



吉娃斯愛科學繪本

第03集
飛魚的夜曆

賽夏族語

翻譯 / 配音
ya'aw kalahae' kaybaybaw
(高清菊)

吉娃斯愛科學

第03集 飛魚的夜曆

賽夏族語



族語全文朗讀



華語全文朗讀



英語全文朗讀



吉娃斯

tiwaS

飛卉

bae'hoY

乃奈

naynay

里昂

li'ang



pinaShae:wan kakita'an ka hahila:
noka 'aelaw kamahayap



飛魚的夜曆



The Flying Fish Calendar

慢

原







kapit'aelawan noka 'aelaw kamahayap potngor ila!



飛魚季來了!



The flying fish season has arrived!







So: potngor ka kapit'aelawan noka 'aelaw kamahayap, Say ta'o: Sinrahoe'
kama ray hae:wan rima' ray wasal romakep ka 'aelaw.



每到飛魚季，達悟族人就要在夜間出海夜捕飛魚。



Every year during the flying fish season, Tao people go out to sea at night
to catch flying fish.

慢

原







ray hae:wan, kama tani pinahiyo' ka 'aelaw kamahayap komita' ray palono'
ka pinahiyo'.



在夜色裡，趨光性的飛魚看到拼板舟上的火光。

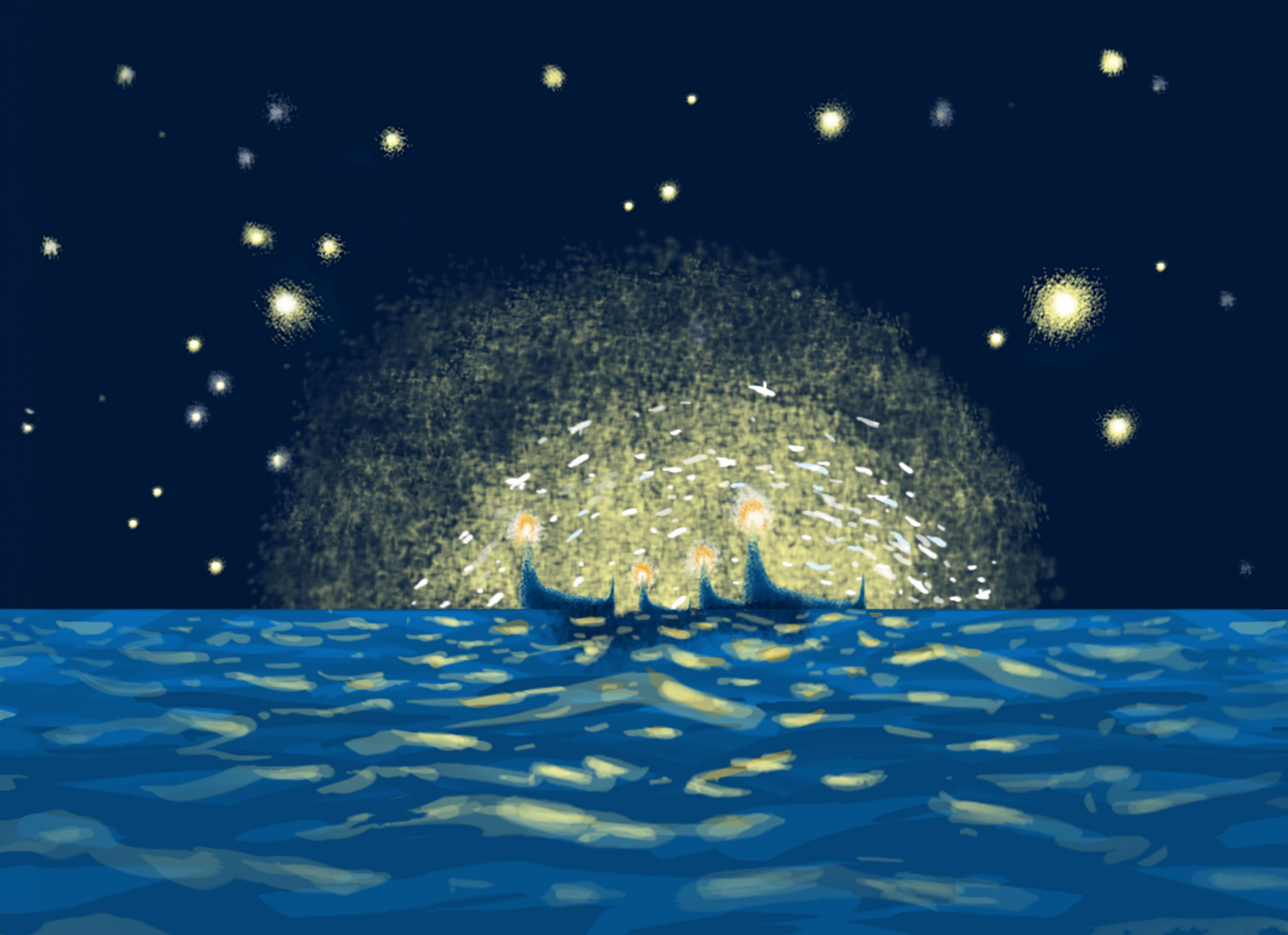


In the dark of the night, flying fish are attracted to the light of torches on
tatala boats.

