOMOB** **BOflOpOAa** **M**
OAHorO **aTOMa** **KMcnopoAa.**



BOAB **В** **TBepAOM** **COCTOHHMM**



BOAS **В** **XMAKOM**
COCTOBHMM.

Boga **Bpa3o6pa3HOM** **coCT**
on HUM

γ **3eM/iM** **ecTb** **cnnoLUHan** **«BOflHa»**
o6o/IOMKa
rngpoccpa,
KOTopyK) **o6pa3yeT** **BOAS,**
HaXOA^LilpBCB **В** **Тpex**
COCTOBHMBX.

РемреНОВСКНН аНану3 срыКТыпв Богв ноКа3ан, НТО *угКaa Boga 6ну*е но СБоен
 СТпыКType К ТБепгвМ ТенаМ, а He К ra3aM, нокKonbKy B па3Me^eHuu MoneKyn Богв
 аBHo npocне^уBanacb HeKoTopaa пeryнаpHocrb - 6ну*HuM нopагоK, xapaKTepHHH гна
 ТБепгвх Ten. ^TOT 6ну*HuM нopагоK, нпуHaTo онucwBaTb TaKuM ноHaTueМ KaK
 MuKpoKnacreпw, KOTOPWMU Ha3wBaroT He6onbmue ycroHHyBwe coBoKynHocry
 MoneKyn Богв. нпу ^TOM yHeHwe BwacHunu, НТО y Богв, nonyHeHHon, K нпуMepy, B
 пe3ынбTaTe TaaHua nbга u y Богв, nonyHeHHon нypeM KOHгeHca^uu наpa, СТпыКType
 6ну*Hero нopагKa 6yгeT па3нуHHaa - ux MuKpoKnacreпw 6yгyT uMeTb па3Hoe
 CTпoeHue. OnwT ноKa3WBaeT, НТО Ha *uBwe opraHy3Mw 6нapoTBopHoe BнuaHue
 oKa3WBaeT uMeHHo Tanaa Boga.

СТпыКTypeHwe па3нуHua Богв coxpаHapoTca B TeHeHue onпeгeнeHHopo BпeMeHy,
 НТО но3Bonuno yHeHWM poBopyTb o 3arогHHoM MexaHy3Me "naMaTy" ^TOH
 yгyBUTenbHon ^yгKocry. He BW3WBaeT coMHeHue TOT \$aKT, НТО Boga HeKoTopoe
 BпeMa "noMHuT" ocы^ecpаneHHoe Ha Hee \$у3uHeчKoe Bo3гeMчTBue, u ^Ta
 "3анucaHHaa" B Boge uH\$opMa^ua oKa3WBaeT BнuaHue Ha *uBwe opraHy3Mw, B TOM
 Hucne Ha HenobeKa. Begb, KaK y*e poBopуnocb, B cocTaB Tena нpo6opo opraHy3Ma Boga
 BxoryT B BecbMa 3HaHyTenbHwx KonуHeчTBax. HTaK, Boga cнoco6Ha coxpаHaTb B
 CBoen "naMaTy" па3Hoo6па3Hwe \$у3uHeчKue Bo3гeнчTBua - ^TO MO*HO CHyTaTb y*e
 HayHHo гoKa3aHHWM \$aKTOM. Ho ^TO yгyByTenbHoe CBOHCTBO Богв oHeHb 6ну3Ko K
 ToMy, HeM HayKa y*e He 3aHyMaeTca, HO НТО u3BecTHo u3 onwTa гyxоBHон *u3Hy
 HenobeчeчTBa: Boga Mo*eT 6wTb "xpаHyTenbHy^H" u гyxоBHwx Bo3гeHчTBuH.
 YHCHWX oHeHb 3auHTeпecoBano ^TO CBOHCTBO Богв u OHy пeмунu нpoBecTy
 uccнeгoBaHue - KaK BнuaeT Ha 3гoпoBbe пeHb, HanonHeHHaa HenпунуHHwMu
 Bwpa^eHuaMu, HenпycpoHHwMu cноBaMu, 6пaHbro.

