

那一年，我們一起守護海洋

The Year We Protected the Ocean Together



今年的暑假很不一樣，班上的同學經常到海王星碼頭。

This summer vacation was very different.
My classmates went to Haiwangxing Dock
all together quite often.





我們會蹲下身，瞪大眼睛的往海底瞧。
We would crouch down and stare into the sea water.



小野指著水下的石頭說：

「你看！石頭上是不是有一隻一隻黑黑的東西？」

「那是什麼？」小野的弟弟問。

Xiaoye pointed to the rock under the sea and said,

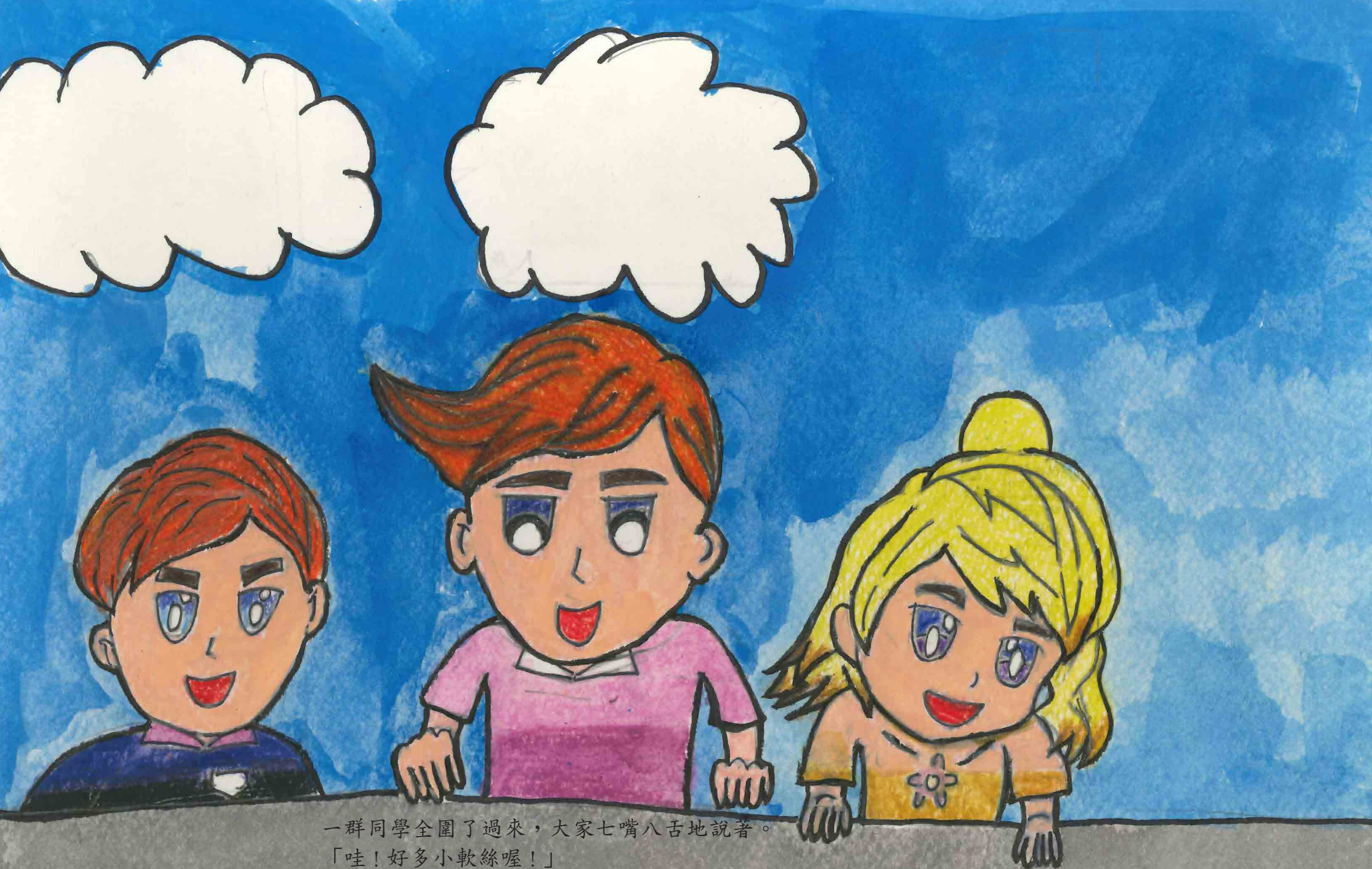
“Look! Do you see those black things on the rock?”

“What are they?” asked Xiaoye's brother.

「那就是軟絲寶寶喔！」小野說。

“They're baby squids(ruǎn sī)!” said Xiaoye.



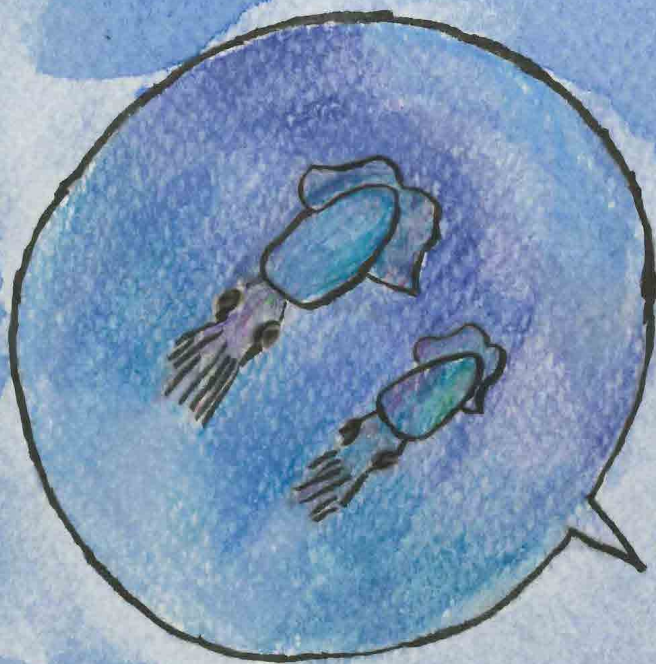


一群同學全圍了過來，大家七嘴八舌地說著。

「哇！好多小軟絲喔！」

All the kids came together and talked excitedly.

