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From **A** to **Z**, nematodes colour our lives!



**As told in
Hausa!**

Colouring book
and stories about
nematodes



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Tasirin Tsutsotsi (worms) ga Mutane da Tsirrai daga A zuwa Z

Tsutsa (worm) tana da tasiri mutuqa ga rayuwar mutane da tsirrai. Wani lokaci tasirin yakan iya kasancewa mai alfanu ga mutane da tsirran, wani lokaci kuma yakan iya zama akasin haka. Mafi yawancin tsutsotsin sukan rayu ne a jikin mutane da tsirrai da wasu halittun. Wato, waxanda rayuwar cinsu da shansu ta dogara kacokam ga abin da suke rayuwa a jikinsa.

Ma'ana su neake kira (parasite worms) da Turanci. Duk da cewa tsutsa (worm) ita ce gamammen sunansu, amma, suna da nau'o'i daban-dabankamar tsutsar ciki ko micijin ciki (roundworms) da wadda ke rayuwa a jikin itatuwa (woodworms ko pinworms) da kurkunu (threadworms) da matsattsaku (leech ko eelworms) da waxandakan haifar da gwaiwar jijiyar shuka (root knot nematodes) da daisauransu. Waxannan tsutsotsi suna rayuwa a wurare da dama kamar jikin mutane da tsirrai da kasa da ruwa da gavar teku da sauransu.

Kaxan daga cikin mutane ne suke da masaniya a kanwaxannan nau'oin tsutsotsi, waxannan halittu ne masu yawan gaske kuma suna rayuwa a ko'ina. Ana iya samunsu a cikin qasa ko a taka su da qafa a gavar teku, a wanilokaci sukan rayuwa cikin kogi ko a bigire (wuri ko sarari)sannan sukan rayuwa a shuka irin su dankali.

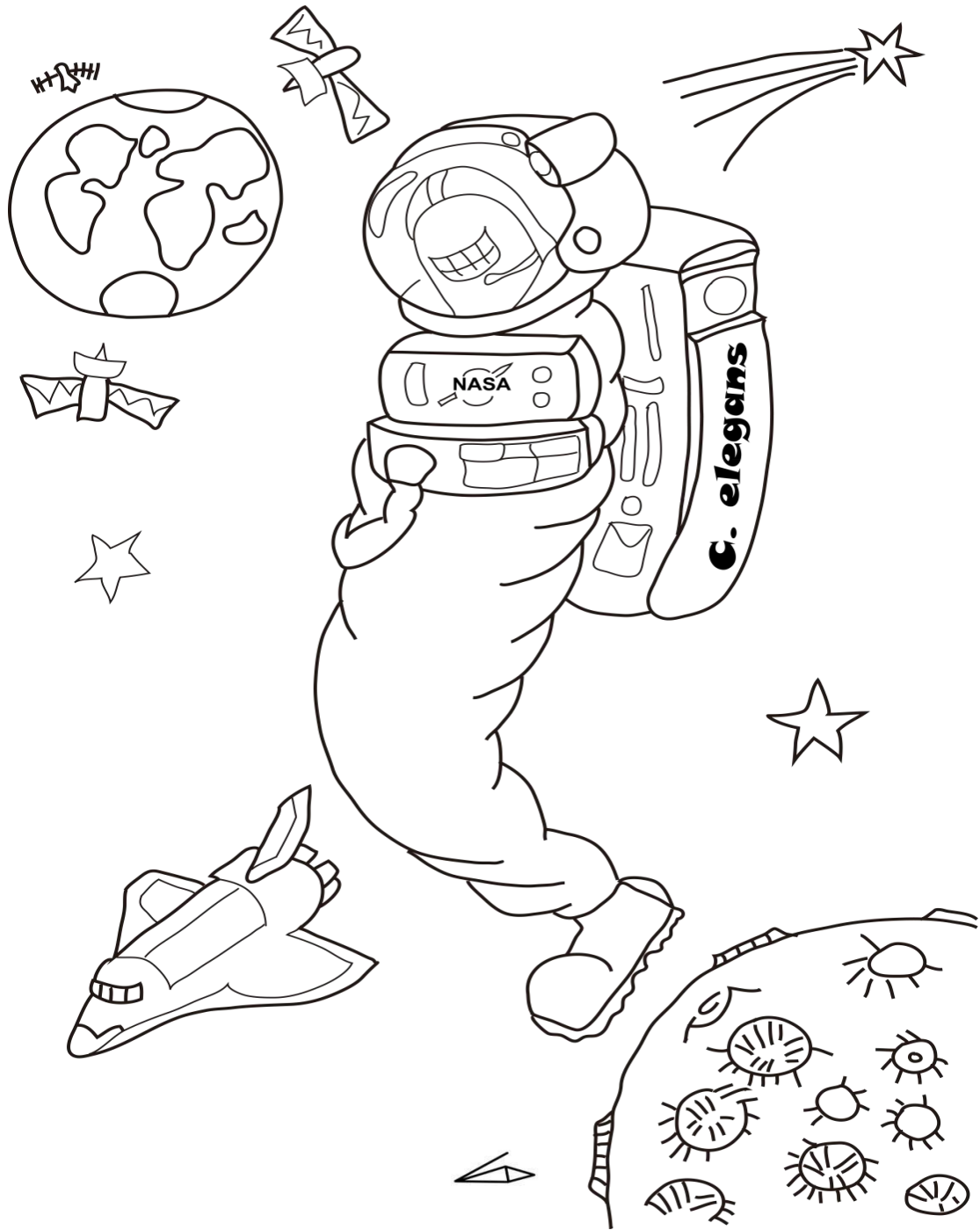
Ba kasafai ido kan ga tsutsar ciki ba musamman na jijiyar tsirrai saboda qanqantarta, a wani lokaci sai da taimakon nau'urar hango qananan halittu (microscope) ake ganin ta. Waxansu tsutsotsin ciki suna da girman da za a iyakimanta su da tsawon mita. Irin waxannan tsutsotsi an san da su saboda ta'asar da sukan yi wa tsirrai da dabbobi har da mutune. Waxansu nau'in tsutsar na da muhimmanci a rayuwa (a qasa da ruwa), suna bayar da gudummuwa a fahimci irin yadda suke (a wurin) da kuma daxewar su a waxannan sassa.

Wannan littafi ne da masana tsutsotsin nan suka shirya bayanai masu nasaba da tsutsar ciki ta amfani da kalmomi da haruffansu suka fara daga A zuwa Z saboda ku fahimce su kuma ku gano hikimar masana kimiyya da nazarin da suka yi a kan tsutsa ta kowace fuska.

Astronaut (Xan-sama-jannati)

Lokacin da `yan-sama-jannati suka jima a sararin samaniya, jikinsu ya yi rauni, ya zama barazana ga qudirorinsu, saboda haka, masana ilmin kimiyya suka xebi tsutsar ciki mai suna (roundworm *Caenorhabditis*) zuwa sararin samaniya da nufin gano musabbabin raunin jikin nasu (`yan-sama-jannati).

Tsutsotsin sun rayu a cikin rokar da aka harba a Columbia a shekara ta 2003 domin ta isa sararin samaniya. An tarar da su da ransu a jallon (aluminium tubes) da aka xura a saharar Texas. An sake aikewa da irin waxannan tsutsotsin ciki sararinsamaniya a shekara ta 2011, inda aka magance matsalar raunin jikin `yan-sama-jannati baki xaya.

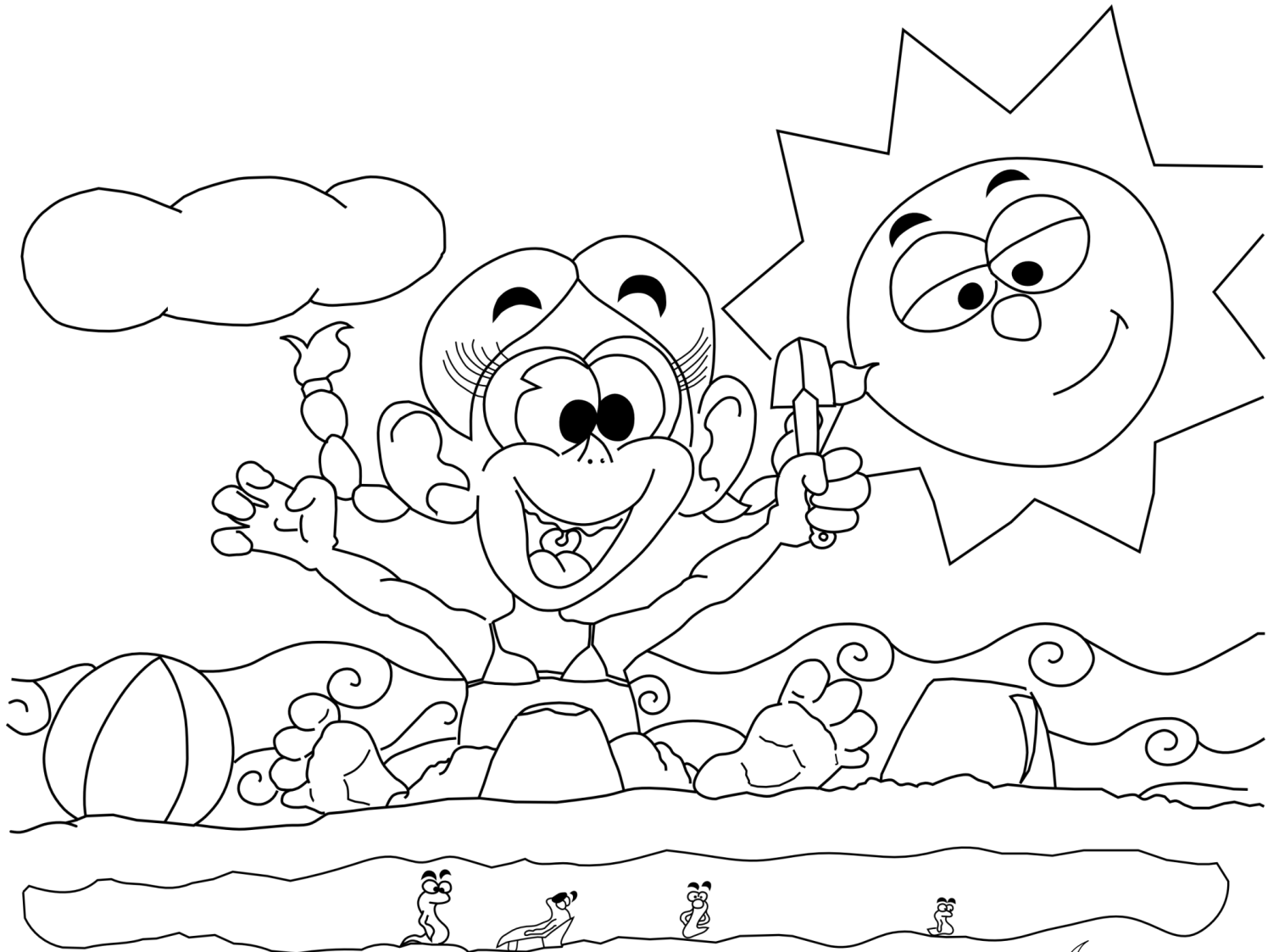


Beach (Gavar teku)

Kuna zaton babu wata halitta da ke raye a qasar gavar teku? Abin da kake gani, na iya zama wani abu daban da zaton da ka yi! Qananan halittu dangin tana na rayuwa a cikin qasa, aduk lokacin da ka haqa rami mai kusurwa huxu; kowace kusurwa mai tsawon mita biyar, ka sani ka tashi hankalin waxannan qananan halittun a cikin qasa aqalla miliyan 50. Ba kuma ana nufin nau'i xaya ne ba, a'a, aqalla nau'i daban-daban har guda 50.

Ido ba ya ganin abincin qananan halittu dangin tana (earthworm) da ke qasa, sai da taimakon na'ura. Galibi, gansa-kuka da wasu qwayoyi minimini ne abincinsu. A wanilokaci sukan cinye junansu.