ног гeнчTBueM 3ByKoB, B TOM Hucne u HenobeчeчKon пeHy, MoneKynw Богв (a
 Hame Teno нпуMepHo Ha 80% COCTOYT u3 Hee) HaHyHapoT BwчTpauBaTbca B cнo^Hwe
 cpyKTypw. H B 3aBycMocTy OT пуTMa u CMWCHOBOH Hapы3Ky ^Ty cpyKTypw MoryT
 HeHyTb, u Hao6opoT, oTpaBнаTb opraHy3M.

B 20-M BeKe aноHчKun yHeHwn Macapy ^MOTO HayHHo гoKa3ан, НТО Boga He
 TonbKo BocнпуHyMaeT uH\$opMa^uro, HO Mo*eT MeHaTbca ног Bo3гeHчTBueM cноBa u
 га*e Mwcну. C noMo^bro HoBenmero o6opyгoBaHua OH cMor 3aMopo3yTb u
 c^oTocTpyKTypы3aM, MeKанныeHToHCKM OH po3дecoпoM MeKанHонEJ1 EM
 ypoBHe, ero нopa3uno. Ha \$OHCaпy3ToпoHиHBO3HecTbMиHa па3Hon \$opMw u
 HeTKocry, c Bugy oHeHb noxoBoeHacHOBOM,HyBCTBOM, MbIC/lbK).



Boлa, KOTOPOH riEJIM Boлa, KOTOPOA TOBOPM/IM Boлa, KOTOPOA roBOPMJIA

BYAAMCKME MOJIMTBbl «BнаFOAAPK) TEBfl!» «HEHABM>Ky TEBfl!»



«CBflTafл» BOAA M3 Boлa, KOTOPOA poBOPAHM
 XPMCTMAHCKOM I4EPKBM «f\ JHOBAK) TEBfl!»

TAJIAA BOAA

нрourxo^geHue ^TO^o caoBa yxoguT CBOUMU KopHaMu ray6oKO B ucropuro нрourxo^geHua pyccKoro a3biKa. Bepopae Bcero, OHO o6pa3OBaHO OT npaцаBaHckoro *voda. OHO, B cBopo onepegb, BocxoguT K npauHroeBponeMcKOMy KopHpo *wed, KOTOpbIM o6o3Hanaa Bogy KaK HeogymeBaeHHyro Baary, ^ugKOCTb. OT ^TO^o KopHa o6pa3OBaocb caoBO "Boga" BO MHopux a3biKax Mupa:

- B 6eaopyccKOM - Baga,
- B cep6ckOM u 6oapackOM - Boga,
- B caoBa^OM u nemckOM - voda,
- B no^bCKOM - woda,
- B aHpaumckOM - water u TaK gaeee.

BOT noneMy Bogy Ha3Baau BogoM. B нocaegcraue OT ^TO^o KopHa o6pa3OBaocb MHO^ecpao caoB. ^a u B Hamy gHu caoBO "Boga" u ero npou3BogHbie nocpoaHHO y Bcex Ha cayxu.

Свойства воды

1. Bo/ja npo3paHHafl.
2. Bo,a,a бecy,BeTHaH.
3. Bo^a He HMeeT Заnaxa.
4. Bo/j,a npn HarpeBaHHH pacuinpHeTCH.
5. Bo,zi,a npn oxjian^eHHH c>KHMaeTCH.
6. Bo^a pacTBopneT co/ib H caxap.
7. Boj\a He pacTBopaeT Men H 3eM/no.
8. Bo,n,a OHHii^aeTca c noMon^bio ^HHbTpa
9. Bo,zi,a - TeKyna.

