



吉娃斯愛科學繪本

第04集
水芋田宇宙

排灣族語
(中排灣語)

翻譯 / 配音
Muni Kadrangian
(慕妮·卡拉雲漾)

吉娃斯愛科學

第04集 水芋田宇宙

排灣族語 (中排灣語)



族語全文朗讀



華語全文朗讀



英語全文朗讀



吉娃斯

Muni

飛弁

Vikal

乃奈

Iljaw

里昂

Sisilj



salingauljan itua puvasan ta savaljung



水芋田宇宙



The Universe of the Taro Paddy

慢

原







aza vaquan a sipaka salingauljan a cadjucadju mangetjezanga.



新的太空艙來了。



The new space capsule has arrived.

慢

原







aza ti Vikal nakikatukez sakamaya pakasi cadja a kipumasepelj taza sipakasalingauljan a cadjucadju, tua sika “macacudrungan i semalingauljan” nua sipakasalingauljan a cadjucadju katu kapuljan nua maka salingauljan.



飛卉認真地遠端操作著新的太空艙，讓太空艙與太空站進行「太空會合」。



Behuy works hard to operate the remote docking of the new space capsule, so that the space capsule performs a “space rendezvous” with the space station.

慢

原







padria a kinamacacudrungan!



會合成功!



The rendezvous is a success!

慢

原







aza ti Vikal ika makakiljaljava tua sipacunan tua kinalangan nua sipakasalingauljan a cadjucadju.



飛卉等不及看看新的太空艙的樣貌。