慢

原







hayza' kinkaboehoel ka 'aelaw kamahayap ma' manpaehpaeh ka 'ae'az
homayap ray wasal.



數以百計的飛魚就會展開胸鰭在海面滑翔。



Hundreds of flying fish open their pectoral fins and glide above the surface
of the ocean.

慢

原







tabin Serra: ila, lasiya ma' lobih ila.



一直到天快亮了, 他們才會返航。



The fishermen only return to the shore when dawn approaches.

慢

原







SimaSangar minrimrimi' ma' rima' ray wasal langi: mayna:a' hi yaba' hayza' 'ima mayha'ha' ka minari' lobih.



si Masagaz 很早很早就在海邊等著出海的父親滿載而歸。



si Masagaz wakes up really early to go to the beach to await his father' s return with a full catch.







tani Say ta'o: ka kaspengan, ni SimaSangar yaba' 'aring siya kas'oehaez ila ma' somapih ka raro:o' Sin Siyaman maSangar, SikoSa' yaba' ni maSangar.



依照達悟族人的傳統，si Masagaz 的父親在他出生後就改名為 syaman Masagaz，意思是 Masagaz 的父親。



According to Tao traditions, when si Masagaz was born, his father' s name became Syaman Masagaz, which means the father of Masagaz.







rinakep ka 'aelaw kamahayap tal'alikaehen tal'izaehen, pihik ka ma'asay
o boeloe' ka 'oeSalap, kayzaeh pak'ae'ae:iwin.



捕上岸的飛魚要迅速處理，還要去除魚鱗和內臟，方便之後做成魚乾。



The flying fish caught by the fishermen must be processed quickly after
reaching shore, removing the scales and organs in order to dry the fish.

慢

原







tabin 'iwazwaz ila ka hahila:, tiwaS ki li'ang mowa:i' ila tomihaehael.



直到太陽快到頭頂時，吉娃斯和里昂才到海邊幫忙。



Giwas and Leon don' t arrive at the beach to help until the sun is high in the sky.

慢

原







SimaSangar soma'oe' hi tiwaS 'aehae' ka 'aelaw noka minkoringan,
ma'alo' nisiya ka tinilhaehael.



si Masagaz 送給吉娃斯一條女人魚，感謝她的幫忙。



si Masagaz gives Giwas a women' s fish to thank her for her help.

慢

原







Say ta'o: Sinraho'e' nasiya 'aelaw hayza' to:o' pina'ap'apol Sinraho'e', 'aelaw noka kamamanra:an, minkoringan ki tatini'. 'aelaw noka minkoringan 'ima kayzaeh a tomal si'aelen, ma' Si'o:ol no minkoringan ki korkoring kasi'aelen.



達悟族人把魚分成男人魚、女人魚和老人魚三種。女人魚是最好吃的一種魚，所以留給女人和小孩們吃。



The Tao people split fish into three categories: men' s fish, women' s fish, and elder' s fish. Women' s fish are the most delicious, so they are saved for women and children to eat.

慢

原







tiwaS 'iyakina pakaykayzaeh 'omo:ol ka 'aelaw, ka'araSen
kamkakrowaSekan ray kawaS kapakSibe:ay hi bae'hoy.
kataka'ino'on?