Abin mamaki ba ya qarewa kamar yadda wani al'amarikan auku da gyautonka, hakan kan auku da dabbobin dawairin su bareyi da zakoki da jakunan dawa da ke Afirka... abune xan qil. Wato, a gavar teku akan samu wasu nau'o'in tsutsotsi waxanda suke rayuwa a nan. Wani lokaci kuma suna iya rayuwa a cikin halittun da ke cikin tekun saboda kusancinsu da su (halittun cikin teku).



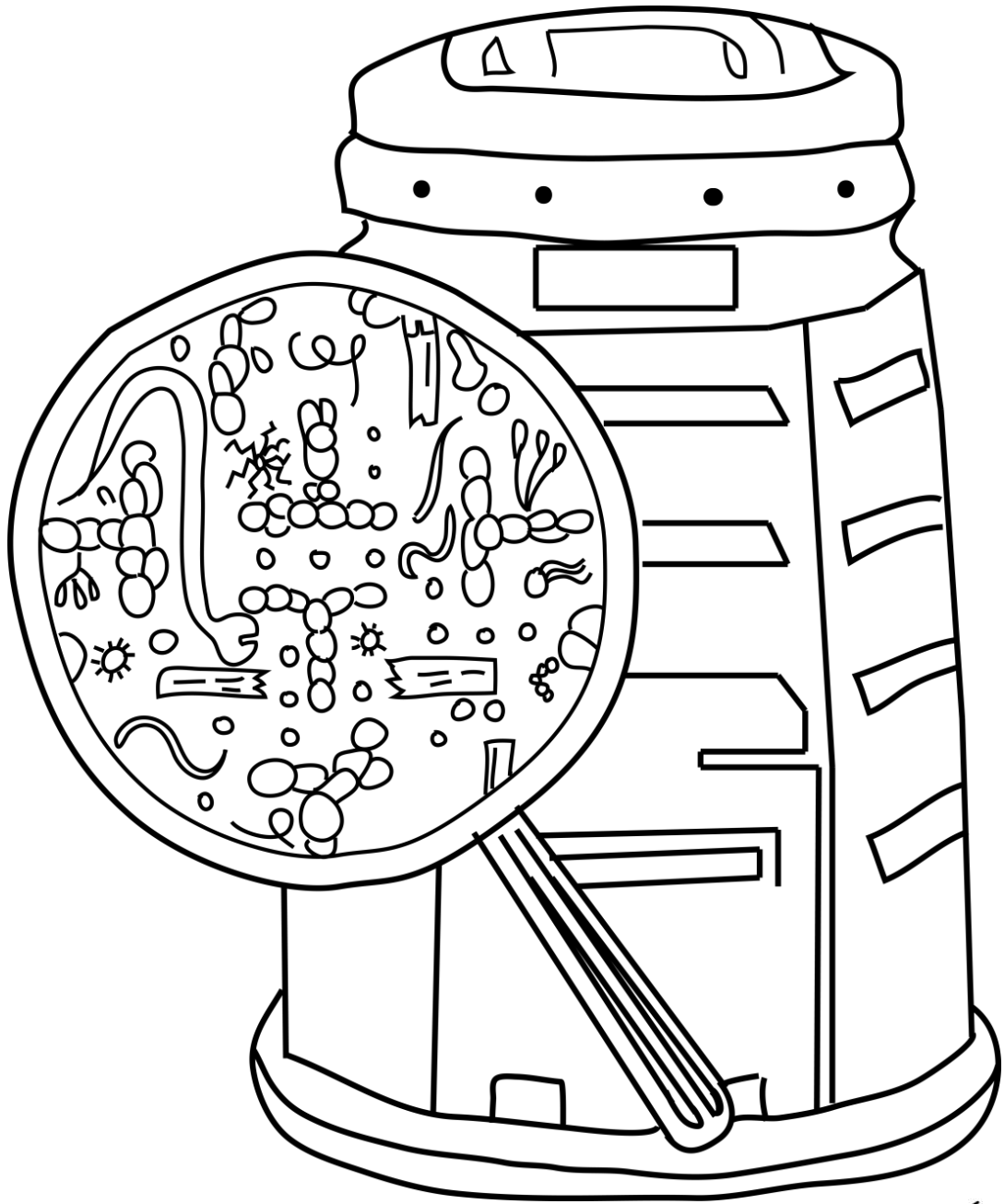
Apolonio

Compost (Takin-juji)

Takin-juji na xauke da rayuwa!

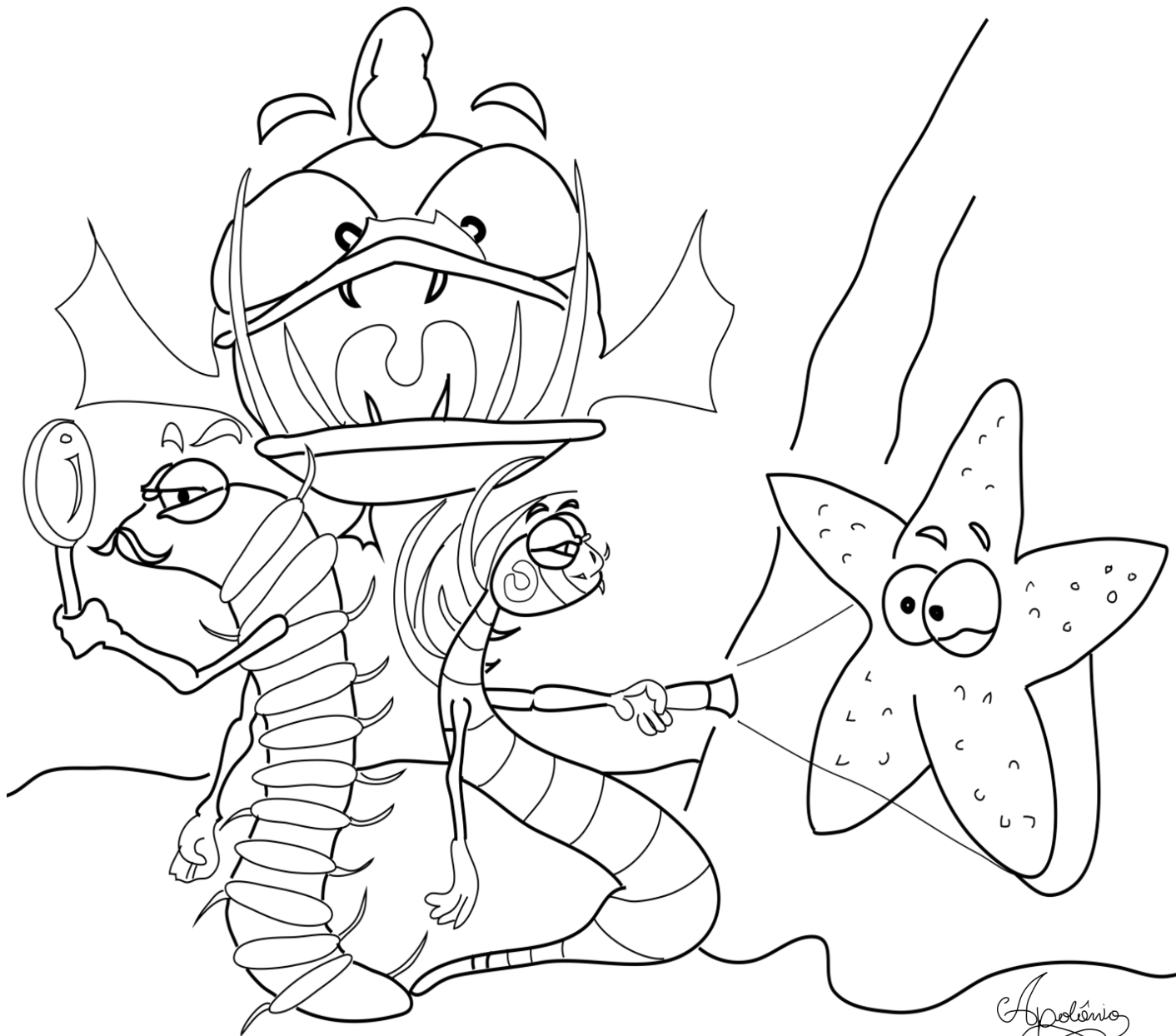
Qwayoyin halittu minimini kamar su bakteria (bacteria) da fungi (fungi) da (springtails) da qanananqwari kamar qadandoniya (millipedes) da gwazarma dashanshani (centipedes) da su tana da dangoginta kantattaru su sauya shara zuwa sinadari mai gina jikin shuka. Waxansu daga cikin waxannan qwari, ana iya ganin su da ido ba tare da gudummuwar na'ura (microscope) ba. Ammawaxansu tsutsotsin, ba a iya ganinsu sai da taimakonna'urar maikuros-kofi (microscope). Abu ne mai kyau mutum ya ware wurin yin juji a gona ko lambunsa, inda zairiqa tara duk wani nau'in abin da ba ya so na kayan marmarida kayan miya ko dai duk wata shara daga lambunsa. Dukranar da aka kwashe jujin aka kai gona, ya zama taki wandakan taimaka wa shuka sosai. Hanya ce mafi kyau a raya gona, ko ba haka ba?

Wasu kuma sukan ware wani wuri su riqa kona shararsannan kuma su riqa zuba mata ruwa daga lokaci zuwa wani lokacin, ta yadda tokar sharar za ta ruvava ta zama sinadarin da zai gina shuka. Takin-juji (compost) yana da tasirin gaske wajen raya shuka.



Deepsea (Cikin Teku)

Cikin teku tamkar wata duniyar halittu ce a inda wasu manyan dabbobi da kifaye da tsutsotsi da kaddai da kwaxida sauran makamantansu suke rayuwa. Saboda haka, akan samu nau'oin kifaye da tsutsotsi da yawa kamar kifi mai hasken jiki (luminescent jellyfish) da mai siffar tauraro (starfish). Wasu tsutsotsin nan ne muhallinsu, a nan suke samun abincinsu. Duk da dai rayuwa suke irin ta namun dawa.



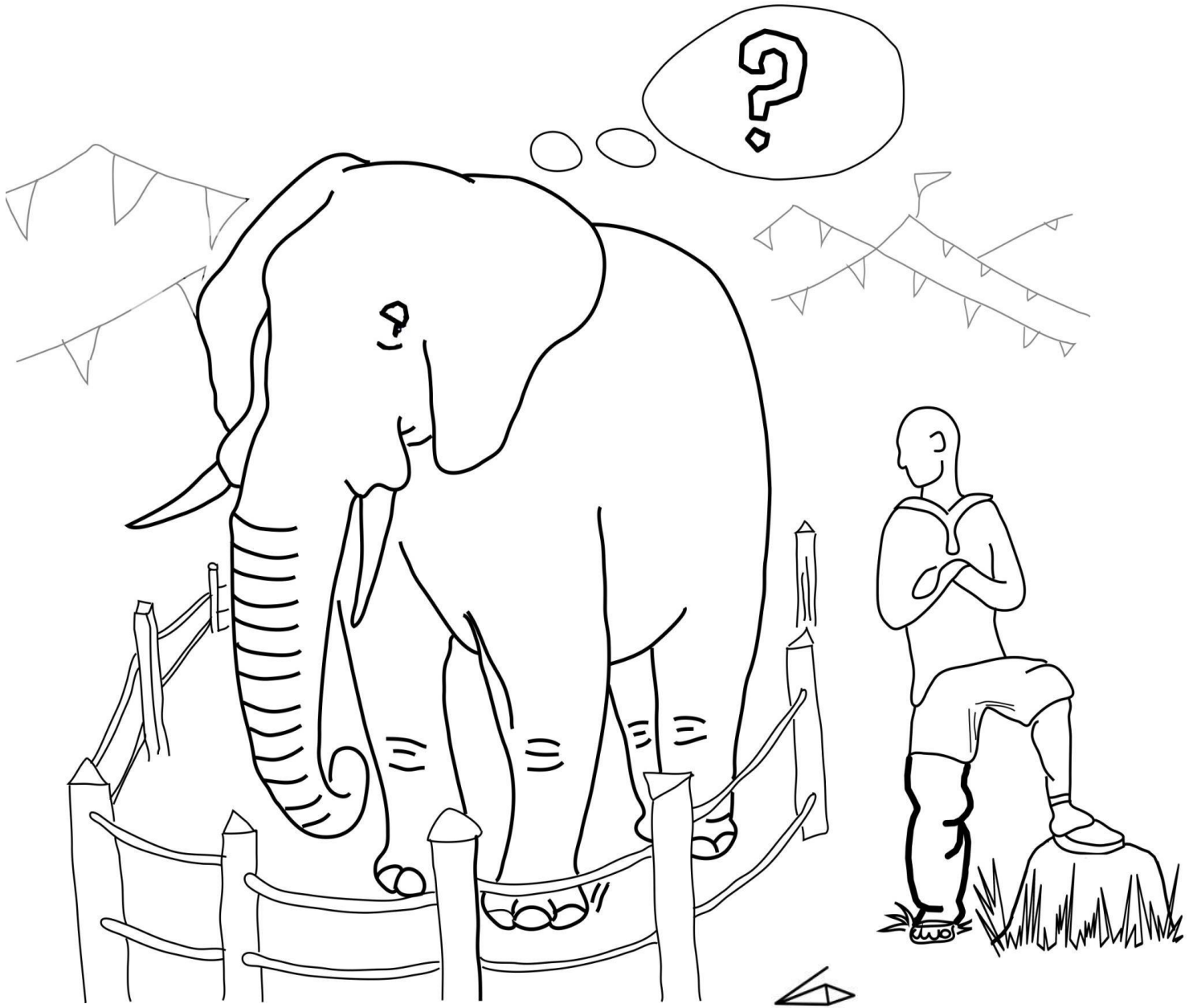
Apolonio

Elephant (Giwa)

Ko kun san waxansu daga cikin nau'o'in tsutsar ciki kan sa mutum ya yi qato kamar giwa? Sam barka gama'abota giwa! Ko ba haka ba?