「好可愛！旁邊還有一二隻透明的軟絲。」
“They are so cute! two transparent squids are even swimming around !”



原來，去年獨木舟薪傳時，小野和同學划著獨木舟到海中，放下他們親手為軟絲製作的產房－竹叢礁。

Actually, during the Kayaking Transmission Ceremony last year, the kids placed a lot of bamboo into the sea water for squids to lay eggs and raise their babies.





「是啊！是啊！那一刻，超級感動的！」小玲說。

"Yeah, that moment was really touching !" Said Xiaolin.

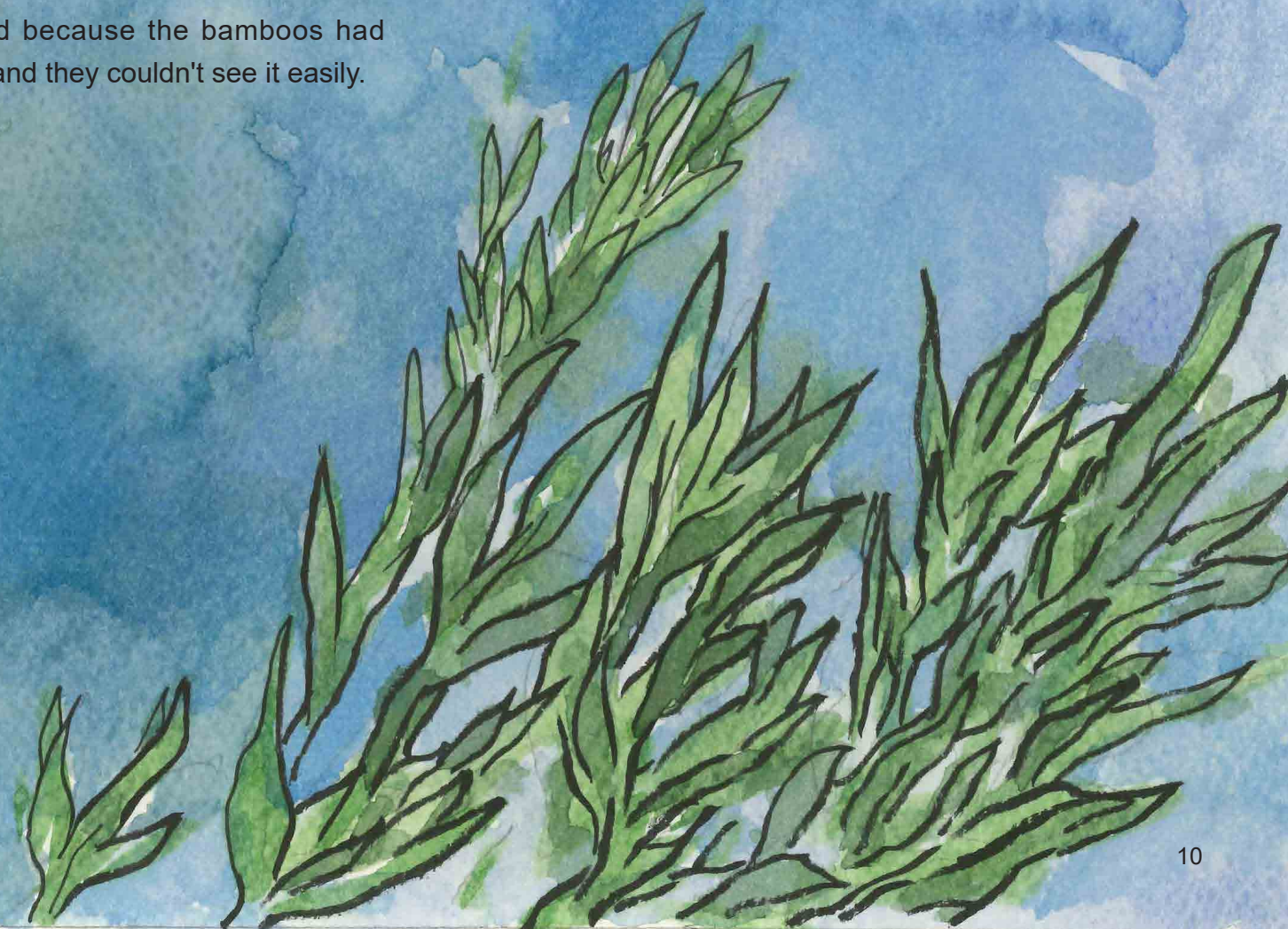


放下竹叢礁後，小野和弟弟總愛現的憋氣潛水。
想看看竹叢礁上有沒有軟絲的卵。

After that, Xiaoye and his brother always liked to show off their diving skills and see if there were eggs attached to the bamboo.