吉娃斯想把這條魚好好保存，以便帶到太空站與飛卉分享。該怎麼做呢？

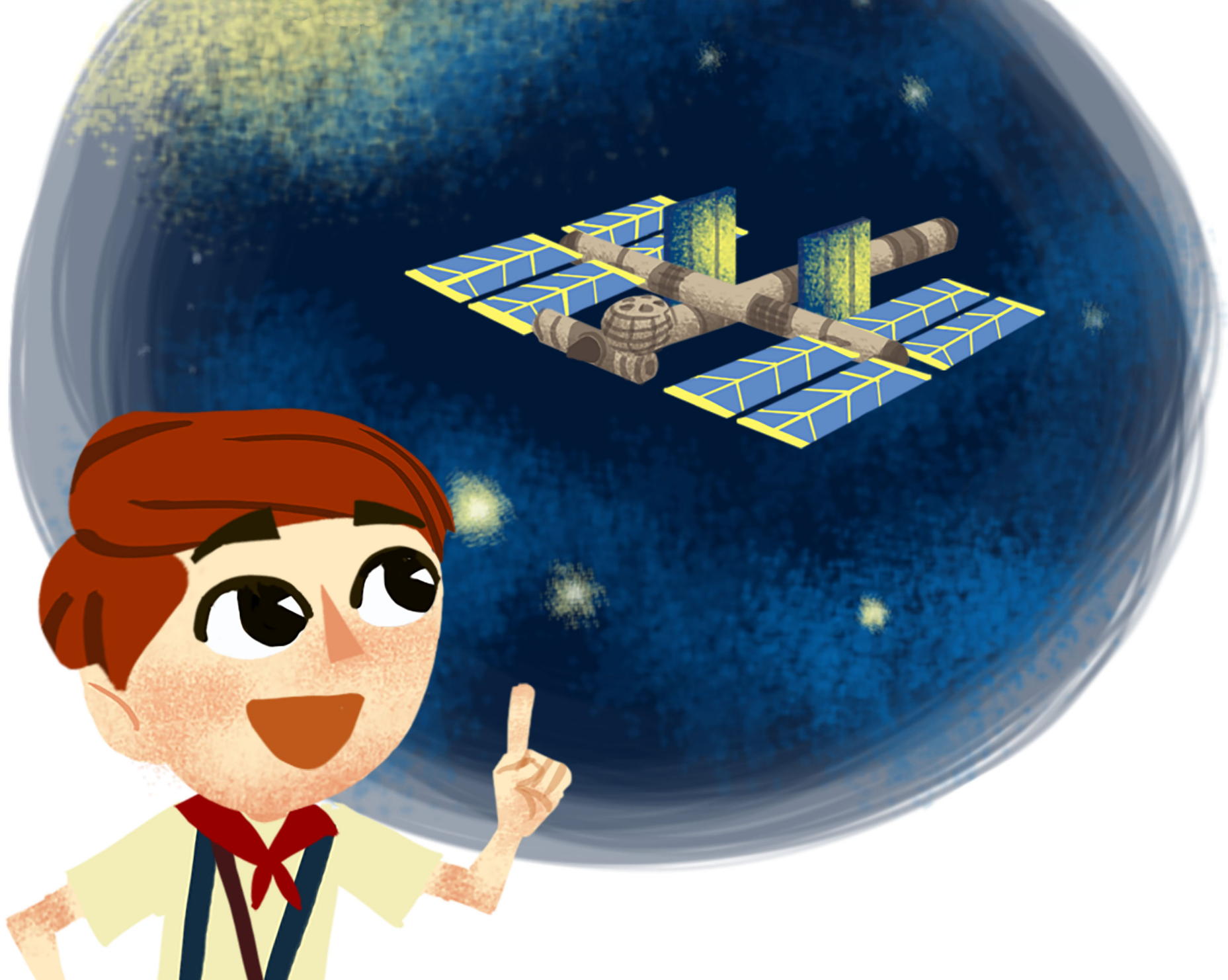


Giwas wants to preserve the fish so she can take it to the space station to
share with Behuy. How can she do that?

慢

原







li'ang ma'az'azem Sa'la' kamkakrowaSekan ray kawaS pinaskayzaeh ka balihaeh noka hahila: zinki' minari' ka kinra:aman.