Behuy can' t wait to see what the new space capsule looks like.







aza vaquan a sipakasalingauljan a cadjucadju namasan kakiseljecan i makasalingauljan, makaya taleman tua ljaceng, maqati uta sikipususu tua cemukicuk ta simezangalan nua cuvug i makasalingauljan.



新的太空艙是一間太空溫室，可以種植蔬菜，也可以進行植物在太空中生長的研究。



The new space capsule is a space greenhouse where they can grow vegetables and conduct research on plant growth in space.

慢

原







aza kapuljan nua makasalingauljan a picul nua sisiquban katu nua i pinukadjunungan maretimalji, manasika sipakatua “sitapetapan nua kinavalangisan” na za mareka tjaranema tua sikisusuan tua valangisan a remesem nua zaljum, saka inika seljaljiak.



太空站裡的重力與地球上不同，所以專家們利用「毛細現象」讓水分沿毛細管方向移動，不會亂跑。



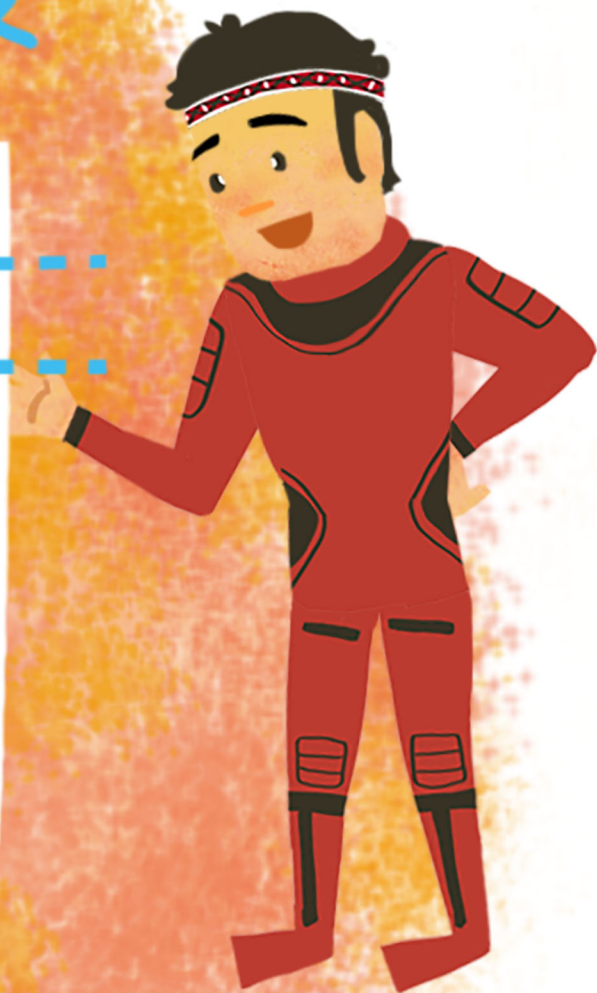
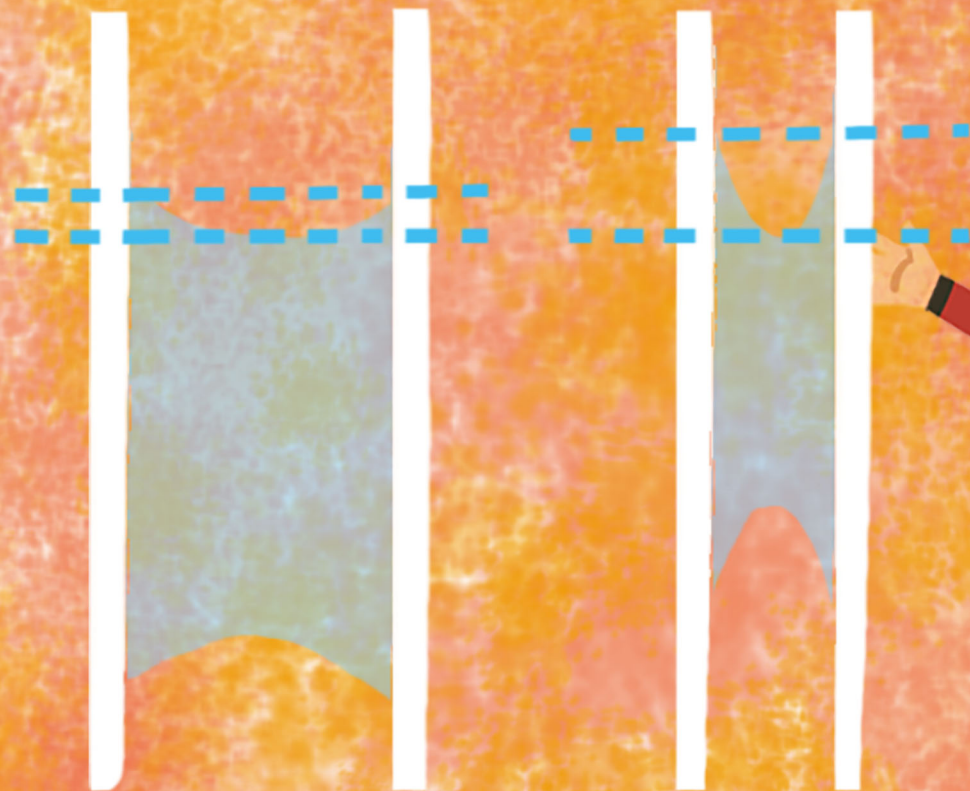
Gravity within the space station is different from that on earth, so scientists make use of the “capillary phenomenon” so that moisture moves along the direction of capillaries and doesn’ t fly everywhere.