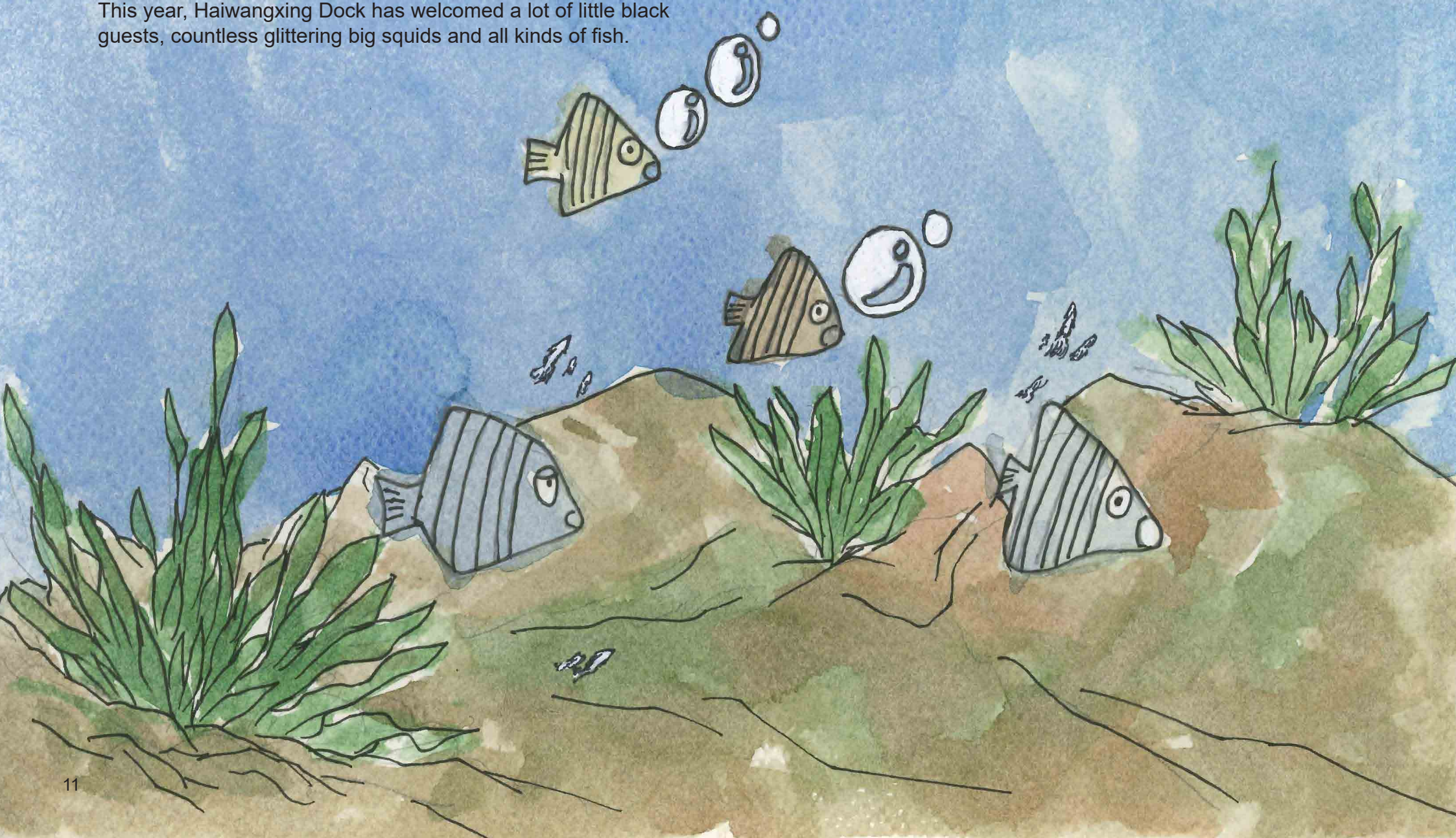
他們很失望，因為竹叢礁沉在很深很深的海底，
他們看不見……

They were very disappointed because the bamboos had
sunk to the bottom of the sea and they couldn't see it easily.



今年，海王星碼頭有很多黑黑的小客人，
一隻隻閃著小光點的大軟絲和各式各樣的魚。


This year, Haiwangxing Dock has welcomed a lot of little black
guests, countless glittering big squids and all kinds of fish.



很多的海洋生物都回到了野柳的保育區

Many sea creatures have all returned to
Yehliu Conservation Area.





為了能更認識軟絲，小野向同學介紹頭足類：
「章魚有八隻腳，圓圓的可不是大頭，是章魚的肚子。」
「肚子？那章魚的頭呢？」小玲問。

To learn more about squids, Xiaoye started to tell his classmates about cephalopods.

“An octopus has eight legs and a circle belly which looks just like a big head.”

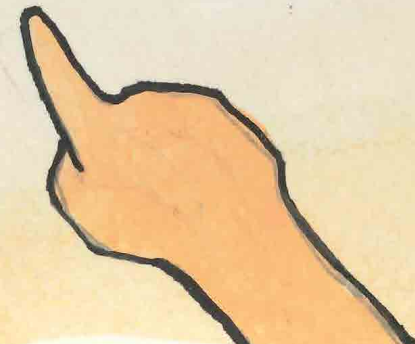
“That's its belly? So, where's its head?” Asked Xiaoling.