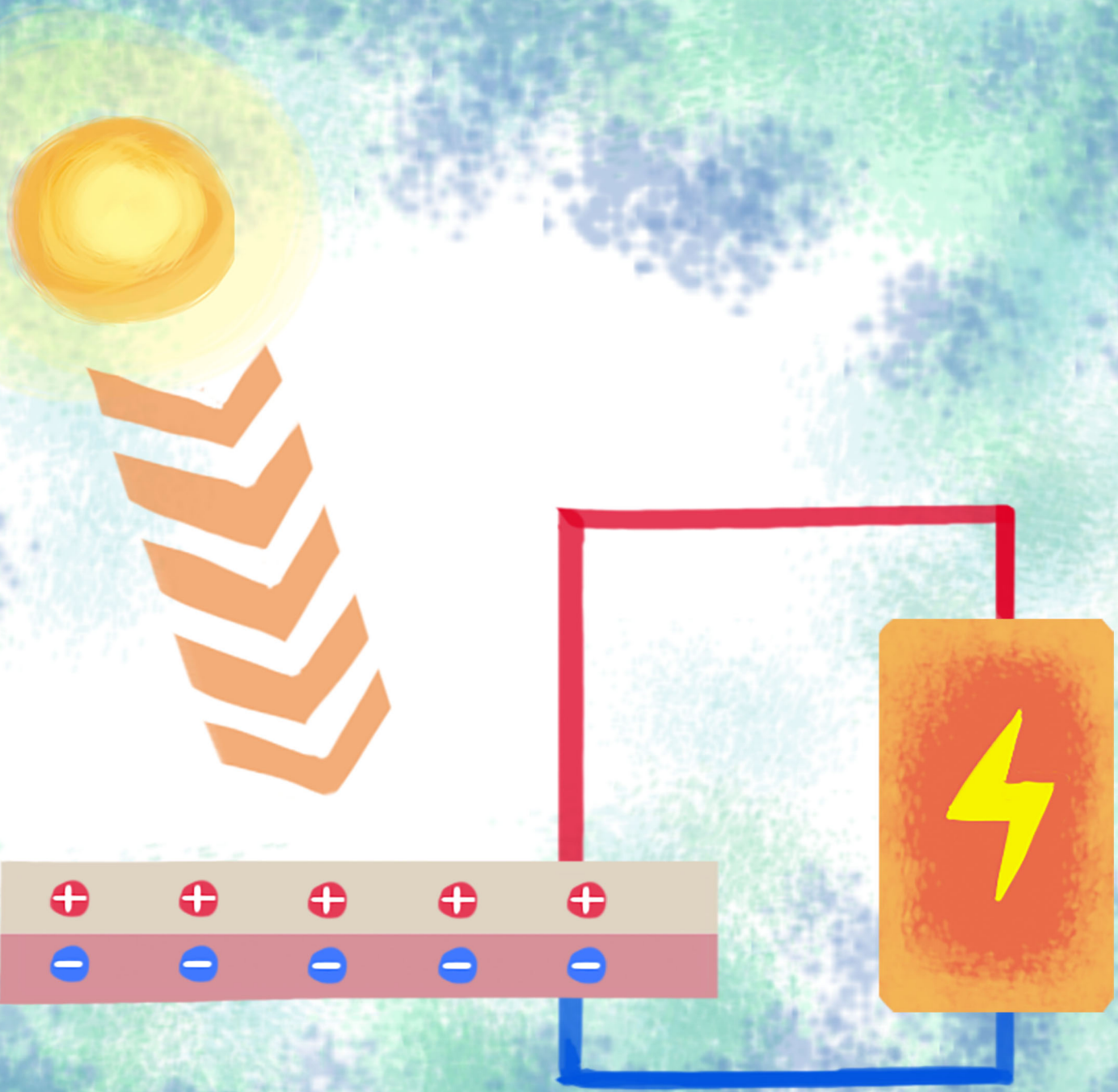


里昂想起上次太空站安裝新的太陽能板所學習到的知識。



Leon recalls what they learned when the space station installed new solar panels.







kakrangi'an mari' ka hinila: kas'oehaez ka tiyaenze: koSa'en ka
“kinaS'aliyaS ki zinki' pinatawaw”. ka balihaeh noka hahila: zinki' ma'
'isa:a' noka hinila: kas'oehaez ka zinki' kapatawawen.