慢

原



毛細現象





aicu a djaremedjeman kata qalameljan izua sivalan a kidjekec, nu aicu a sivalan a kidjadjekecan nukaki tjakudral a sivalan a maqepu nua kinavadevadan taza nasevacaq i mapacucun a sivalan a minselak, maqati a kitjesaliv tua sivalan a semiqub nua kadjunangan sa pasavavav a sireseman, aicu a namatucu a kinakemudan manaza pinaka “sitapetapan nua kinavalangisan” aya.



水分子和物體分子間具有附著力，如果這個吸附力大於分子間內聚力所產生表面張力，可以讓水克服地心引力而往上方移動，這種現象稱為「毛細現象」。



There is an adhesive force between water molecules and the molecules of objects. If the absorption force is greater than the surface tension generated by the cohesion between molecules, then water can overcome the force of gravity to move upward. This is called the “capillary phenomenon.”

慢

原







matu nukaki tjasiljeveljev tua zaljum a sibir tu papamav, aza inika siniljeveljev tjara matjeveng uta, ayatua izua za sitapetapan nua kinavalangisan.



例如把毛巾放一半到水裡，沒有進入水裡的部分也會變濕，就是因為毛細現象。

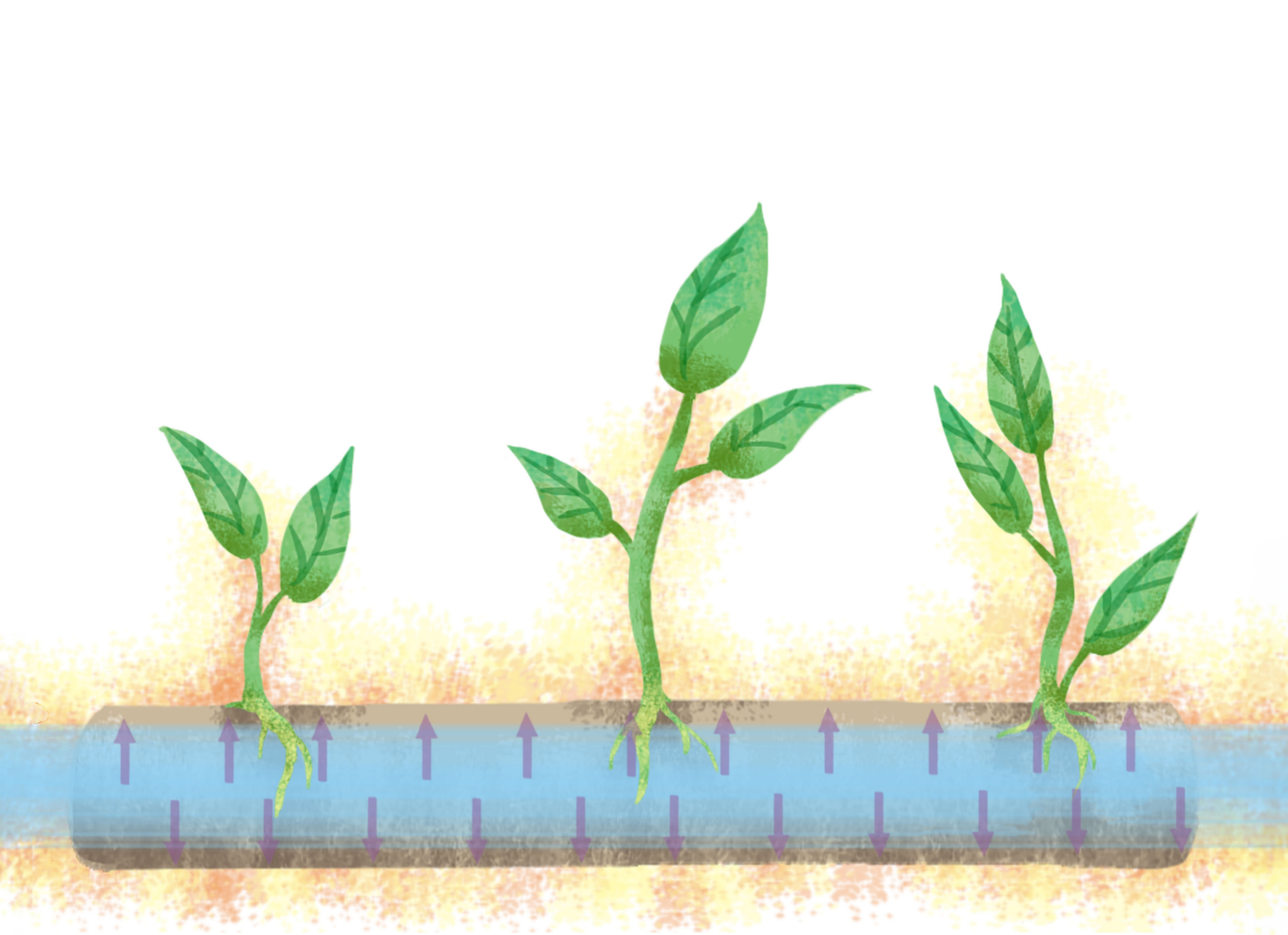


For example, if we put half of a towel in water, even the part not in the water will get wet. This is because of the capillary phenomenon.

慢

原







aza kakiseljecan i makasalingauljan a “cukacukadj nua cuvuuq” aza laljing nua zaljum manaza ika masupusupu a maruvalangilangis a baberuberungan, tua sikakayan a pakatua kakedrikedrian a berung a tjemeveng ta kapaz nua cuvuuq.