小野將手指向兩眼之間說：

「頭足類就是頭和腳連在一起，所以章魚的頭在兩個眼睛上方。」



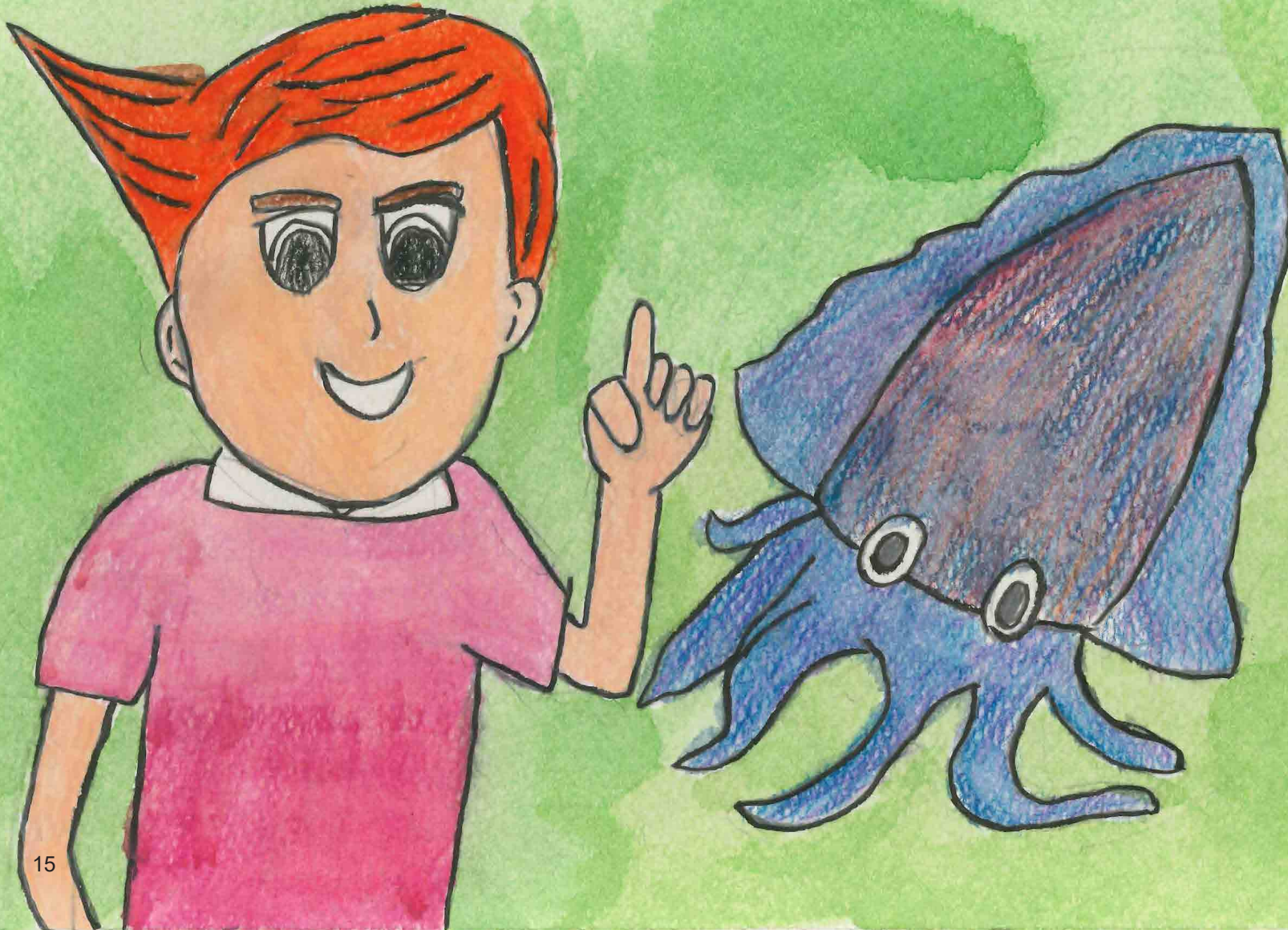
Xiaoye pointed to the part between its eyes and said,
“Octopuses are part of the cephalopod family.
‘Cephalopod’ means that the head is connected to the feet.
That’s why an octopus’ head is on its eyes.”



小野又問：

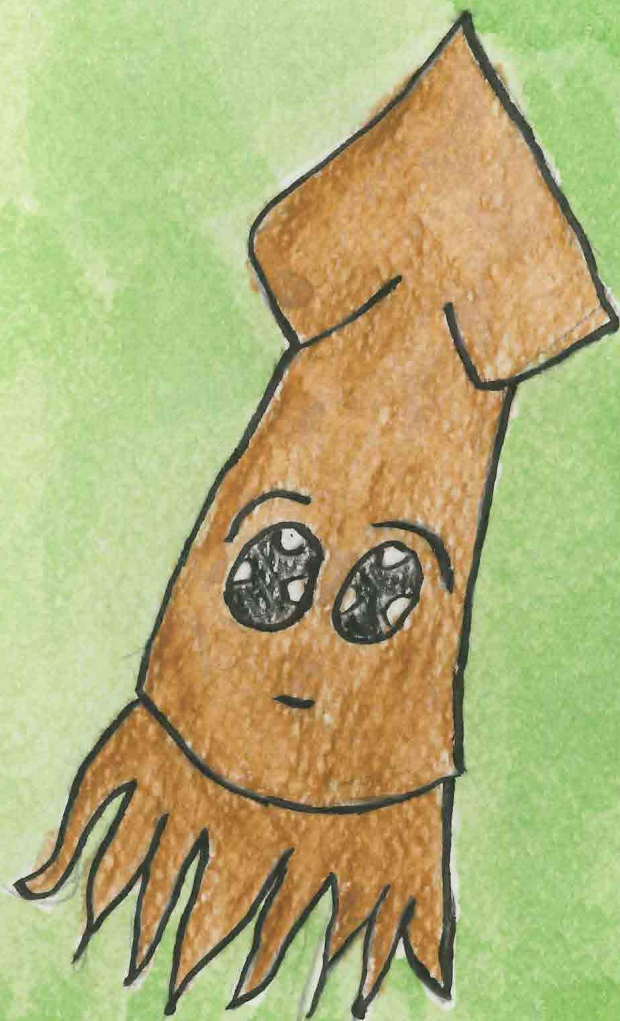
「大家知道軟絲、花枝、小卷、透抽和魷魚該如何分辨嗎？」

Xiaoye asked again, "Ruǎn sī, huā zhī, xiǎo juàn, tòu chōu and yóu yú are all considered squids. Does anyone know how to tell them apart?"