物質吸收光子後放出電子的現象叫做「光電效應」。太陽能板就是利用太陽光的光子產生電力的一種工具。

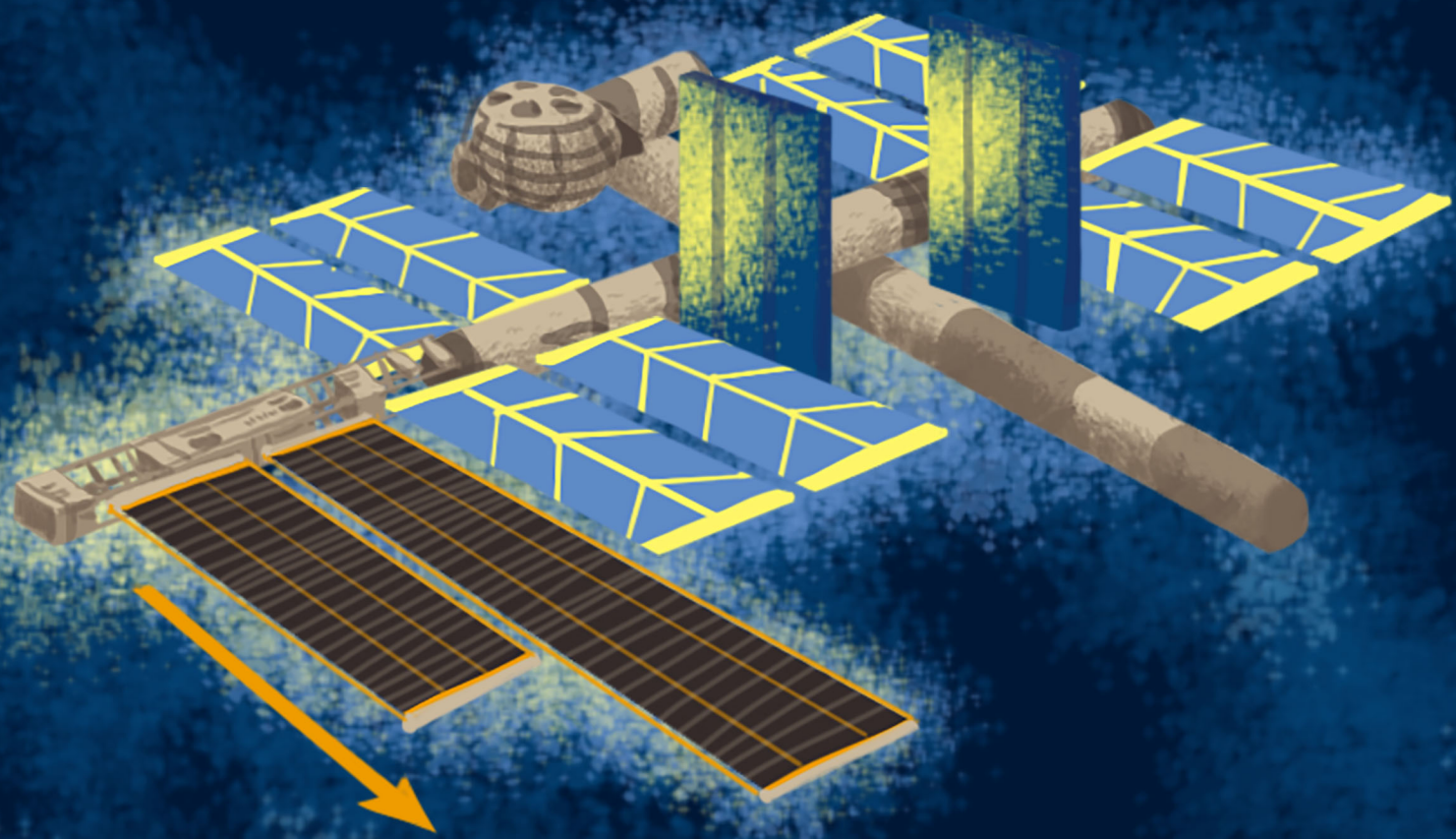


The phenomenon where a substance emits electrons after absorbing photons is called the “photoelectric effect.” A solar panel is a tool that uses the photons of sunlight to generate electricity.

慢

原







'ima SaSo' ka balihaeh noka hahila: zinki' kayzaeh Sipoten, hil'awan o 'okik mowahil, ma' kayzaeh mari' ka wa'is noka hahila:



新型的太陽能板甚至是捲動式的，更輕更不佔空間，更能有效利用太陽能。



A new type of solar panels can even be rolled up. They are lighter and take up less space so they can more effectively capture solar energy.

慢

原







tiwaS ki li'ang ma'az'azem, lasiya ma' kayzaeh 'ano hinila: ki kinrikrika:
pak'ae:'ae:iw ka 'aelaw, ma' kayzaeh 'araSen ray kakrowaSekan ray kawaS.



吉娃斯和里昂想到，他們也可以好好利用太陽的光和熱，把魚曬乾，就可以帶到太空站了。



Giwas and Leon remembered that they can utilize the light and heat of the sun's energy to dry the fish so they can take it to the space station.

慢

原







'oka' o, 'am koza' kin honaehnge: ka pinahila:?



可是到底要曬多久呢？



But, how long does it take to dry a fish in the sun?

慢

原







patpatemezeng ka kini:im bato', SimaSangar Sa' 'aelaw mina 'okik nakhini pahila:.



好不容易才找到的大石頭，si Masagaz 卻說，魚不是這樣曬的。



They finally found a big enough stone to place the fish, but si Masagaz said that' s not how to sun dry a fish.







Say ta'o: pahila: ka 'aelaw minsalaz 'aehae' kinkaboehoel tinal'oemaeh
ila. 'aelaw potimo'en, 'ano timo' ka kak'i:'i:zo' hineSem wa'isan no 'aelaw
kamahayap, kayzaeh 'alikaeh pak'ae:'ae:iw ka 'aelaw.



達悟族人曬飛魚已經有不只一百年的歷史。處理好的飛魚抹上粗鹽，利用鹽的滲透
壓大於飛魚的滲透壓，可以讓飛魚乾得更快。



Tao people have been drying flying fish in the sun for over a hundred
years. Once they have prepared the fish, they cover it with coarse salt.
The osmotic pressure of salt is greater than that of the fish, so this makes
the fish dry even faster.

慢

原







Say ta'o: Sinrahoe' kin'i'iyah ki 'aelaw kamahayap lalazem a tomal,
'ana kaSepe:an ka hahila: ma' tani 'aelaw kamahayap kapnazipan hahila:
matawaw a maSangay.



達悟族人的生活與飛魚密切相關，就連曆法也都是照著飛魚的汛期來作息。



The lives of the Tao people are closely connected with flying fish, so even
their calendar and periods of work and rest are determined by the flying
fish season.

慢

原



RAYON
MIVANWA
召魚祭



四月





ray naba:an noka ta'o: kapaSrayonan, lasiya minSa'la' pawa:i' ka 'aelaw Sa' minbanwa:, ma' 'ano hae:wan pit'aelaw ila tabin Sopat 'ilaS kayzaeh ila ray hila:an pit'aelaw.



春天的時候，是 Rayon（飛魚季），達悟族會先舉行 Mivanwa（招魚祭）召請飛魚來，然後就開始了夜捕飛魚，一直到四月才可以在白天捕魚。



During the spring, it is Rayon (flying fish season) and the Tao people hold Mivanwa (the fish festival) to invite the arrival of the flying fish. Then, they begin to catch flying fish at night until April when they can resume fishing during the day.

慢

原



ТЕУТЕУКА





rayon ila, ray minayhaseb 'ilaS tabin minaymaykaSpat 'ilaS ka teytesyka'(ray wasal pit'aelaw ka hahila:), 'isahiza pit'aelaw nanaw ka 'aroma' 'aelaw, papaSangay ka 'aelaw kamahayap.