Cutar da `yan miniminin tsutsar ciki ke haifarwa, kan samutum ya yi jibgege kamar giwa, a sanadin taruwar tsutsotsin a ruwan jikin mutum wanda kan sa ruwa ya taru a sashen jikin mutum. Wannan kan haifar da kumburi, qafafu su yi tundurmi kamar na giwa.

Allah ya tsare!



Fossil (Kayan Tarihin Dauri)

Akwai tsutsotsi minimini (nematodes) da ke rayuwa ajikin dabbobin da suka rayu a shekarun baya duk da yakesun mace amma waxancan tsutsotsin suna wanzuwa acikin qasa. Muna da masaniyar akwai tsutsotsi da suke rayea jikin tsofaffin bishiyoyi da aka yi gabanin adana tarihi, wato su ne matattara ko ma'adanai na tsutsotsi. Kayantarihin dauri da suka ruve irin itatuwa, matattarar tsutsotsin. Ana haqon (farautar) qwari a jikin kayan tarihin dauri.

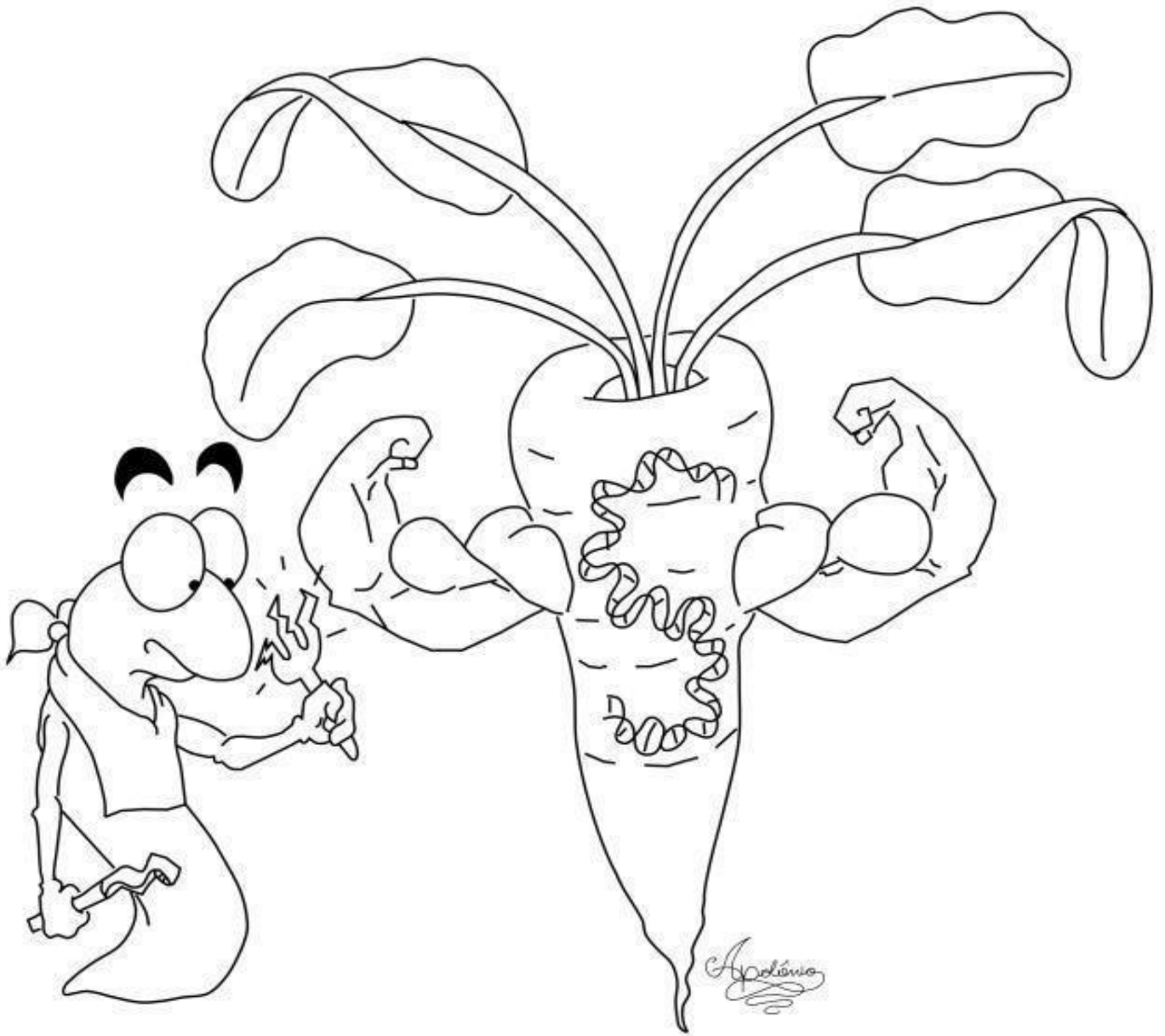
Masana kimiyya sun gano wasu qwari na xauke da waxannan tsutsotsin. Bincikensu ya bayyana akwai tsutsotsin da ke rayuwa a cikin qwari musamman a zamanin Jurrassic.

Ba mu da masaniyar asalin tsutsotsin amma muna dayaqinin ana kyautata zaton ruwa ne matattararsu tun farko.



GMO (Tasarifin Halittu)

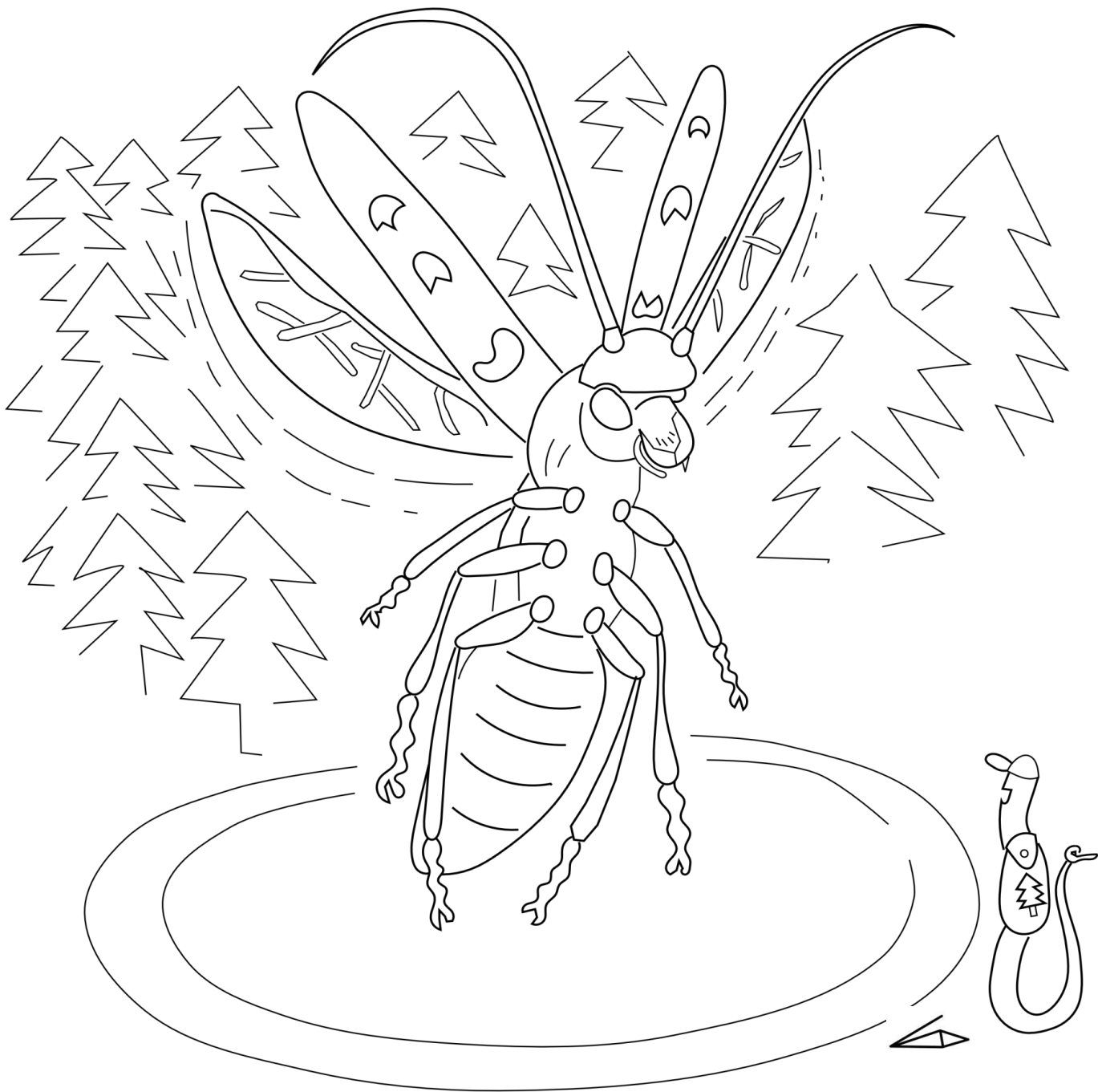
Tasarifin halittu (Genetically Modified Organisms) dabbobi ne da tsirrai ko qwayoyin halittu da masana kimiyyasuka sauya masu halittarsu. Duk da yake xan-Adam kan iya qara wasu xabi'u a kan qwayoyin halittar gado (DNA), akan sami ganye ko iri da akan ba shi kula kada qwayoyin cuta daga tsutsotsi (nematodes) da sauran qwayoyin cuta(pathogen) su illata su. Ba ko da yausha ake bukatar maganin qwari ba saboda tsaron lafiyarmu da na muhallinmu.



Hitchhike (Kama-da-juna)

Waxansu qananan tsutsotsi suna da sammatsi. Qananan tsutsotsin da ke jikin itace kan shige jikin gungura-kashi, ya yi ta yaxa su daga wannan bishiya zuwawaccan. Gungura-kashi kan yi rami a jikin bishiya a matsayin hanyar abincinsa da kuma wurin nasa qwoyayen, su kuma qananan tsutsotsin bishiya kan ci gajiyarwaxannan ramuka, su kai ga hanyoyin da bishiya ke tsotsoruwa da abincinta. Ta haka sukan yaxu bayan sun sami wurin zama daga qarshe sukan toshe hanyoyin da bishiya ke samun abinci da ruwa sai ta mutu. A duncule, gungura-kashi da tsutsotsin cikin bishiya su ne tushen baza cuta.