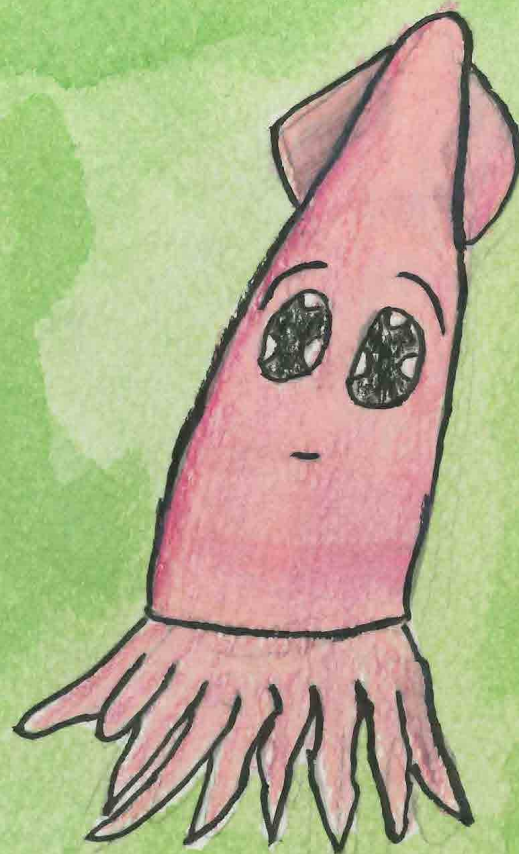


「後方肉鰭三角形的是魷魚，菱形的是小卷和透抽。而花枝和軟絲的肉鰭是一長條連在身體的旁邊，花枝的體內有硬硬的白色骨板，而軟絲沒有。」

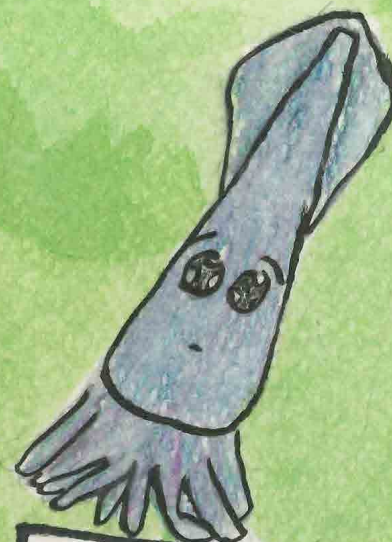
"A yóu yú has a triangle fin, xiǎo juàn and tòu chōu have a diamond ones. The fins of a huā zhī and a ruǎn sī are long shaped and connect to the two sides of the body. There is a hard bone in a huā zhī's body, but not in a ruǎn sī's."



魷魚



透抽



中卷



花枝



小卷



軟絲

小玲補充說：「頭足類動物的身體還會因為環境變色，保護自己。也會用身體的顏色來表達情緒喔！」

Xiaolin added, “Cephalopods can change their color to blend into their surroundings and protect themselves. They also show their emotions by changing colors.”





「活的軟絲身上的斑點紋會一閃一閃的發光。我阿公說，新鮮小卷和透抽的身體斑紋會很清楚，不新鮮就會變得模糊。」

“ There are shiny spots and stripes on the body of the living ruǎn sī. My grandpa told me that we can tell if they are fresh or not by them.”