СВОИСТВА ВОДЫ

- Вода n_{BjineTCH} у $\text{HHBepca}^{\wedge}\text{bHbiM}$ pacTBopHTejieM g/in $\text{no;rapHbix BemecTB.}$
- Вода $06./\text{iagaeT}$ 60жibHioH
- Вода $\text{HMeT}^{\wedge}\text{fuiyio}$ $\text{Ten}^{\wedge}\text{oTy}$ HcnapeHHH; 3TO Hcnojibajf'GTCH $\text{non TepMoperyjiHu,HH y}$ JKHBOTHWX $(\text{noTooT}^{\wedge}\text{ejieHHe})$
- $\text{y Bo}^{\wedge}\text{bi}$ 60жibuaiaH $\text{Ten}^{\wedge}\text{oTa}^{\wedge}\text{niiabJieHHH}$
- $\text{C/naoTHocTb .}/\text{ib}^{\wedge}\text{a}$ MeHbiue njiOTHOCTH Bogbi, noaTOMy OH He TOHeT
- $3\text{HaHHTe}/\text{ibHoe}$ noBepxHGCTHoe HaTH>KeHHe nrpaeT^* Ba>KHyo $\text{pojib npn ABHHCCHH}$ Bo/ibi no KannnnnpaM OpraHH3MOB
- $\text{Bo}^{\wedge}\text{a}$ HBjineTxn $\text{He(f6xoAHMbiM KOMHOHCTOM}$ $\text{MeTa6o}^{\wedge}\text{HHeCKHX}$ peaky,HH

МНТепечВие ^aKTu o Boge

HeHoeK 6e3 Bory Mo*eT npo^yTb He 6onee 5 г/л.

Ham opaHH3M COCTOIT y3 Bory 6onee aem Ha 70%.

Teoeruaecky, ecHy 6w pacpaHy Bee negHyKy Ha nnaHeTe, yroBeHb Bory nogHanca 6w 6onee aem Ha 60 M. H3-3a ^TO^o 3aTonneHHwMy oKa3anuch 6w 15% cymy.

B cpegHeM Ka^gm aenoBeK e^epoHO noTpe6naeT nry6ny3yrenbHo 60 TONH Bory.

E^e co mKonw Bee 3HaroT, HTO y Bory ecTb 3 arperaTHwx cocpoaHua: *yKoe, TBeproe y pa3oo6pa3Hoe. OgHaKo yaeHwe BwgenaroT 5 pa3nyHHwx cocpoaHyH Bory B *yKoM Buge y 14 cocpoaHyH B 3aMep3meM Buge.

CopnaHo ucnegoBaHuaM, Boga ycnemHo nopno^aeT yH^aKpachy poa^uro.

Ha gaHHWH MoMeHT, Ha HameH nnaHeTe oKono 1 Munnuarpa nrogeH numeHw BO3MO*HOCTy nyTb aucpyo Bory. TonbKo 3a nocnegHue 50 neT y3-3a npaBa rocTyna K Boge, B Mye npou3omno 6onbme 20 BoeHHwx KOH^UKTOB.

HecMoTpa Ha TO, HTO 3eMna 6onee aem Ha 70% noKpyTa BoroH, numb 1% aBnaeTca npechoH.

KpynHeHmuM BoroemoM npechoH Bory aBnaeTca o3epo EaHKaH, HTO B Poccuu.

C reTCTBa MW cnwmuM o TOM, HTO cneryeT ^KOHOMyTb Bory. H ^TO npaBnybHo, Begb caMaa ToHKaa cTpya npyBoryT K noTepe go 1000 n Bory e^egHeBHo.

CHer cnoco6eH oTpa^aTb nyHu CBeTa Ha 75%, a Boga nnmb Ha 5%. HMeHHO ^o^TOMy cHe^Hwe HOHU TaKue cBernwe.

YH6HWM yganocb goKa3aTb, HTO Boga uMeeT cnoco6Hocb 3anoMuHaTb uH\$opMa^uro.

Megy3w Ha 99% cocpoaT u3 Bogw.

B oKeaHax Boga uMeeT CUHUH oTTeHoK u3-3a pacceaHHoro noToKa CBepa.