Abin takaici, dangantakar kama-da-juna da tsutsar cikin bishiya tamkar gudun hawa tudun qanqara ne. Alaqartasu (kama-da-juna da tsutsar cikin bishiya) haxari ne babba ga itatuwan da ke dazuka a duniya baki xaya.

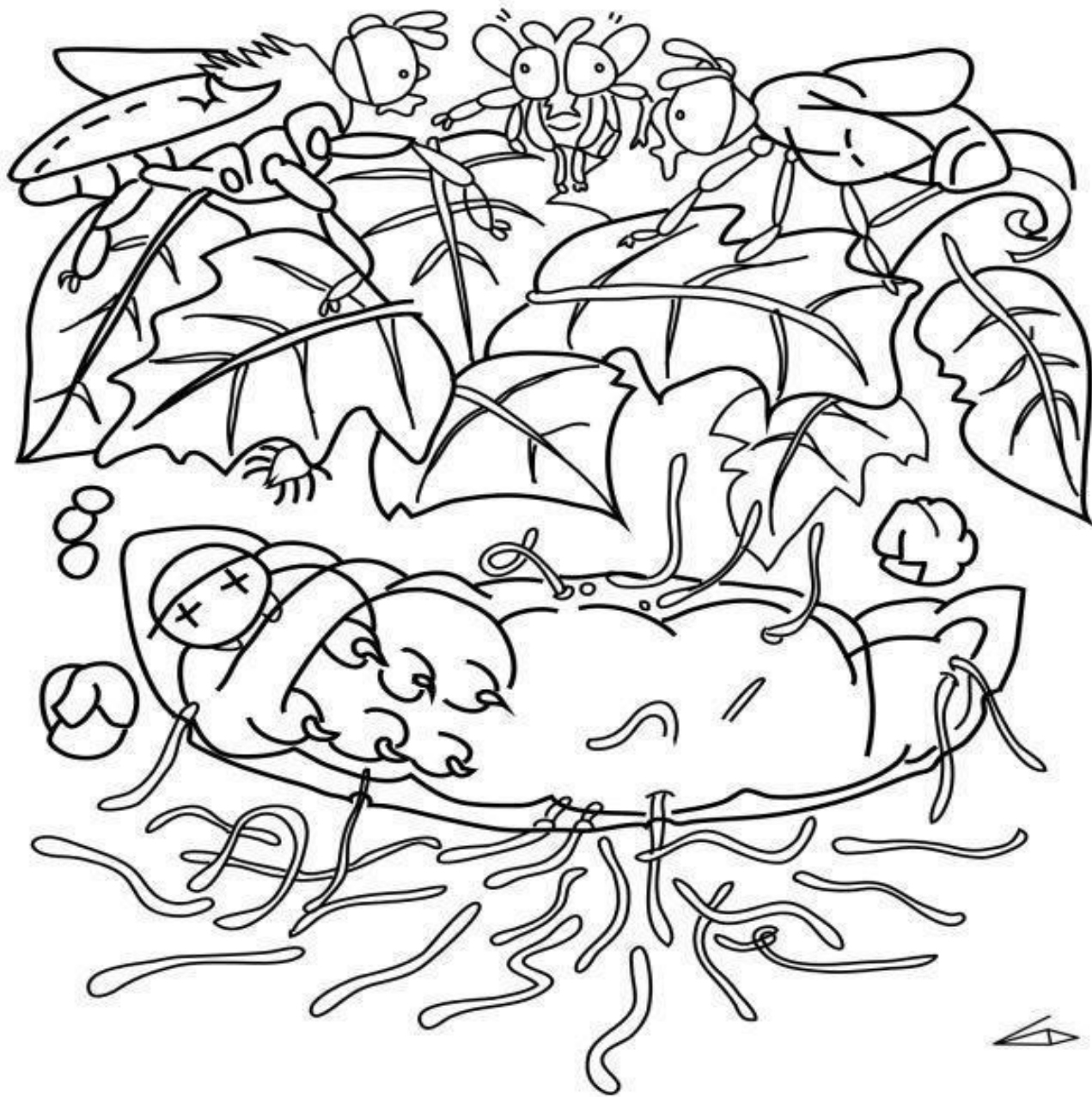


Insect (Qwari)

Qwari kan iya addabar kayan marmari, su lalata ko suyi rami a jikin bishiyoyi. Abin al'ajabi a nan shi ne, tsutsotsincikin bishiya kan zama garkuwa a gare mu tun da sukan farmaki qwari.

Qananan tsutsotsi tun suna minimininsusukan shiga labar qwari, qwayoyin cutar da suka xiba kan ninka kansu a cikin labar kuma su samar wa kansu da abinci. Ta haka sukan ninku dubbai a cikin labar har su yi sanadin mutuwarasa.

A sakamakon hakan muna iya kare tsirrai daga cuta batare da mun yi amfani da sinadarai ba amma wasu nau'o'intsutsotsin na iya zama kariya ga rayuwa.



Jungle (Dokar Daji)

Jijjuyawar rayuwar halittun da ke rayuwa a jikin wa]ansu dabbobi na da]aure kai. Wa]ansu dabbobin masu yawa kan zama masu tsani har su kammala rayuwarsu.

Abin ta'ajibi shi ne idan aka]auki wannan tsutsar (nematode) mai suna *Myrmeconema neotropicum* da makamantansu da ke dajin kudancin Amurka, sukan rayu a kashin tsuntsaye. {wari kan cinye kashin tsuntsayen daga nan an sami sauyin she}ar tsutsotsin zuwa }wari. Tsutsar halitta ce da ke rayuwa a cikin wa]annan }wari, takan kumbara cikinsu daga nan sai launin jikinsu ya sauya daga ba}i sai ya yi haske ya koma kamar launin inabi!

Tsuntsaye kan bi inabi (kayan marmari), sukan farauci }wari masu launin inabi daga nan tsutsotsin ke yin ya]o daga }warin zuwa tsuntsayen. Bayan tsuntsayen sun ci }warin sukan yi kashi mai]auke da tsutsotsin.



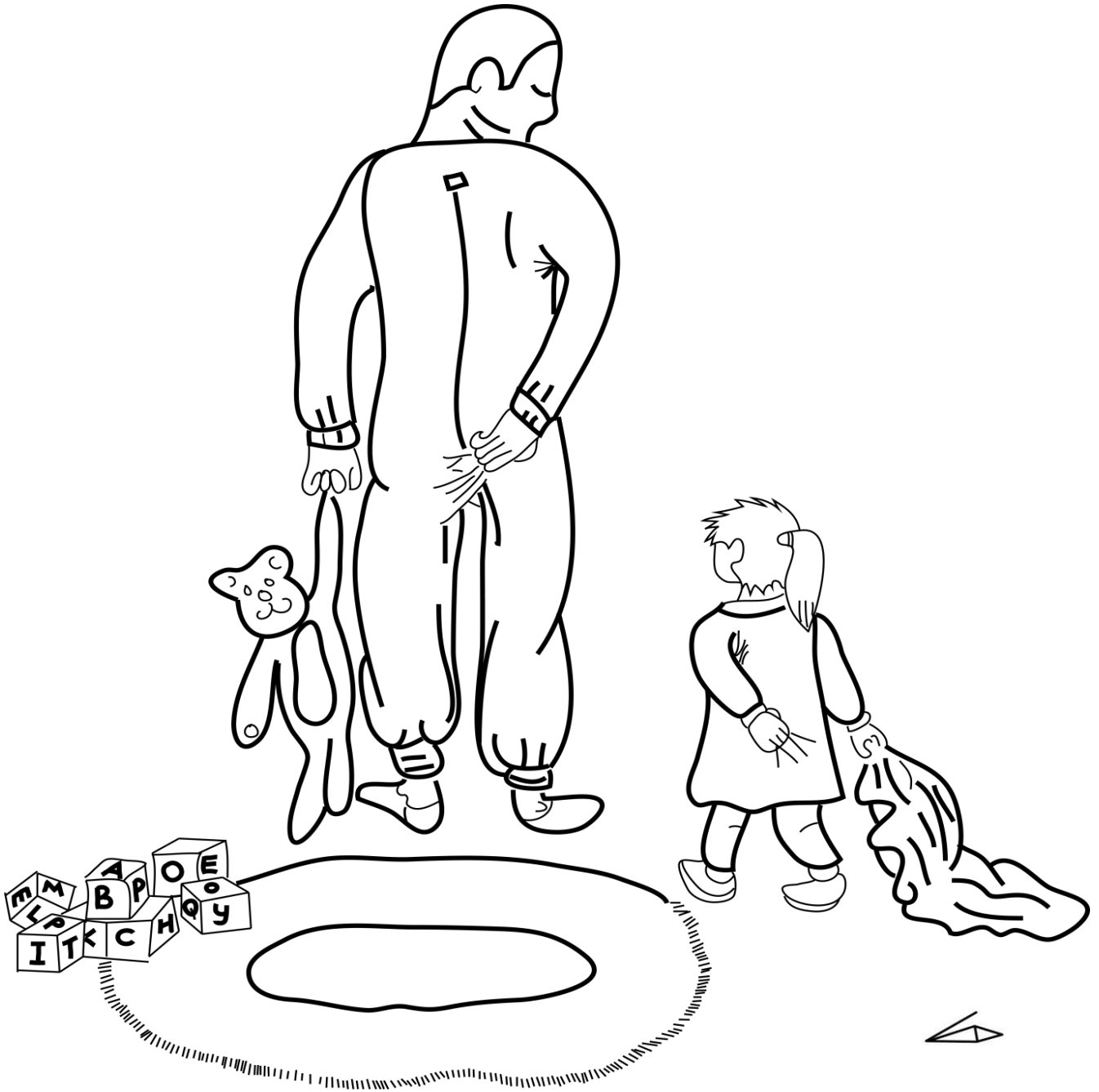
Apelino

Kid (Yaro/yarinya)

Qaiqayin dubura na damun ka? Babu mamaki kana datsutsar ciki.

Tsutsar ciki ba baquwa ba ce ga yara. Akan sami macen tsutsar ciki tana sa qwoyayenta cikin dare a dab da duburar mutum ta cikin hanji, qwoyayen kan qyanqyashe da zarar iska ta hura su. Motsin tsutsotsin ke haifar da qaiqayin dubara. Yaro na sosawa sai qwoyayen su bi yatsunsa daga nan sai ya xauki kayan wasansa, su kuma su bi kayan wasan yaro. Yaro na kai kayan wasa bakisai ya haxiye kuma su zame masa cuta a ciki.

Yara, ku yawaita wanke hannuwa! Kun ji?



Love (Jima'i)

Kowane nau'i na tsutsotsi na da hanyar da take saduwa, kamar yadda mutane ke yi. Akwai mace akwai namiji a cikinsu. Waxansu daga cikinsu mata-maza(hermaphrodites) ne: su ne mazan, su ne matan, domin haka suke yi wa kansu barbara da kansu.