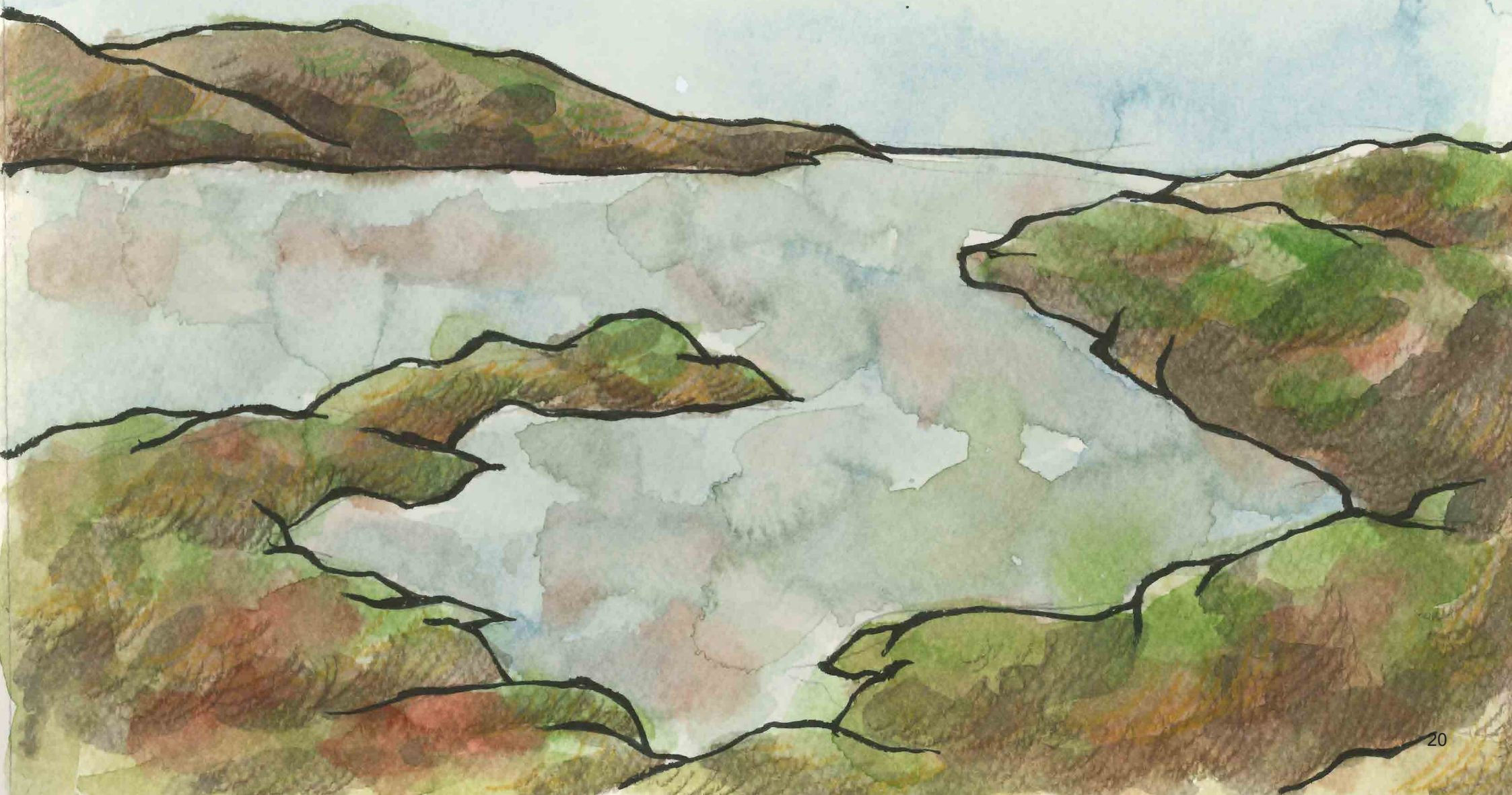
小野帶著同學們一起走到維納斯海岸。
「還記得什麼是潮間帶嗎？」小玲問大家。

Xiaoye took everyone to the Venus Coast. "Do you remember what an intertidal zone is?" Xiaoling asked everyone.



「這個我會！就是海水漲潮和退潮之間的區域。」弟弟說。

"I know! It's a zone between high and low tides." Said the brother.