Rayon 開始後的第五個月到第八個月是 teytesyka (海上魚撈的季節)，這個時候只能捕捉飛魚以外的魚種，讓飛魚休養生息。



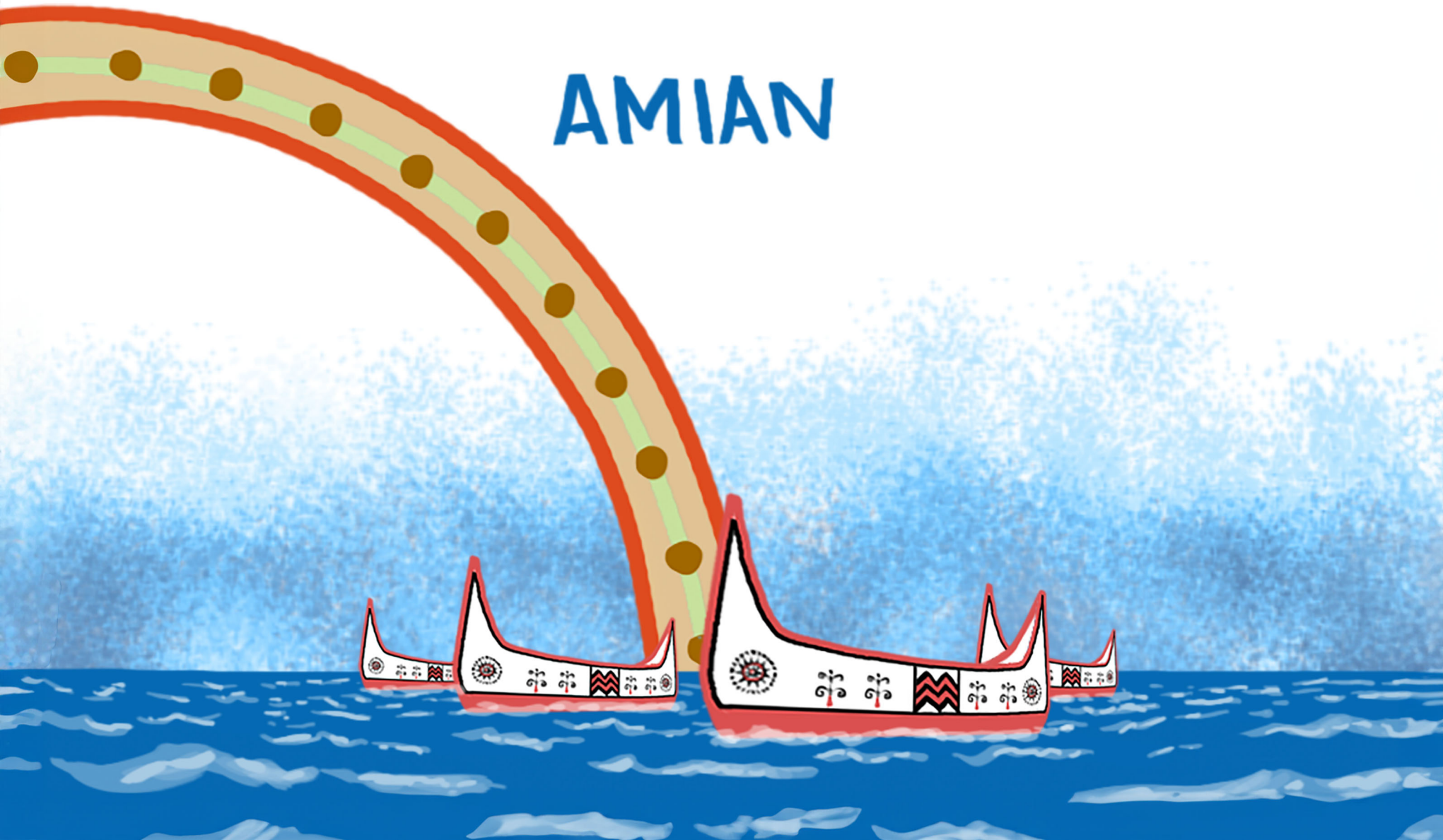
From the fifth to the eighth months after the start of Rayon, it is Teytesyka (the season of fishing on the ocean). During this time, they can only catch fish other than flying fish to give flying fish a chance to recover.

慢

原



AMIAN





monhaehae' 'ilaS 'isa:a' ka 'ami:an (ka'ayna:a'an ka 'aelaw), Say ta'o: kama paSmanoyotoyon Sa' 'okay si'ael ka 'aelaw kamahayap, 'inay 'isa:a' 'ana 'ima 'ae:'ae:iw ma' 'okay si'aeli, nakhiza koe'hael hayza' ka 'ima kayzaeh kamari'in.



第九個月開始是 amian (等待飛魚的季節)，達悟族人會舉辦 Manoyotoyon (飛魚終食祭)，從這時開始，連飛魚乾也都不能吃了，這樣明年才會有更好的豐收。



Starting with the ninth month, it is Amian (the season of waiting for flying fish). The Tao people hold the Manoyotoyon (festival of finishing the flying fish). From this point on, they cannot eat anymore dried flying fish to ensure that they will have another full harvest in the coming year.