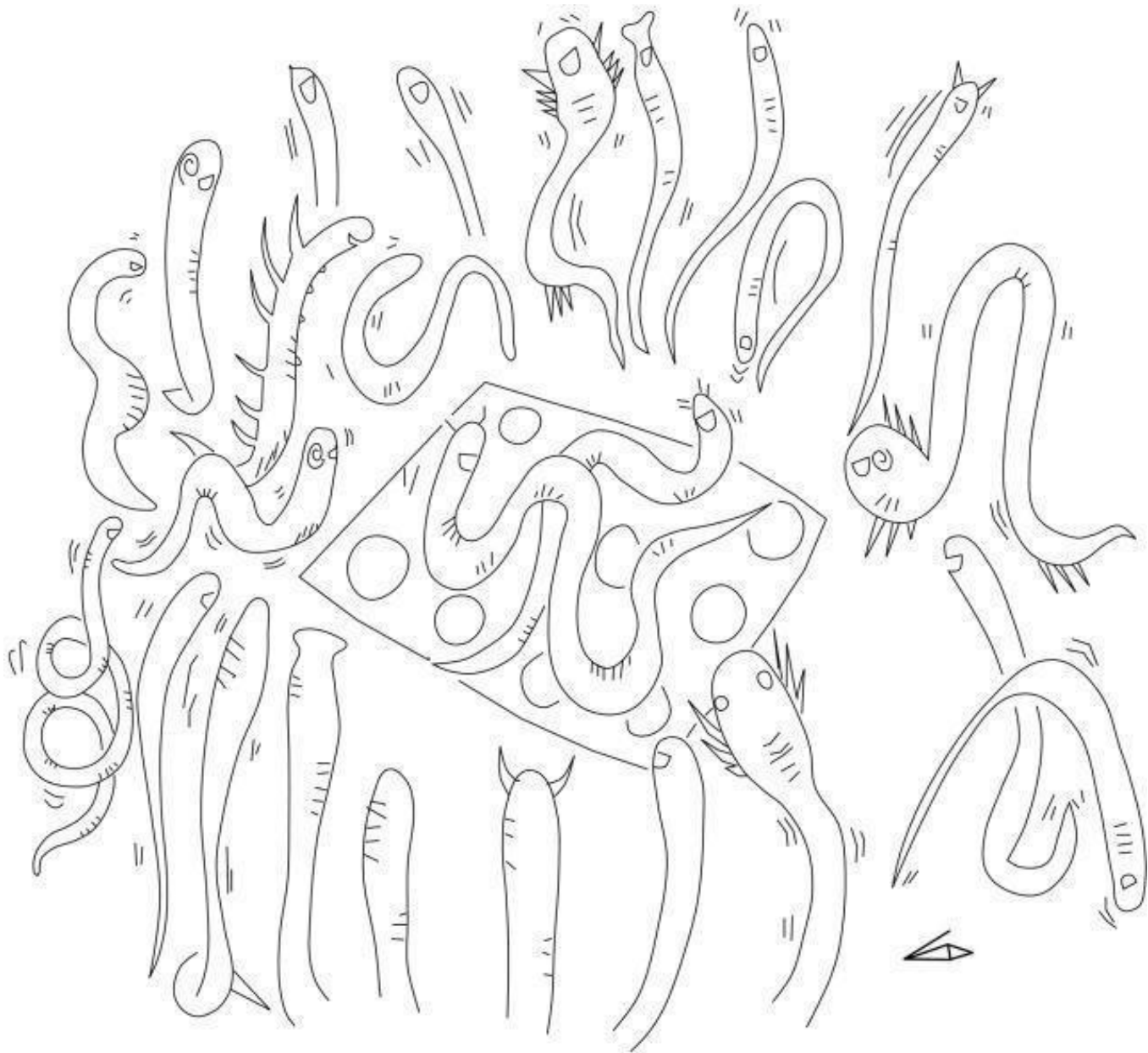
Wani lokaci babu jinsin mata, su ne ke barbarar kansuamma jefi-jefi. Barbara takan gudana a tsakanin jinsi; inda namiji kan barbari mata-maza. Sukan yi wani abu mai kamada rawa yayin da suke yin barbara.

Masha Allahu! Kalmar 'love' wadda ke da ma'anar 'so'ko 'qauna', ta samu abin da masana suke kira da yaxon ma'ana. Abin nufi a kimiyyar tsutsotsi da tsirrai kalmar tana da ma'anar 'JIMA'I'.



Movement (Motsi)

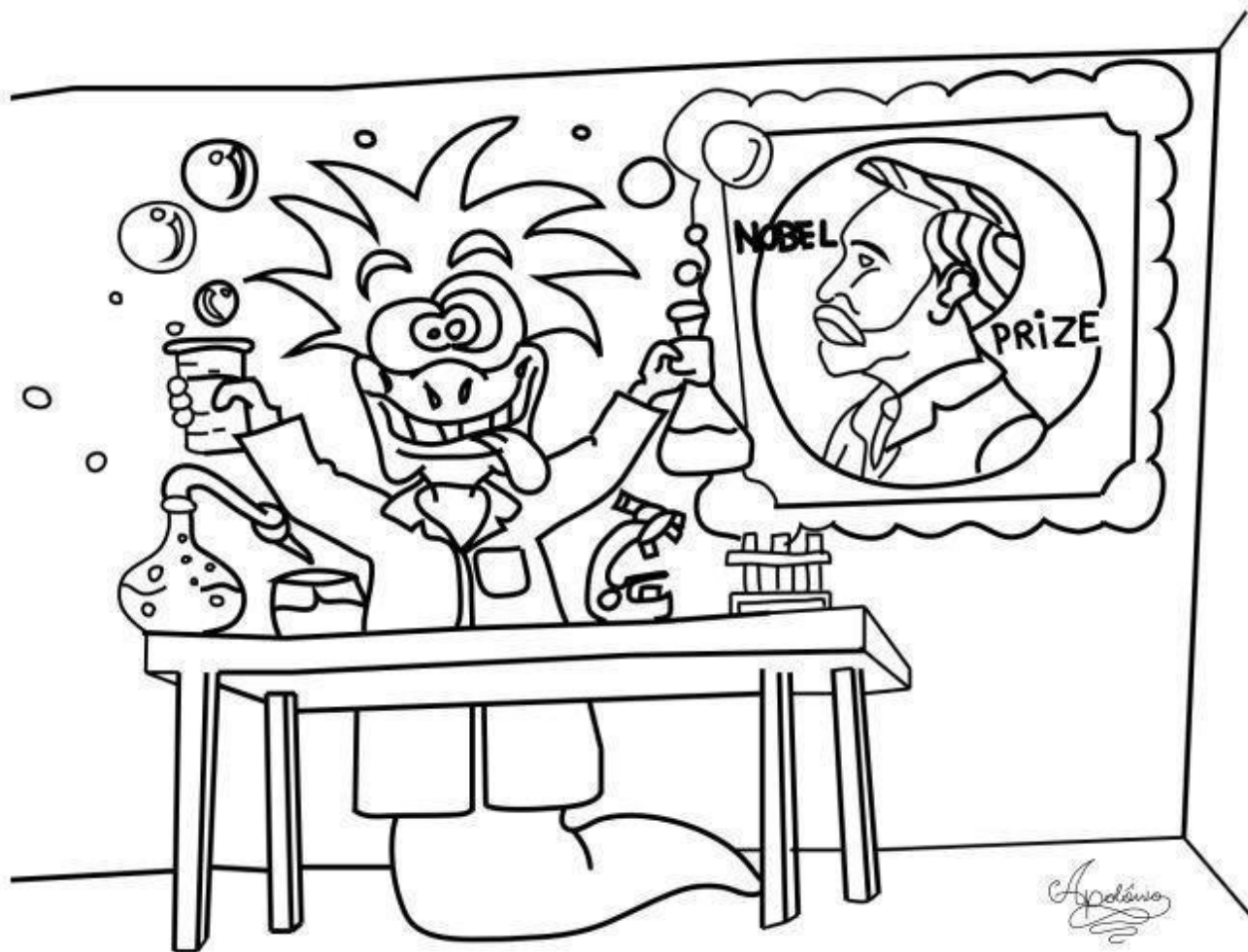
Tsutsar ciki na da karsashi idan tana tafiya kumatafiyarta kamar yadda maciji yake yi ne, takan yi yanqayi duk jikinta ya motsa daga kai zuwa bindi (wutsiya). Waxansu tsutsotsin ciki ba su da karsashi, waxansu kumaakwai hanzari, saboda haka ana iya tantance nau'oinsu tamotsin da suke yi. Wasu daga cikin tsutsotsin ciki gajeru nekuma suna da kauri da doguwar jela ko bindi, kamar yaddasassan jiki ko rassan bishiya ke aiki daban-daban haka bindin tsutsar ciki ke aiki idan tana tafiya; ta riqa hawa da sauka kamar tafiyar labar malam-buxe-littafi (caterpillars).



Nobel prize (Lambar yabo)

Wata nau'in tsutsa mai suna '*Caenorhabditis elegans*'ta yi fice a wurin masana ilmin kimiyya saboda sun yi amfanida ita wajen amsa tambayoyi masu alaqa da rayuwar kimiyya ko kimiyyar rayuwa. Misali, ta ya ya qwai ke sassauyawa ya zama tsutsa? Ta ya ya tsutsa ke jin qanshinabinci? Ko ya ya take motsi?

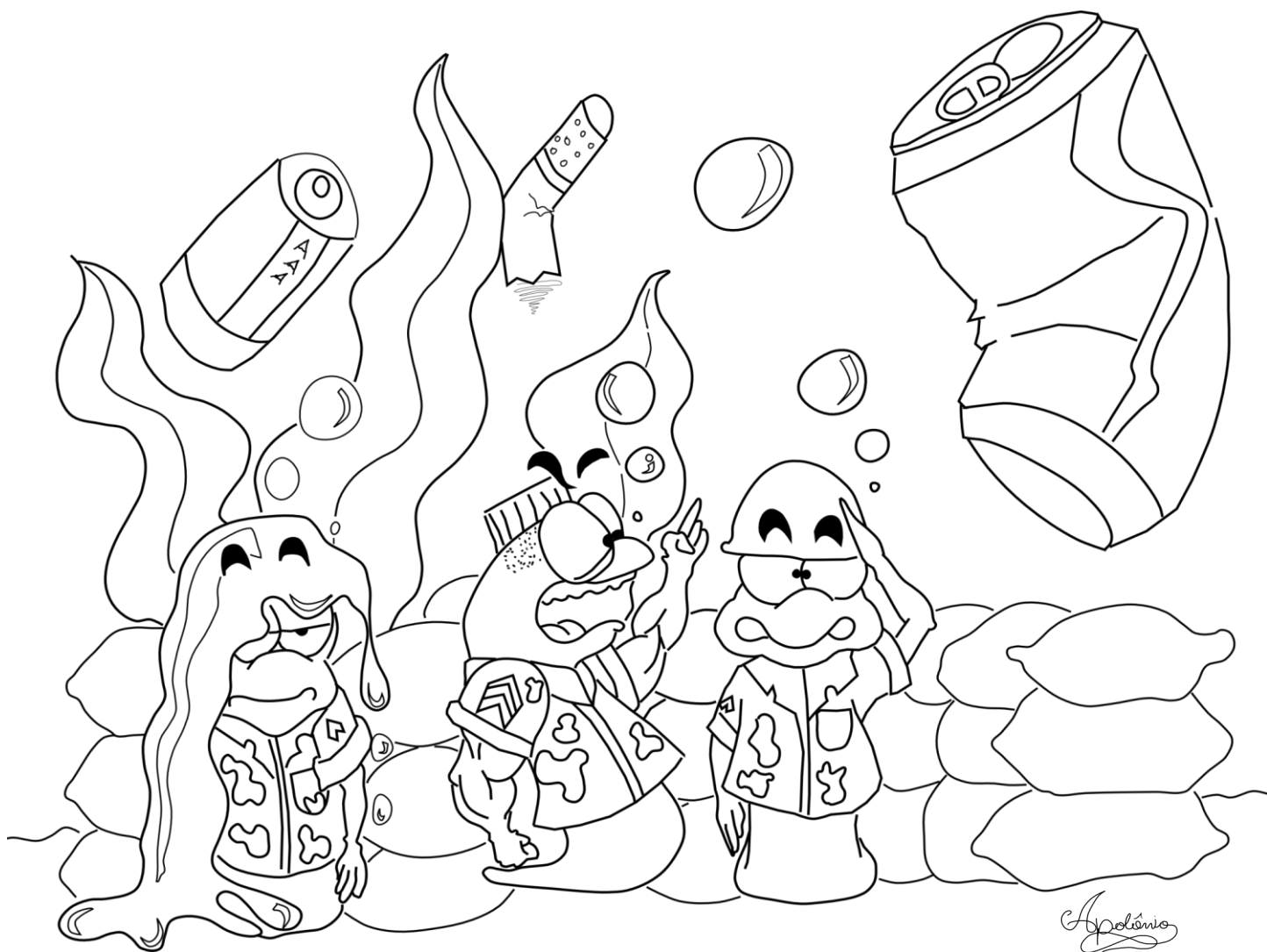
A cikin shekarun nan, an ci nasarar samo muhimman bayanai tare da inganta sababbin hanyoyin nazari da aka yiamfani da qananan tsutsotsi wajen yin gwaji. Sakamakon haka, ya sa aka ba waxansu qwararrun masana kimiyya shida (6) lambar yabo har guda uku daban-daban a tsakanin shekara ta 2002 zuwa ta 2013 sakamakon bincikea kan wannan tsutsar mai suna '*Caenorhabditis elegans*'.