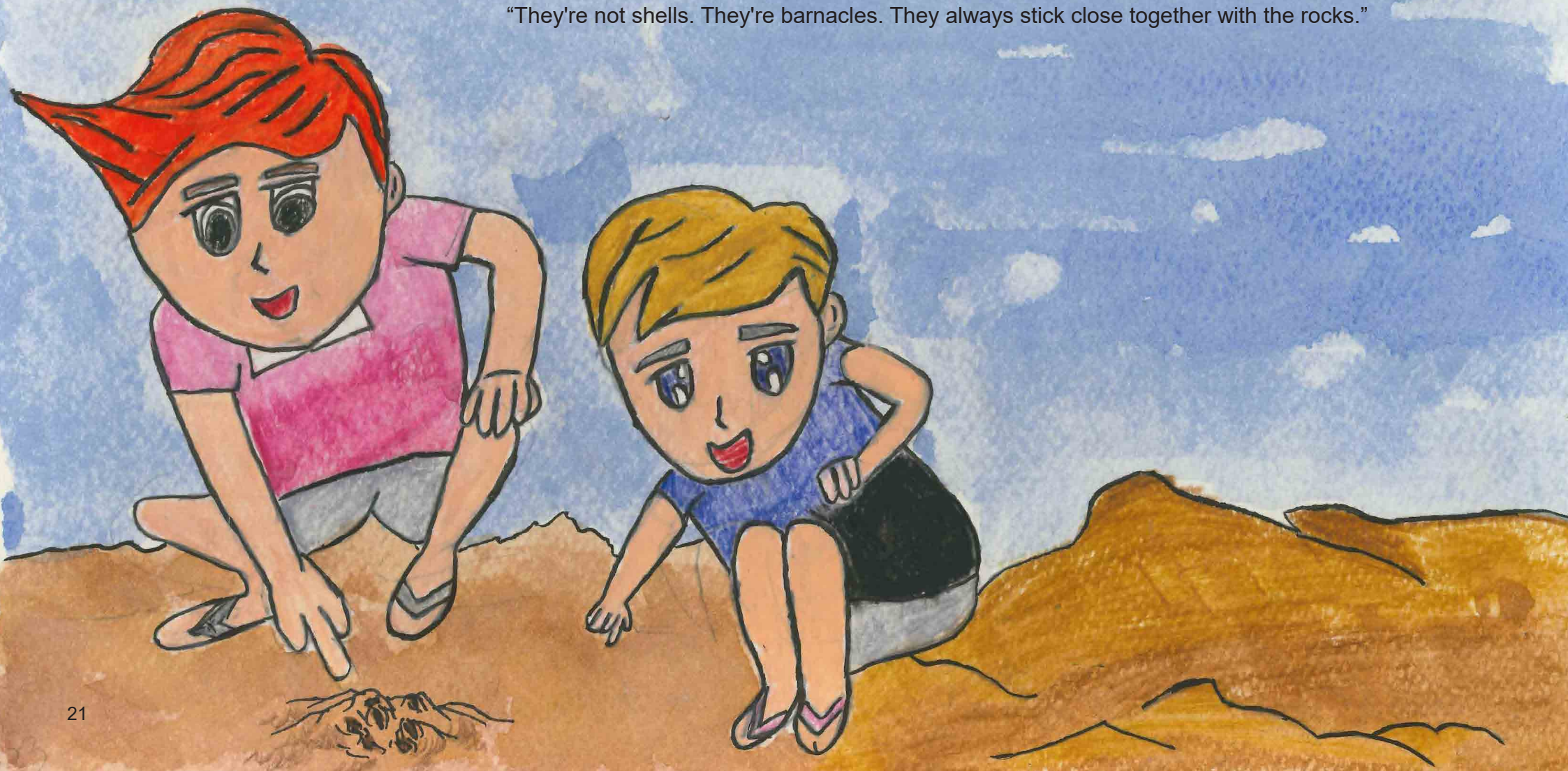


「那是什麼？為什麼貝殼都破掉？」弟弟好奇地的問。

「那不是貝類喔！那是藤壺，他會把自己緊緊的附著在岩石上。」

Xioaye' s brother asked curiously, "What are those? Why are the shells broken?"

"They're not shells. They're barnacles. They always stick close together with the rocks."



「當漲潮時，他的殼蓋會打開並伸出觸手來濾食浮游生物；而退潮時，牠會關閉殼蓋，防止身體的水分流失。」小野說。

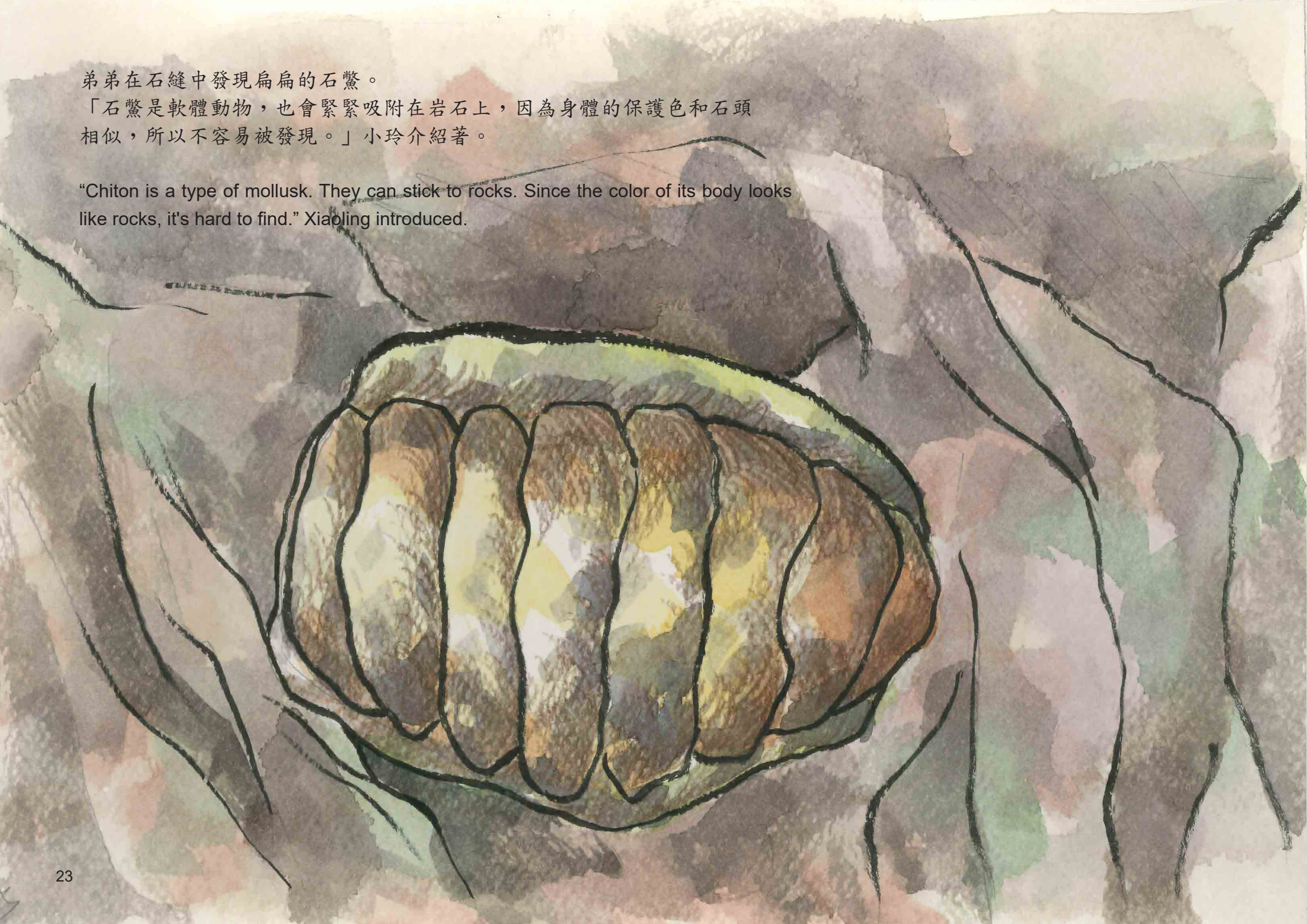
“When the tide is high, they open their shells and stretch their tentacles to catch the plankton. When the tide is low, they close their shells to keep their bodies from losing water.”