太空溫室「植物枕」的水管有無數細微的孔洞，讓水分可以藉由小孔洞滋潤植物的根部。

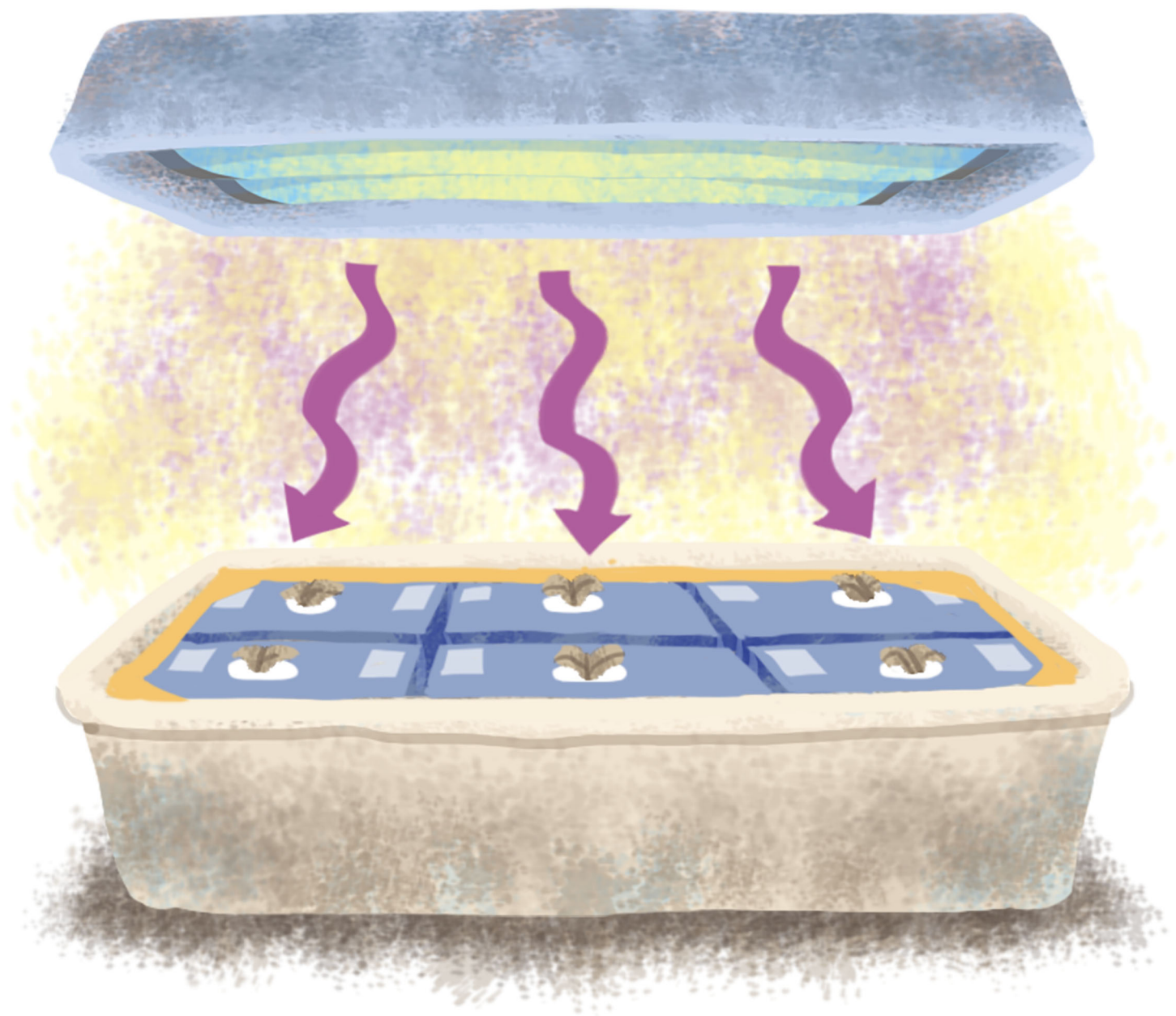


In the space greenhouse the water pipes within “plant pillows” have many tiny holes through which the water can moisten plants’ roots.

慢

原







aza masanitaljanga aza kakiseljecan i makasalingauljan makaya uta
penaqulja tua cuvuuq taza maru pinaliljingan a qulja katu maru sapuy a
qulja tua sikaljenguaqan a mapusaladj nua simezangalan na cuvuuq.



另外太空溫室也會為植物照射有益的藍光與紅光幫助植物生長。



In addition, the space greenhouse also provides the plants with beneficial
blue light and red light to help them grow.

慢

原







ika nakinemenem ti Vikal, tu nuimaza itua kapuljan nua makasalingauljan,
manu makaya uta kisan siruqemuma!



飛奔想不到，在太空站裡，竟然還可以當農夫呢！



Behuy never thought that he would become a farmer in the space station!







tuazua, ti Muni izua i Ivatas a qinaljan a kisan siruqemuma iu!



這個時候，吉娃斯在 Ivatas 也正在當農夫呢！



At the same time, Giwas is working as a farmer on Ivatas!

慢

原







ka nakivasaanga ta savaljung, sa taleman a mumalj aza qapulu nua supiq,
pay ki makayaanga cemuvuq a venaquan.