Ocean (Teku)

Teku na da muhimmancin da ba ya misaltuwa a rayuwar mutane, amma haka bai sa mun ba ta kulawar da ta dace ba. Waxansu daga cikin rashin kulawar da ake yi wa teku sun qunshi zuba mata shara da mai da kuma guba. A gaskiyar magana, hakan illa ce sosai. Saboda waxannan xabi'u suna gamawa da rayuwar dabbobin da ke cikin teku. Idan wani bala'i ya auku a harkar mai, gavar teku ake zuwaa wanke dattin, wanda hakan kan zama sanadin mutuwar dabbobin cikin teku. Waxannan halittu (*nematodes*) sun fi kowace halittar qarqashin teku yawa kuma suna da nau'o'i daban-daban. Gurbacewar muhallin da mai ke haifarwa nahalaka waxansu daga cikin tsutsotsin, amma waxansun sukan bijire, su jure, su ci gaba da rayuwa.

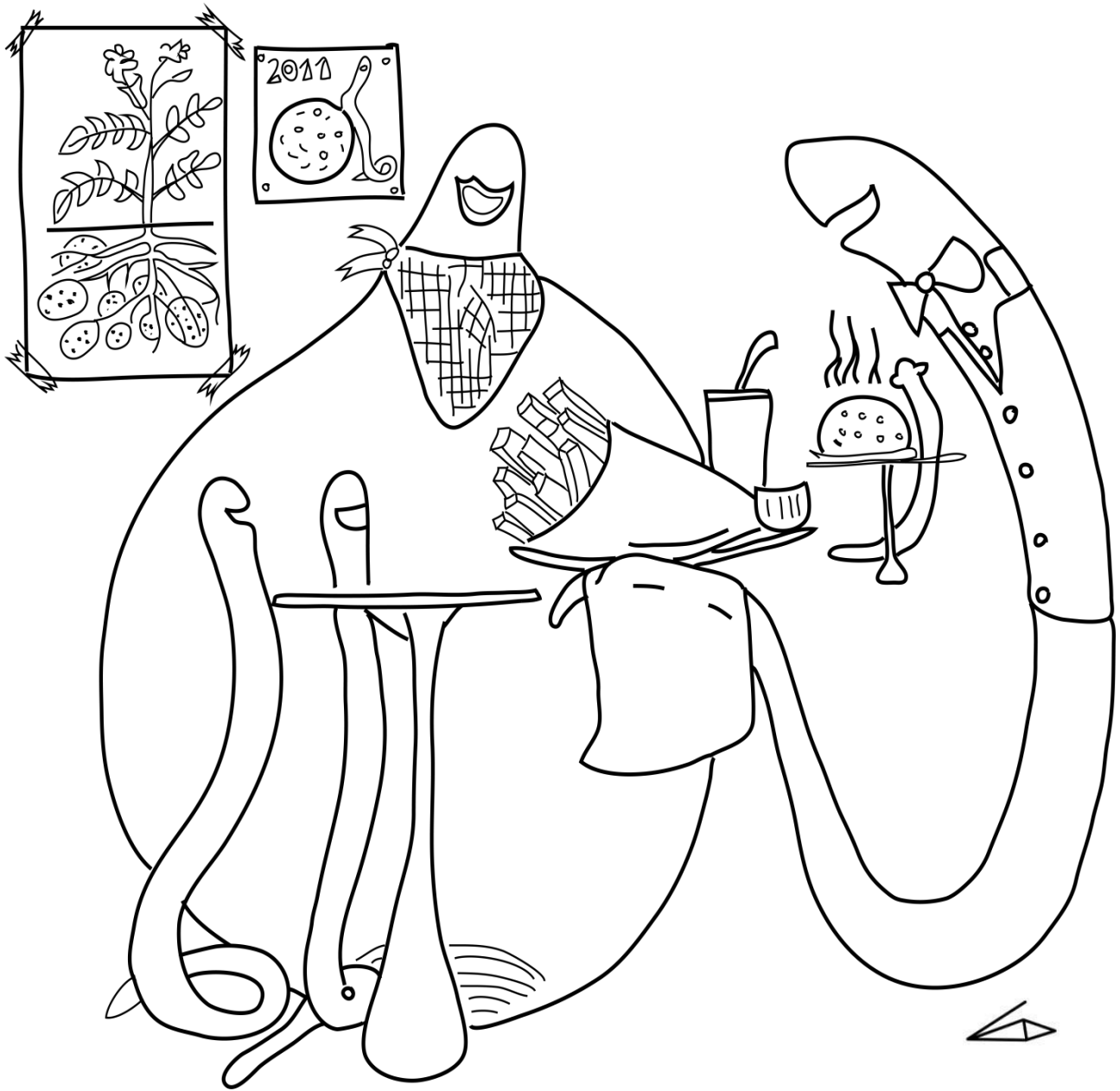
Masana kimiyya sun gano cewa waxansu nau'i na '*nematodes*' na iya karya lagon gurbacewar teku. Bincike akan '*nematodes*' na yin nuni game da sakamakon da gurbacewar teku ke haifarwa da gudummuwar '*nematodes*' wajen daidaita teku da kyautata ta.



Apolônio

Potato (Dankalin-Turawa)

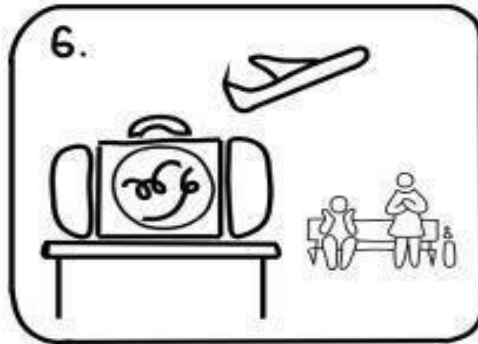
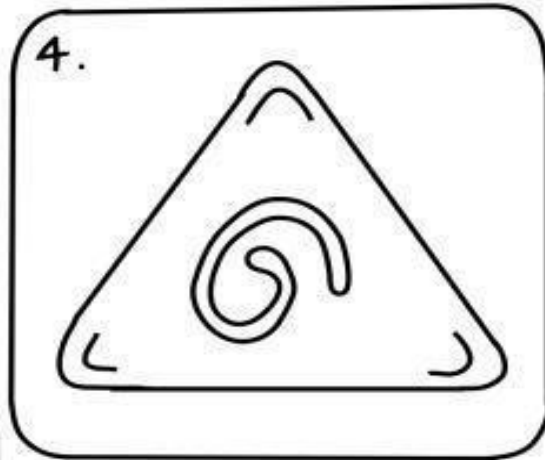
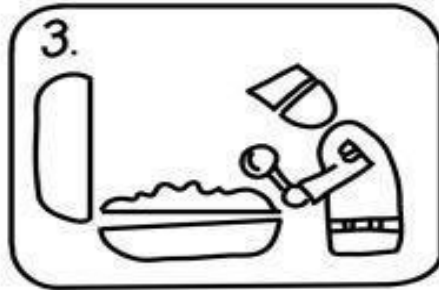
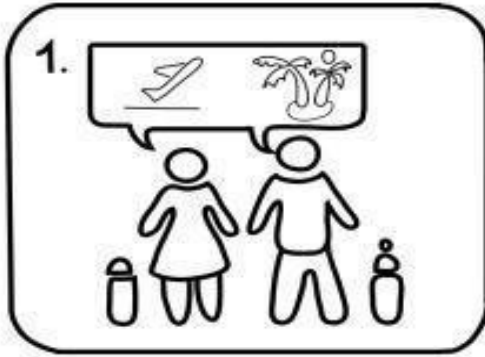
Muna jin dakin soyayyen dankalin-turawa dadafaffensa da kuma mandaqonsa, ko kun san dankalin-turawa na yin sankara? Gwaiwar jijiya (root knot nematodes) da sankara (potato cyst nematodes) na kama jijiyyar dankalin-turawa dagundarin `ya'yansa. Idan haka ta faru dankalin bai cika yin nagarta ba kuma manomi ba ya samun abin kirki idan an zohaƙe dankalin. Dankalin-turawan da ya kamu da gwaiwar jijiya, hakanna cutar da shi ya qi sha'awar gani (`ya'yan su zamaqanana, waxansu su zama kamar jijiya) ta yadda manomi ba zai ji qwarin gwiwar kai shi kasuwa ba, mai saye kuma ba zai ji sha'awar ya saya ba.



Quarantine (Killacewa)

Waxansu nau'o'in tsutsa kan cutar da tsirrai, sutsumburar da su ko su kashe su. A yawancin lokaci, tsutsarkan hana samun amfani na gari, musamman ga kayan miyada kayan marmari ko hatsi. Haka kuma shuke-shuke da akeyi domin qawata muhalli kan cutu daga waxannan tsutsotsi. Qasashen da ba su da irin waxannan tsutsotsin masu vata tsirrai sukan yi bakin qoqarinsu wajen daqile aukuwarannobar tsutsotsi, wato sukan ayyana waxannan tsutsotsicikin jerin annoba da ake daqile yaxuwarsu. Bugu da qari, jami'an shige da fice kan yi bakin qoqarinsu, su sa ido a kankayan abinci da ke shiga da fita a waxannan qasashen. Idan kuma suka kama kayan da ke xauke da tsutsotsin daake qoqarin daqile yaxuwarsu, sukan sa a koma da su inda aka xauko su ko kuma su lalata su xungum.