慢

原



RAYON
MIYVANWA
召魚祭



TEYTEYKA
夏天



MANOYOTOYON
飛魚終食節





hini ma' noka Say ta'o: "pinaShae:wan kakita'an ka hahila: noka 'aelaw kamahayap."



這就是達悟族「飛魚的夜曆」。



This is the Tao people's "Flying Fish Calendar."

慢

原







mayna:a' ni SimaSangar pinahila: ka 'aelaw kayzaeh ila, ma' kayzaeh maraS ka 'ima 'ae'ae:iw 'aelaw kamahayap 'ini bae'hoy kasi'aelen, hini 'aelaw noka minkoringan ma' 'inSa'la' pilosnawen si'aelani ila!



等到si Masagaz 把飛魚乾曬好, 就可以帶飛魚乾給飛卉吃, 這條女人魚就先煮湯吃了吧!



When si Masagaz is finished drying his flying fish in the sun, they can bring the dried flying fish to Behuy at the space station. But, it's best to make fish soup with this women's fish now!

慢

原







ni Simarngang 'aelaw pinilosnaw ila no saboeh.



si Mazngang 替大家煮好魚湯。



si Mazngang makes a fish soup for everyone.

慢

原







'ima baba:aw pinnazip ka 'aelaw pinilosnaw kayzaeh a tomal rae'oe:oen!



新鮮的魚湯真是太好喝了！

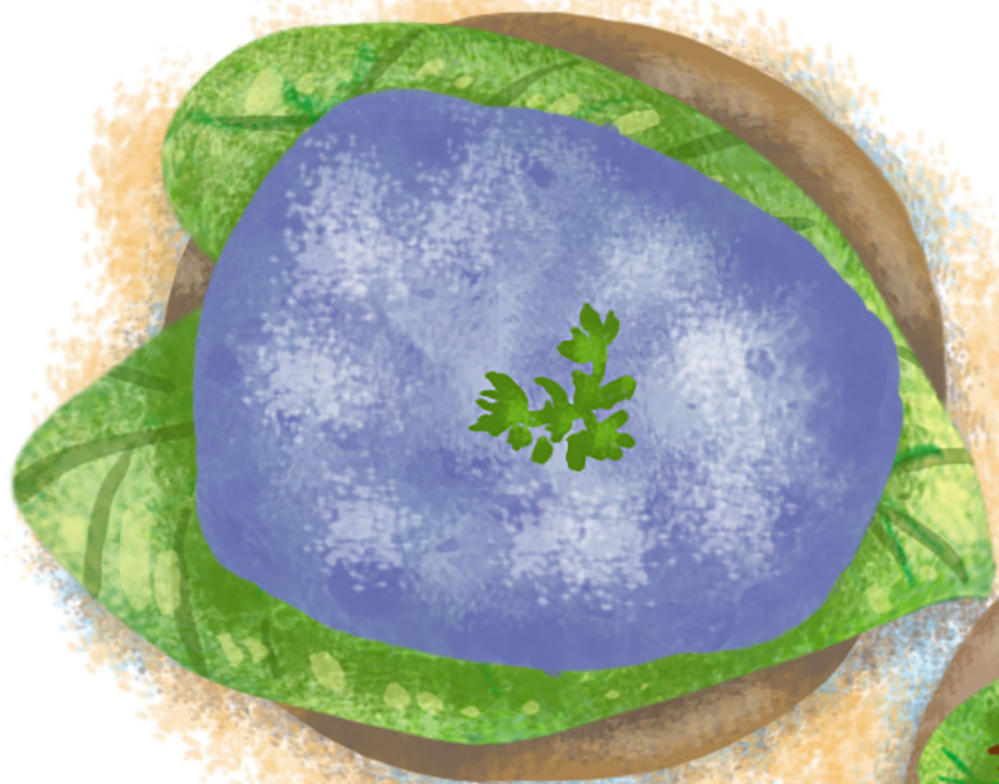


The fresh fish soup is so delicious!

慢

原







Simarngang komoSa' nisiya 'ima tabin ka tinalek 'okik 'aelaw pinilosnaw,
ma' hayza' naehan ka rokol tinawbon ki ka:ang pinilwaha:an.