割下水芋後，把莖插回田裡，就能長出新的水芋。

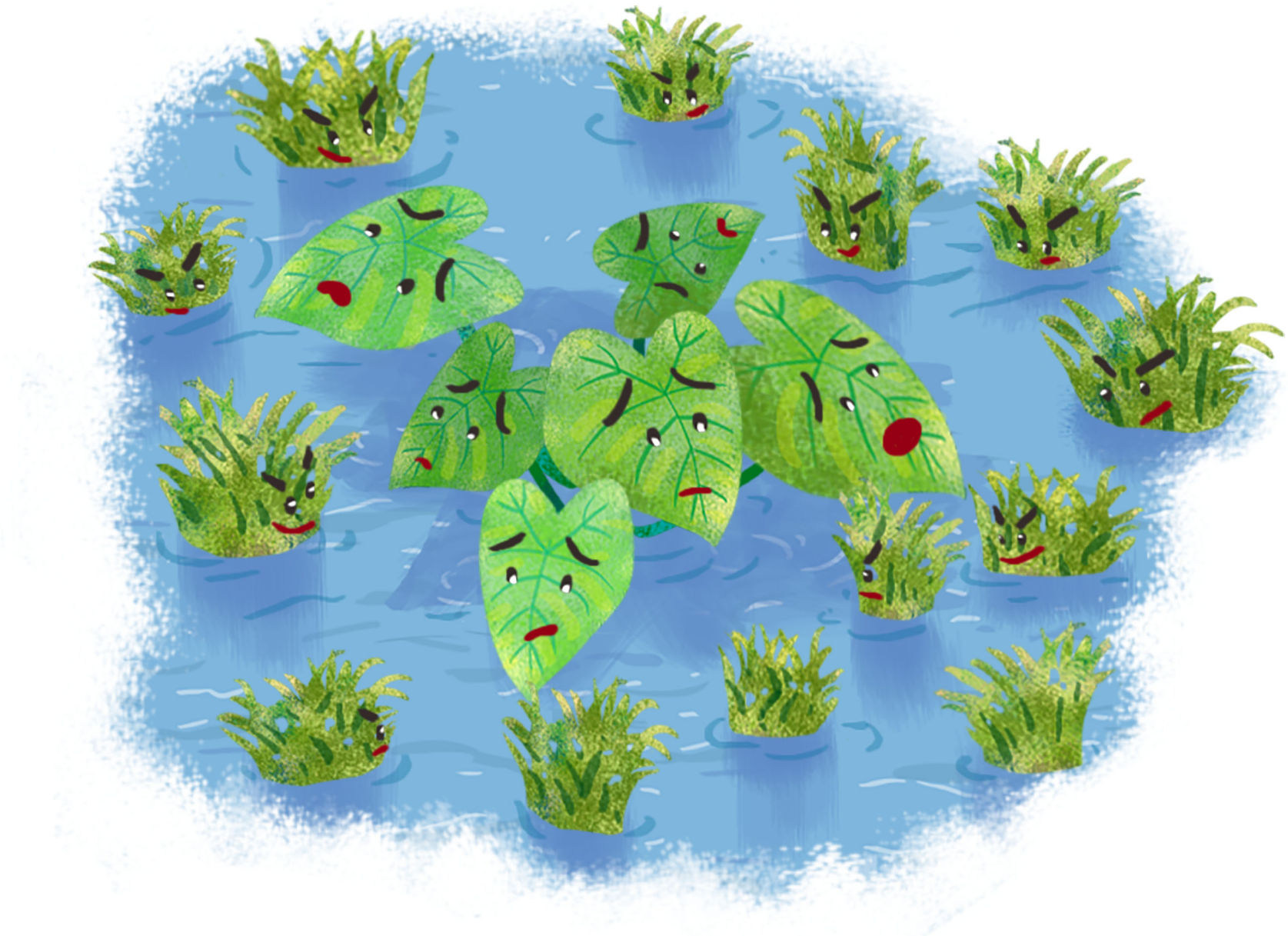


After cutting off the taro, they place the stems back into the paddy so that
it will grow a new taro root.

慢

原







nu i kazumazuman tjara setukez sakamaya vaik a masik tua napimezangal a cemel, ta simezangalan nua savaljung.



平時也要勤奮去除多餘的雜草，幫助水芋生長。



While the taro grows, they have to diligently weed the paddy to help it grow.

慢

原







matucu a qivu a se Tao, aicu a malupi a vavayan aza marka vasa matjatjuka minlayalayap, aicu a nasetukez a vavayan aza marka vasa matjatjuka namekudral aya.



達悟族人都說，懶惰的女人芋頭個個飛，勤勞的女人芋頭個個肥。



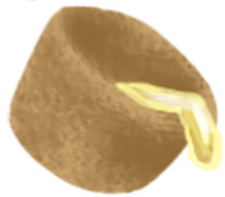
Tao people say, a lazy woman's taro diminishes by the day, but a hardworking woman's taro gets bigger all the way!