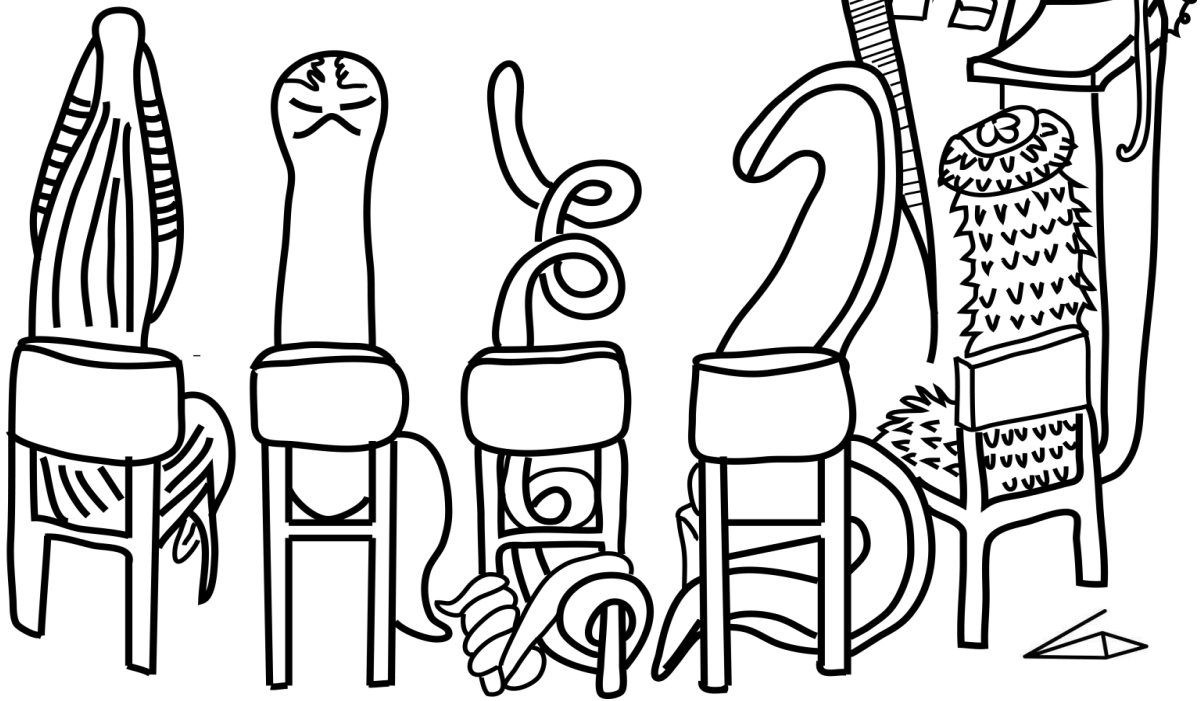
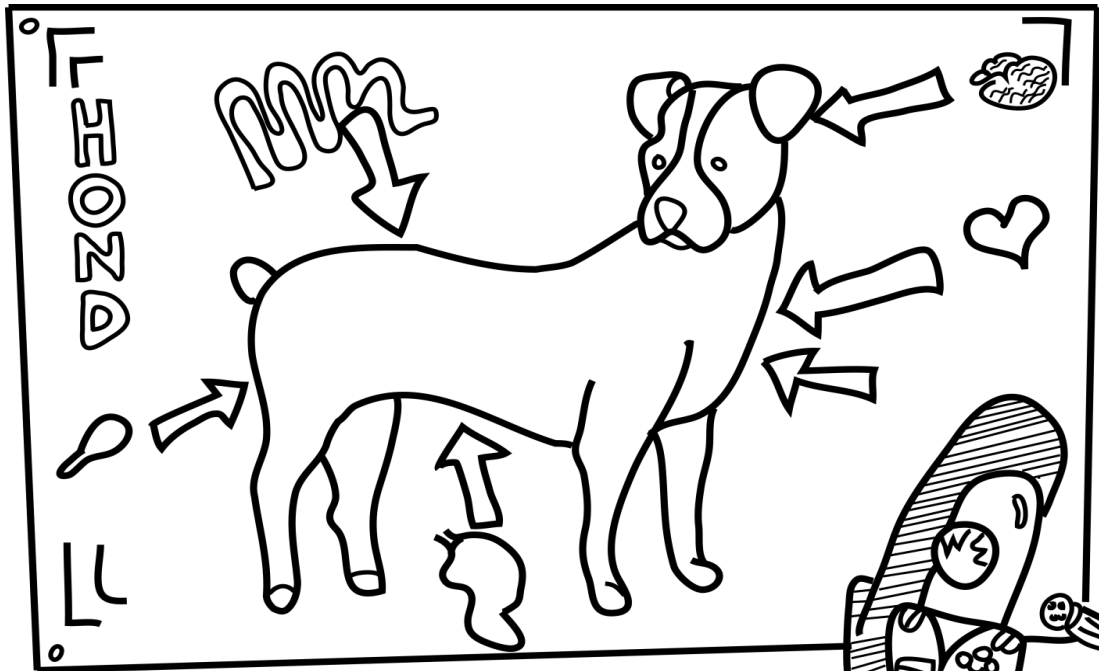
Kalmar da fi dacewa da wannan fassarar ita ce 'killacewa', amma mafassarin ya yi amfani da kalmar 'daqilewa', saboda qoqarin da akan yi wajen hana yaxuwarannobar tsutsotsin.



Retriever (Karen farauta)

Karnuka kan yi fama da tsutsar ciki daban-daban; tsutsar zuciya (heartworms) da ta huhu (lungworms) da ta hanji (hookworms and whipworms). Galibi qwayoyin cutar kan shigi karnukan ne ta wajen shayarwa. A wani lokaci kuma muhallin da suke rayuwa ke kawo su. Tsutsar cikin kan rayu a hanji da huhu da kuma zuciya. Ba a cika gane tsutsar ciki na damun kare ba, sai cututtuka sun far masa da suka qunshi: zubar da jini da haki da qanjamewa ko rama.

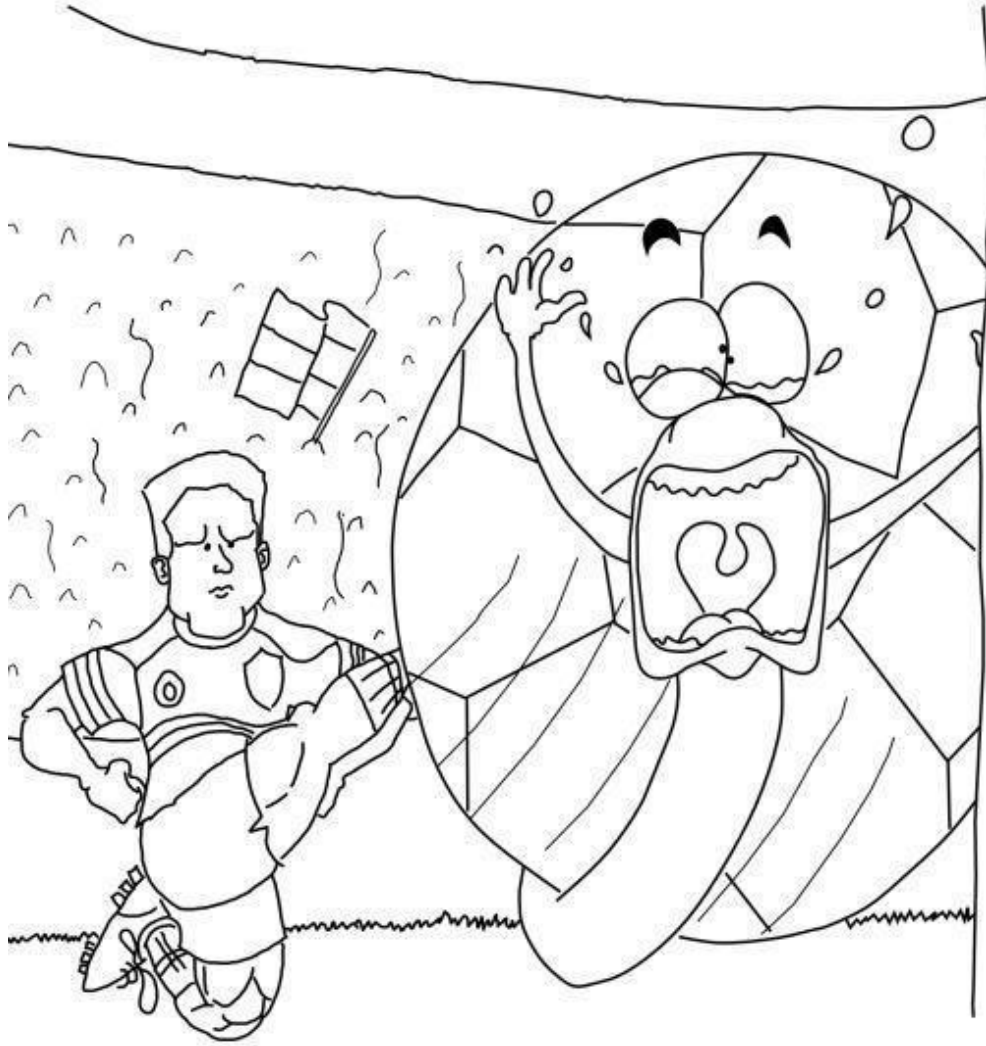
Bai wa kare maganin tsutsar ciki a kai a kai, bisa ga kulawar likitan dabbobi, hanya ce ta daqile cutukan, dominsai kare ya sami lafiya ne zai yi haushi da tsalle-tsalle.



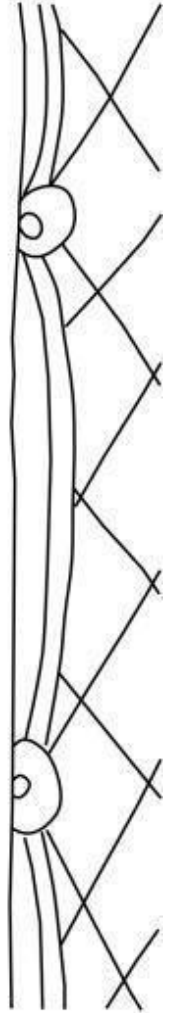
Soccer (Qwallon Qafa)

Filin qwallo kan sami kulawa. Akan shuka ciyawa, a bata ruwa kullum da kuma sauran xawainiya da ake masa. Akwai miliyoyin tsutsotsi a filin qwallo kuma suna murna dakulawar da ake yi wa filin wasan, bakin tsutsotsin na da tsinikamar allura, shi suke kafawa su zuqe danshin jijiyoyin ciyawar.

Idan tsutsotsin sun yi yawa a filin wasan qwallo sukan kashe ciyawar, ganyen ta ya soma yin ja, alamun ta mutu ke nan, daga nan sai filin qwallon ya gurgunce. Tsutsotsin da ke cikin filin qwallo na iya zama barazana ga `yan-wasa, amma `yan-wasan ba barazana ba ce ga tsutsotsin!



Arslano



Teeth (Haqora)

Tsutsotsi kan yi famfara kamar yadda yara kan yi, waxansu nau'in tsutsotsin kan yi famfara sau huxu kafin qarfinsu ya haxu (kafin su haxa qarfi ko girma). Haqoran waxansu daga cikin tsutsotsin kan bambanta kuma suna danasaba da abin da suke ci. Akwai tsutsotsi da ake kira makisa (predators), sukan ci jikin waxansu dabbobi saboda haqoransu na da kaifi sosai. Waxansu tsutsotsin haqori guda suke da shi kamar allura, shi sukan sa su tsotsi danshin jijiyoyin tsirrai, waxansu ba su da ko haqora! Sukan ci `yan halittu da ke cikin qasa su rayu. hmm... lagwada!



Unique (Abin al'ajabi)

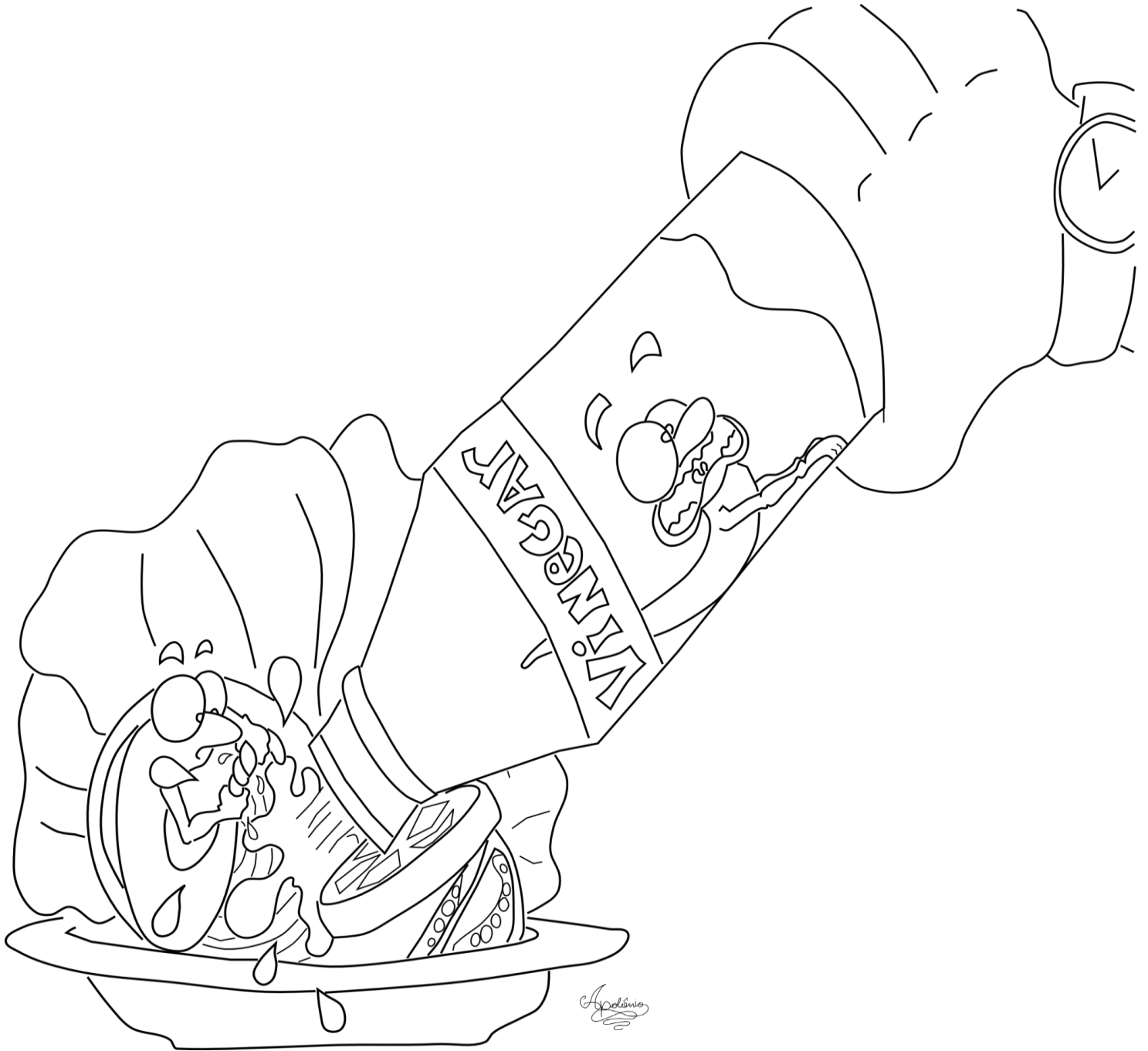
Karanta wannan matani na iya sa mai karatu ya fahimciyanayi kuma ya ga kyawunsa. Wannan littafi na magana akan ku san komai da ya shafi qasar gavar teku daqawalwalniyar teku da gudanar kogi ko yadda dokar dajitake. Mai karatu na iya tunani a kan dabbobi da tsirrai duka. Tsutsotsi suna rayuwa a ko'ina idan ka dubi kowane xaya daga cikin waxannan wurare, domin sun yi tarayyamusamman idan ka dubi zane-zanen littafin nan za kafahimci kowane daga cikin waxannan wurare, muhallin tsutsotsi ne. Ba ka yi mamaki ba?