si Mazngang 說她的拿手料理除了魚湯，還有芋頭糕和蒸陸蟹。

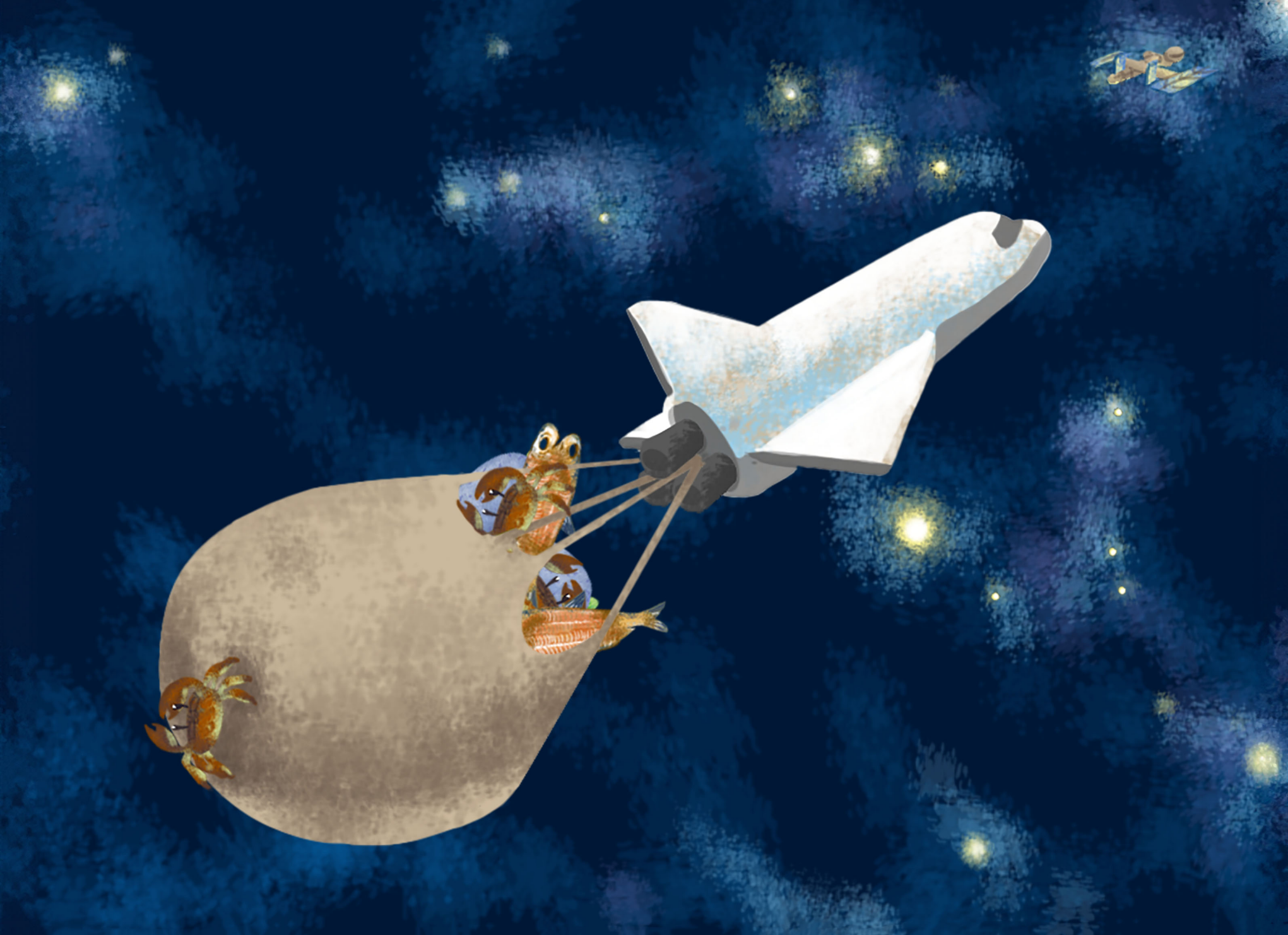


si Mazngang says in addition to fish soup, her specialties also include
mashed taro and steamed crab.

慢

原







ni tiwaS kalalohayen saboeh, siya 'iyakina tal'amet noka Say ta'o: ka 'ima kayzaeh kasi'aelen 'araSen ray kawaS kakrowaSekan, paSantoptopoy hi bae'hoey tiyal naka koko:ol ila!



吉娃斯要全部學起來，她要把達悟族的美食通通帶回太空站，讓飛奔吃得肚子鼓起來像是一座小山！



Giwas wants to learn how to make all of those things to bring Tao culinary traditions back to the space station so Behuy can eat so much delicious food his belly sticks out!

慢

原



一般單詞

中文	詞性	族語
飛魚季	名詞	kapit'aelawan noka 'aelaw kamahayap
捕	動詞	romakep
展開	動詞	manpaehpaeh
傳統	名詞	kaspengan
魚鱗	名詞	'oeSalap
保存	動詞	'omo:ol
知識	名詞	kinra:aman
曬乾	動詞	pak'ae:'ae:iw
汛期;補獵日期	名詞	kapnazipan hahila:
休養	動詞	papaSangay
夜曆	名詞	pinaShae:wan kakita'an ka hahila:
新鮮的	形容詞	'ima baba:aw
芋頭糕	名詞	rokol tinawbon
鼓起來;使吃飽	動詞	paSantoptopoy

中文	詞性	族語
趨光性	名詞	kama tani pinahiyo'
滑翔	動詞	homayap
太陽能板	名詞	balihaeh noka hahila: zinki'
物質	名詞	kakrangi'an
光子	名詞	hinila:
光電效應	名詞	kinaS'aliyaS ki zinki' pinatawaw
滲透壓	名詞	ka'i:'i:zo' hineSem

科學單詞

吉娃斯愛科學 賽夏族語

第03集 飛魚的夜曆

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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)

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