慢

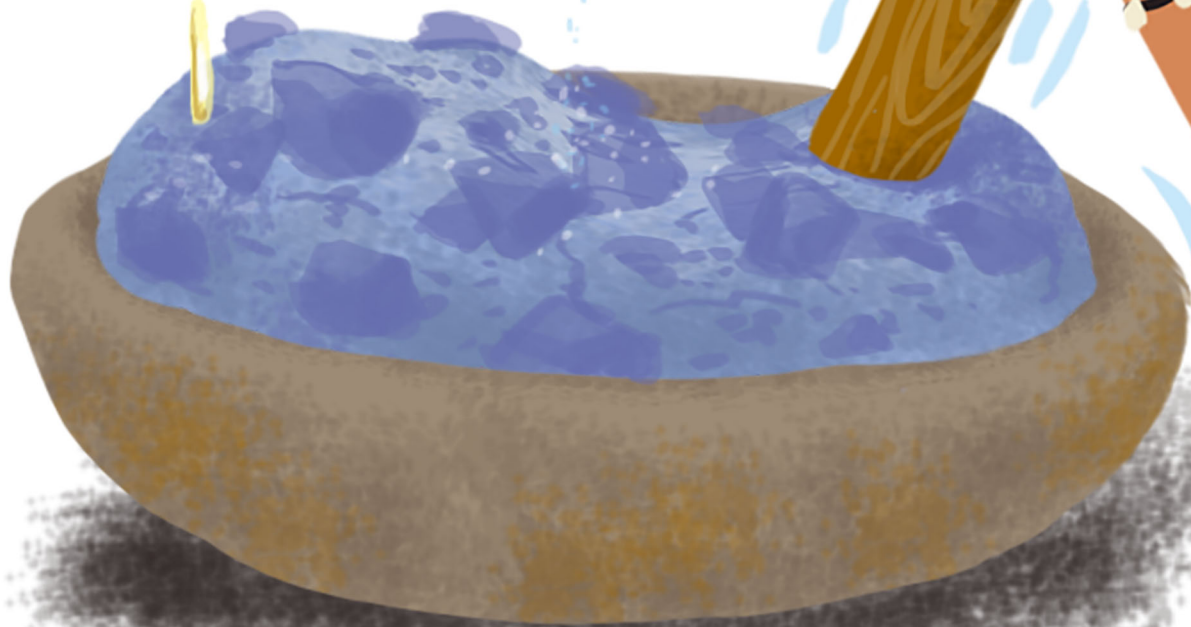
原



油



鹽





nu kinesaanga tjemeljur aicu a savaljung, paisuan sa papenamaliav, sa pativetivi tua qalev nua vutjulj kata sidimuc tu kedri ta qatia.



水芋蒸熟後，搗成泥狀，加上烤肉油汁和一點鹽。



After steaming the taro, they pound it into a paste and add some oil from roasted meat and a bit of salt.

慢

原







pay aicu a sinanguanguaq a djinukul a vasa tjequljaanga!



美味的芋頭糕誕生了！



The delicious mashed taro is done!







manu ka venarung ti Muni tua sivaik a sematua kapuljan nua makasalingaljan aza djinukul a vasa kata djinaung a alibangbang, manu meneka sa kaulav aza namasanparavac a qaciljay!



就在吉娃斯想要把芋頭糕和飛魚乾帶到太空站時，聖石竟然不見了！



Just as Giwas wanted to bring some mashed taro and dried flying fish back to the space station, the Pinsbkan magic stone disappeared!







manu qinecapanga sa vaikan na za qetjupu!



原來是一隻陸蟹把聖石夾走了！



It was taken by a terrestrial crab!

慢

原







aza tjaljamakayan tua sitjara kigetjupu tua se Tao a ti Qipu navaikanga dri!



達悟族最強捉陸蟹高手 si Mazngang 要出動了!



The greatest crab catcher of the Tao people, si Mazngang is on the case!







aza qetjupu nakiqilja itua tepetepez a vudavudas. nu tjadjumaken a qelju nua lala a sipacacikel nimadju, mana makaya kalin a patjequlja.



陸蟹躲在草叢的沙土裡。找到牠出沒的洞口，才能把牠挖出來。



The terrestrial crab is hiding in the sand among the grass. They have to find the hole it burrows into in order to dig it out.

慢

原







maljeliavanga za djinameq a qetjupu, ljakua savid tu inika vanaza naqemecap tua namasanparavac a qaciljay sa vaikan.



一連抓了好幾隻陸蟹，都不是夾走聖石的那一隻。



They catch several crabs, but none of them are the one that took the Pinsbkan.

慢

原







tavililjanga ka litjungananga naza masantalj, mana alapen anga za namasanparavac a qaciljay.



最後在大家的圍捕下，終於拿回了聖石。



Finally, after everyone helps to surround the crab, they get the Pinsbkan back.







sa aza naqemcap tua namasanparavac a qaciljay sa vaikan a qetjupu pasa sauin anga ni Muni.



吉娃斯放走了那隻夾走聖石的陸蟹。



Giwas let the crab that took the Pinsbkan go

慢

原







ayatua maljeliavanga kiniqetjupu nua masantalj.



因為大家捉到的陸蟹已經夠多了。



because they already caught enough crabs.

慢

原







ti Qipu pasa kiayan tjay Muni a semazua itua kapuljan nua makasalingauljan.



si Masagaz 跟著吉娃斯來到了太空站。



si Masagaz arrives at the space station with Giwas.







pacun ti Muni taza nasepeljuq a kakanen saka nasetjavav i tjaladj tua sipakasalingauljan a cadjucadju, paramur a levan angata!



飛卉看著滿滿的食物漂浮在太空艙，真是太開心了！



Behuy is so happy to see all the food they brought floating in the space station!

慢

原







ti Qipu ljemengeljengeljeng tua salingualj a kadjunungan a pakatua siljizav a qezung, matucu a qivu timadju nu pitjayvililjanga tjara kisan makasalingauljan a cau aken sakamaya aya.