Ka^gwM rog ucnanaeTca 1 TпunnuoH TOHH Bogw. ^TO Hucно BwrnaguT, KaK egуHu^ c 12 HynaMu.

B A3ep6aMg*aHe cy^ecpayeT pa3HoBugHocb Bogw, KoTopaa Mo*eT BocннаMeHaTbca. ^To npoucxoгуT u3-3a Toro, HTO B ee cocpaBe cogep^urca MHoro MeTaHa.

no gaHHWM poHECKO, caMaa Hucraa Boga Haxogurca B OuHnaHгуu.

B AHTaпKTугe o6Hapy*eHo o3epo, KoTopoe He 3aMep3aeT ga*e npu TeMnepaType - 50 pпarycoB. A Bce u3-3a Toro, HTO B HEM cnumKoM MHoro cony.

B An^upe cy^ecpayeT o3epo, Bory KoToporo MO*HO ucnonb3oBaTb B KaHeCTBe нучMeHHwx HepHy.

npu MHHыc 120 pпarycax no ^nbcuro Boga cpaHoByTca cBepxBa3KoH yHy TaryHeH, a npu TeMnepaType Hy*e MyHыc 135 pпarycoB oHa npeBpa^aeTca B "creKnaHHыpo" Bory. "CreKnaHHaa" Boga - ^TO TBepгoe Be^ecpao, B KOTOPOM oTcyTCTByeT KпucpaHHyHeCKaa cTpyKTypa, KaK B creKne.

Boga He TonbKo gapy *u3Hb, HO Mo*eT u oTHyMaTb ee. 85% Bcex 3a6oneBaHyM B Myne nepegaeTca c noMo^bro Bogw. E^erogHo 25 MнH HeHobeK yMupaeT OT ^Tux 3a6oneBaHyM.

Boga Mo*eT 6wTb 6ecннаTHoM, a Mo*eT 6wTb u oHeHb гopopoM. CaMaa гopopaa B Myne Boga npogaeTca B Hoc-AHg^enece. npou3BoryTeny yHaKoBWBapoT гparo^HHыpo ^yгKocb co c6aHaHcupoBaHHWM BKыcoM B 6yTнKу co cpa3aMu "Swarovski". CTOUT TaKaa Boga 90 \$ 3a 1 n.

Berpa гна Bogw u3poTaBHyBapoT B \$opMe KoHyca гна Toro, HTO6W ux He пa3oпBano npu cnyHaHHoM 3aMep3aHy Bogw.

^na npou3BогCTBa 1 TOHHW cTanу Tpe6yeTca 300 TOHH Bogw.

YHeHbie cHyTapoT, HTO MUPOBOH oKeaH u3yHeH TonbKo Ha 2-7%.

^peBecHoe пaTeHue ^BKану^T B cyTKy нopoH^aeT u3 noHBw u ucnanaeT 320 n Bnapy.

CKanucraa 6eHKa Mo*eT *uTb 6e3 Bogw go 100 гHeH.

HTaK, MW y3Hanу, HTO Boga - npyBHHoe, HO B TO *e BпeMa Heo6WHoe Be^ecpao, nog BнacTbro KOTOPOH HaxoгуTca Bca ннаHeTa: oHa ^oпMupyeT KHyMaT, aBнаeTca cпeгoH o6yTaHua гна пa3HyHHwx cy^ecpa, nogгep^yBaeT *u3HeгаTenbHocb nypeM nepeHoca ^Hep^yy u HyTaTenbHwx Be^ecTB no BceMy Teny opraHy3Ma, 3a^y^aeT Hac, нporeM, u ^UBOTHWX OT KocMyHeCKoro xonora, nocToaHHo пepынupyeT KпыpoBopoT Be^ecTB u ^Hep^yy u ^TOT cнycoK MO*HO npoгoH^aTb u npoгoH^aTb. H a xoHy cKa3aTb, HTO Boga Ba^HeMmee Be^ecpao Ha 3eMne, 6e3 KOTOPOH HeBo3Mo*Ha *u3Hb.