Vinegar (Ruwan-tsami)

Matsattsakun ruwan tsami da tsutsotsin ruwan tsami (*Turbatrix aceti*), tsutsotsi ne da ke rayuwa a ruwan da ke da tsami a tafki ko na tufa (apple). Tsawon waxannan tsutsotsi ya kai kimanin milimita 1-2, kuma sukan ci miniminin halittu (da kan rikixе su zama cuta) daga tufa damakamantan halittun da ido ba ya gani. Wannan gurvataccen ruwa, nan ne matattarar halittun da ido ba ya gani.

Matsattsakun ruwan tsami abinci ne na musamman, mai kitse sosai ga yaya-suya ('ya'yan kifi), kuma sunasaurin yaxuwa. Kana so ka yi gwaje-gwaje a kanmatsattakun ruwan tsami? Abu ne mai sauqi: nemo ruwan tufa ko ruwan tsami da fasasshiyar robar ruwa ka sa qyallen tata sannan ka nemoqalilan na matsattsakun ka sa a '*coffee filter paper*' bayan xan lokaci za ka soma ganin matsattsakun suna yaxuwa. Duba intanet ka gani... ina maka fatar alheri!



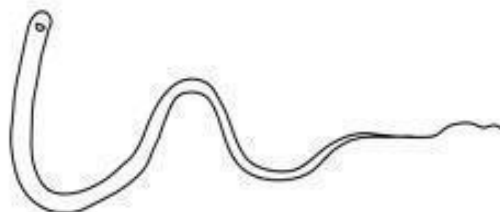
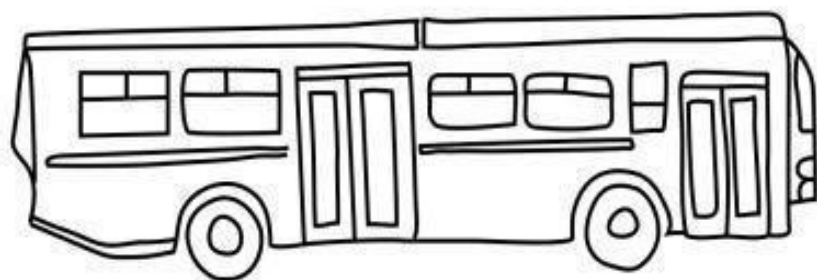
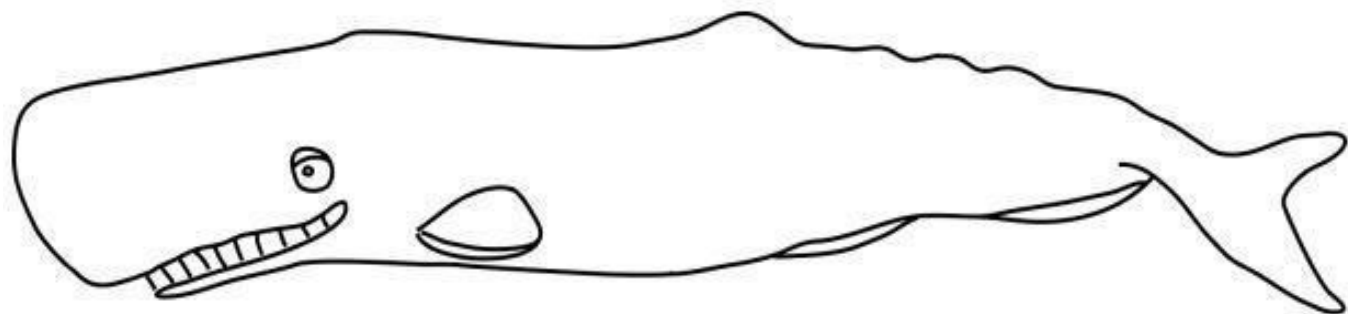
Aradino

Whale (Dabbar Wale)

Kana da labarin littafin nan mai suna "*Moby Dick, the white whale*"?

Mawallafin Moby Dick ya bayyana Dabbar Wale kifi nemai haxari da ke tayar da hankalin teku. Dabbar Wale kifi ne mafi girma a duniya, girmansa ya kai a haxa bas biyu awuri xaya, tsutsar ciki mafi girma a cikinta take rayuwa: tsayin tsutsar ya kai mita 8, kaurinta kuma ya kai senti mitabiyu da rabi (2.5)!

Wata 15 Dabbar Wale ke goyon ciki domin haka, tayinkifin (Wale) da tsutsar cikin kan rayuwa a uwar mahaifarta (Wale) saboda girman kifin. Kana iya fahimtar dalilin da yasa tsutsar cikin Dabbar Wale ke da girman gaske.



Xiphinema (Zifinima)

'Xiphinema' kalma ce mai wahalar fahi! Kana sane da cewa tsutsotsin ciki da na jijiyyoyin tsirrai na da sunaye?

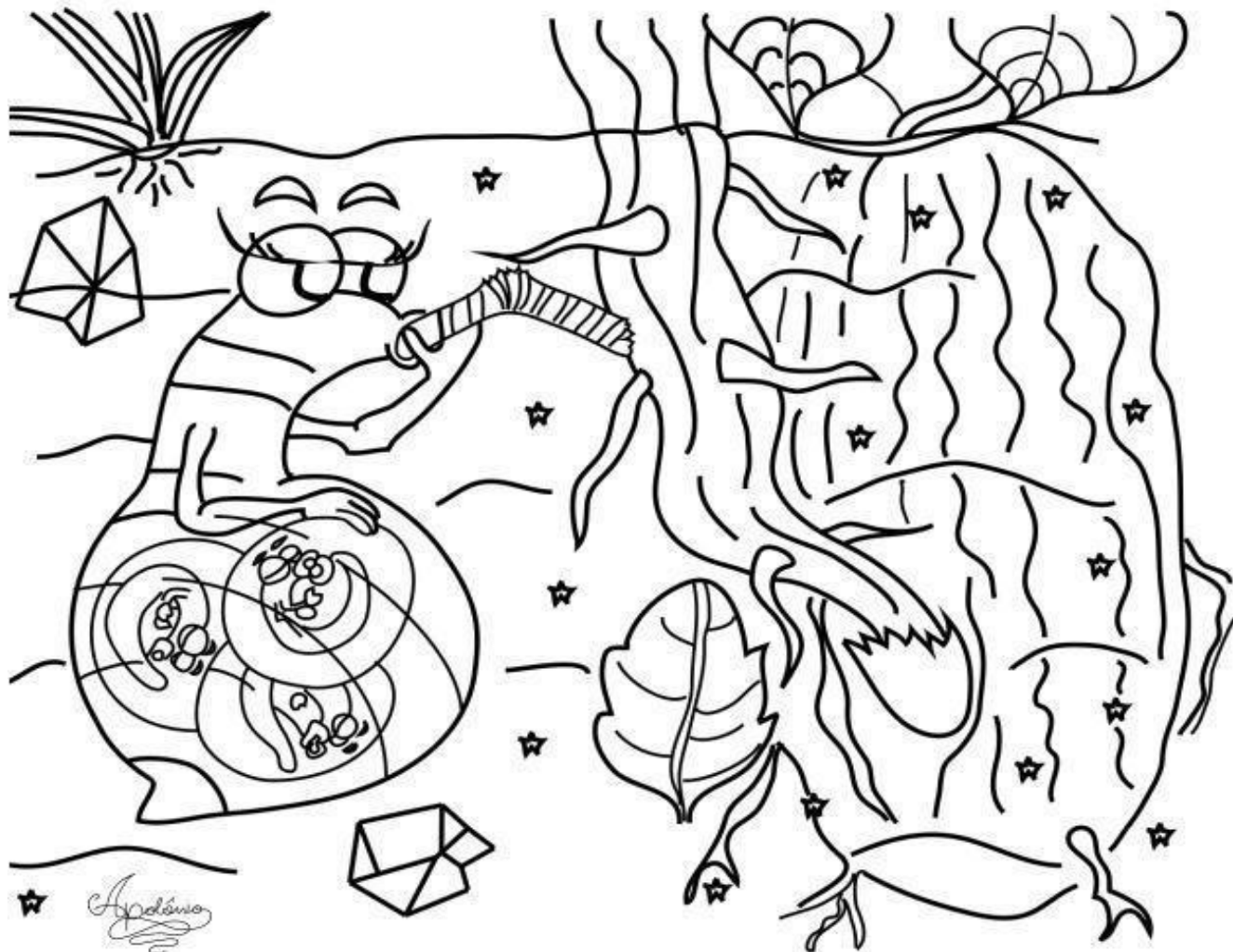
A tsohuwar Girka 'Xiphi' na nufin 'sifar takobi'. Tsutsotsin da ake kira Zifinima (Xiphinema) halittu ne da keda alaqa da tsirrai, suna da haqori mai sifar takobi wannanya sa masana kimiyya sukan kira su da wannan suna. Zifinima na xauke da qwayoyin cuta, idan suka far wa shukasai ta kamu da ciwo. Ko da yake an yi dace, masana kimiyya da manoma suna da maganin cutar da Zifinima kesa wa shuka!



Yam (Doya)

Doya abincin yau-da-kullum ce a qasashe masu zafi, da ita da dankalin Hausa duk mabunqusa qasa ne. Sankarakan yi wa doya fata-fata, manomi ya rasa ta yi.

Tsutsotsi masu santsin jiki (nematodes) kan kamajijiyar doya, su tsotse tatas, sai suna sa qwoyayensu, nan da nan sai jijiyoyin su ruve, shi ya sa ake kiran shi da sankara.



Zebras (Jakín-dawa)

Jakin-dawa dangin doki ne. Akwai labara mai muhimmanci a kan tsutsar ciki da jakin-dawa da kuma doki. Akwai tsutsotsin cikin qananan gaske da tsawonsu ya kai '*micro mita*' xari huxu (400) da ake kiransu da suna '*Halicephalobus gingivalis*', sukan addabi jakin-dawa dadoki sosai. Idan jakin-dawa ko doki ya ji ciwo, waxannan halittu ke samu su shiga ko kuma su shiga ta hanci da bakindabbobin. Sukan bi hanyoyin jini daga nan su kai ga qoda da hanta da qwaqwalwa, a nan sukan ninka kansu cikin gaggawa, hakan kan zama sanadin mutuwar jakin-dawa kodoki. Jakin-dawa da doki kan iya warkewa daga cutar da tsutsotsin kan haifar masu, idan an gano cutar da sauri. Matsalar ita ce, ba kowa ba ne ya san da akwai waxannanhalittu masu cutarwa kuma sukan bijire wa magani, hakan kan hallaka jakin-dawa da doki cikin sauri.