si Masagaz 看著觀景窗外的地球，他說以後也要當一個太空人。

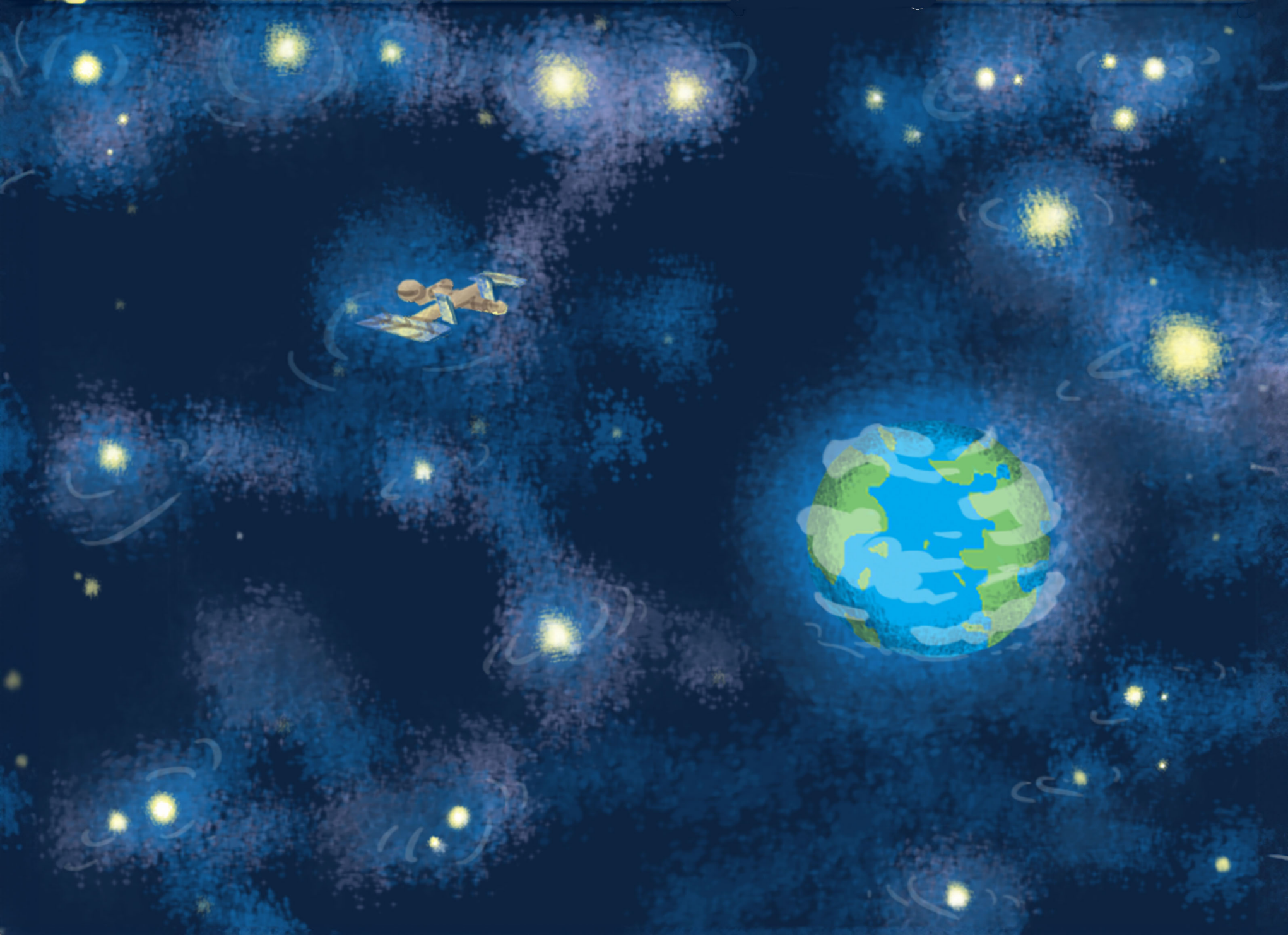


si Masagaz looks at the view of the earth from the window and says he wants to be an astronaut one day too,

慢

原







ayatua aicu a ljinaungan nua i kacauwan mana namanan ljavek nua i salingualj a kadjunungan.



因為宇宙就是地球的海洋。



because the universe is like the earth' s ocean.

慢

原







aicu a namasan makaljavek a kinadriungan, aicu a ti Qipu muri makatua vinalji a varukur, sa pulingetj tua i ljinaungan nua i kacauwan.

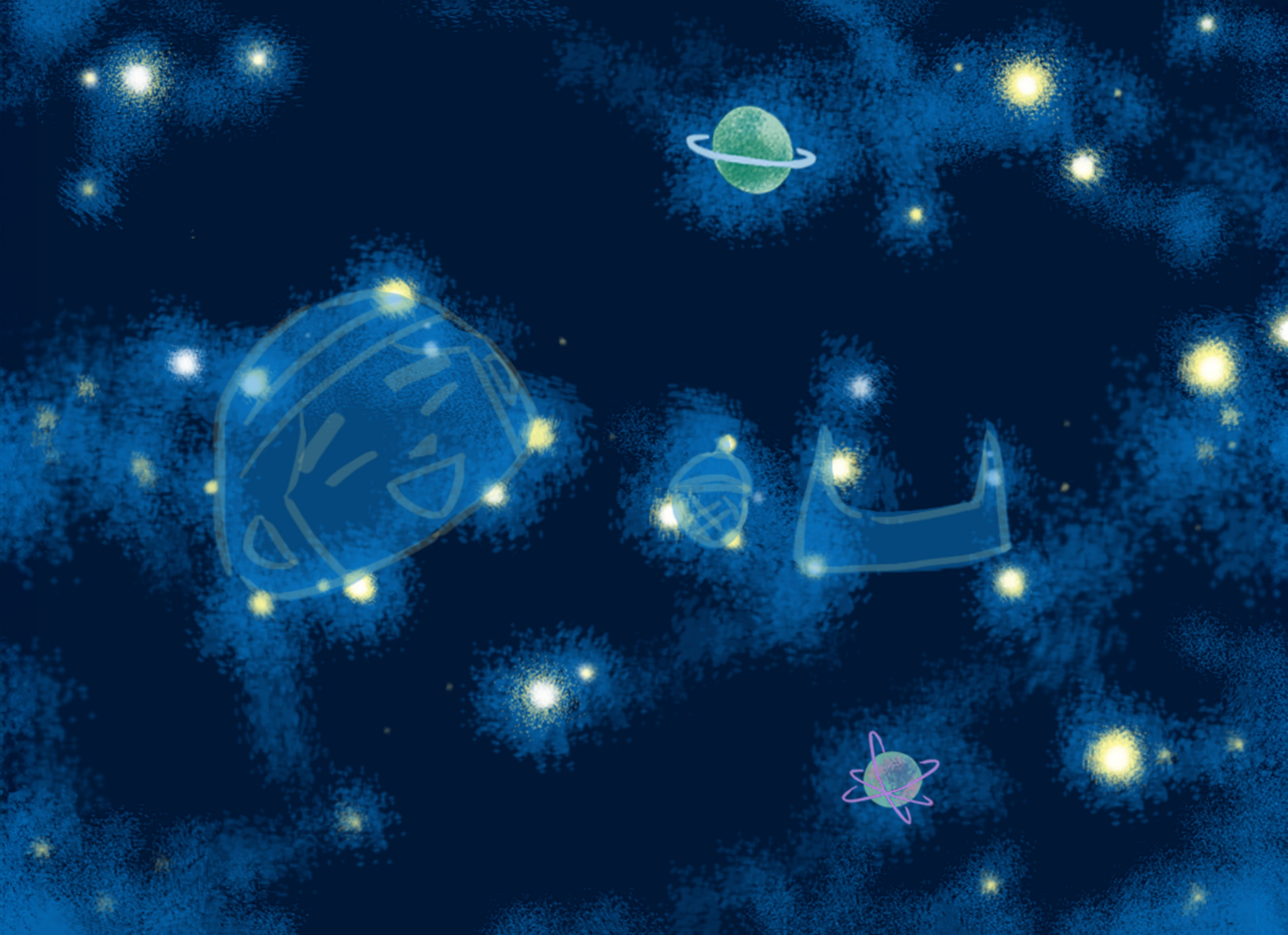


身為海洋民族，si Masagaz 要乘著拼板舟，在宇宙航行。



The Tao are a people of the ocean, so si Masagaz wants to sail the universe in a tatala boat!







aicu a ti Qipu tjara sekanavalj sakamaya.



si Masagaz 一定會成功的。



si Masagaz will surely realize his dream.

慢

原



一般單詞

中文	詞性	族語
操作	動詞	kipumasepelj
生長	動詞	simezangalan
研究	名詞	cemukicuk
變濕	動詞	matjeveng
細微的	形容詞	maruvalangilangis
農夫	名詞	siruqemuma
水芋	名詞	savaljung
誕生了	動詞	tjequljaanga
陸蟹	名詞	qetjupu
最強的	形容詞	tjaljamakayan
出動了	動詞	navaikanga
抓	動詞	djinameq
圍捕下	動詞	litjungananga
漂浮	動詞	sasetjavav
成功	動詞	sekanavalj

中文	詞性	族語
會合	動詞	kinamacacudrunan
溫室	名詞	kakiseljecan
重力	名詞	picul nua sisiquban
毛細管	名詞	valangisan
毛細現象	名詞	sitapetapan nua kinavalangisan
水分子	名詞	djaremedjeman
地心引力	名詞	sivalan a semiqub nua kadjunungan
吸附力	名詞	sivalan a kidjadjekecan
分子間內聚力	名詞	sivalan a maqepu nua kinavadevadan
藍光	名詞	maru pinaliljingan a qulja
紅光	名詞	maru sapuy a qulja
宇宙	名詞	ljinaungan nua i kacauwan

科學單詞

吉娃斯愛科學 排灣族語 (中排灣語)

第04集 水芋田宇宙

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計畫名稱 「發現天生科學家：原住民族文化科學學習實踐與發展十年計畫」 (第二階段第二年)

補助單位二 國家科學及技術委員會 (繪本繪圖製作)
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族語翻譯 Muni Kadrangian (慕妮·卡拉雲漾)
族語配音 Muni Kadrangian (慕妮·卡拉雲漾)
族語翻譯審查 Ljavuras Kadrangian (拉夫琅斯·卡拉雲漾)、Camak Paljailjay (朱志強)

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吉娃斯 愛科學 Go Go Giwas

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