弟弟在石縫中發現扁扁的石鰐。

「石鰐是軟體動物，也會緊緊吸附在岩石上，因為身體的保護色和石頭相似，所以不容易被發現。」小玲介紹著。

“Chiton is a type of mollusk. They can stick to rocks. Since the color of its body looks like rocks, it's hard to find.” Xiaoling introduced.



「石鰲的身上有像小眼睛的感光體，可以偵測外面環境中的光線。而且口中有一個厲害的割草機，用口內的齒舌來刮食岩石上的海藻。」

“Chiton don't have eyes, they have photoreceptors that catch light. Their mouths are also like a lawn mower; they can use their tongue to scratch and eat seaweed from rocks.”



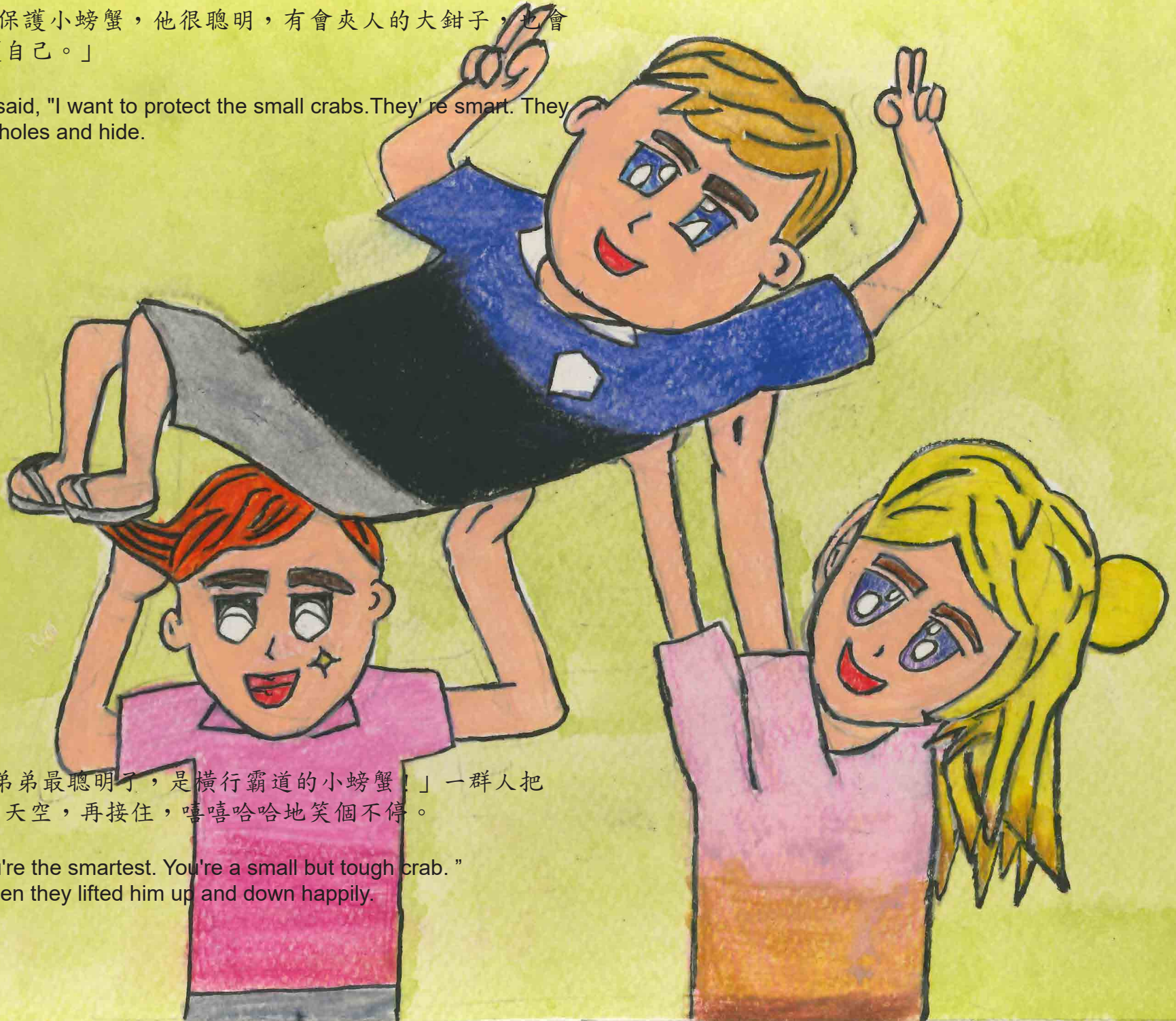
小玲說：「潮間帶的生物為了生存，很努力地克服環境的阻礙，我們要尊重牠們，也守護這一片海洋。」

"These organisms have to overcome a difficult environment to live in the intertidal zone. We should respect and protect them, and the ocean, too."



弟弟說：「我要保護小螃蟹，他很聰明，有會夾人的大鉗子，也會挖洞躲起來保護自己。」

Xiaoye's brother said, "I want to protect the small crabs. They're smart. They have claws to dig holes and hide.



「對！對！對！弟弟最聰明了，是橫行霸道的小螃蟹！」一群人把弟弟抬起來拋向天空，再接住，嘻嘻哈哈地笑個不停。

"Hahaha, yes, you're the smartest. You're a small but tough crab."
Everyone said. Then they lifted him up and down happily.

「咦？那是什麼？」弟弟眯著眼睛仔細看。

Xiaoye looked at something closely and said, "What's this?"



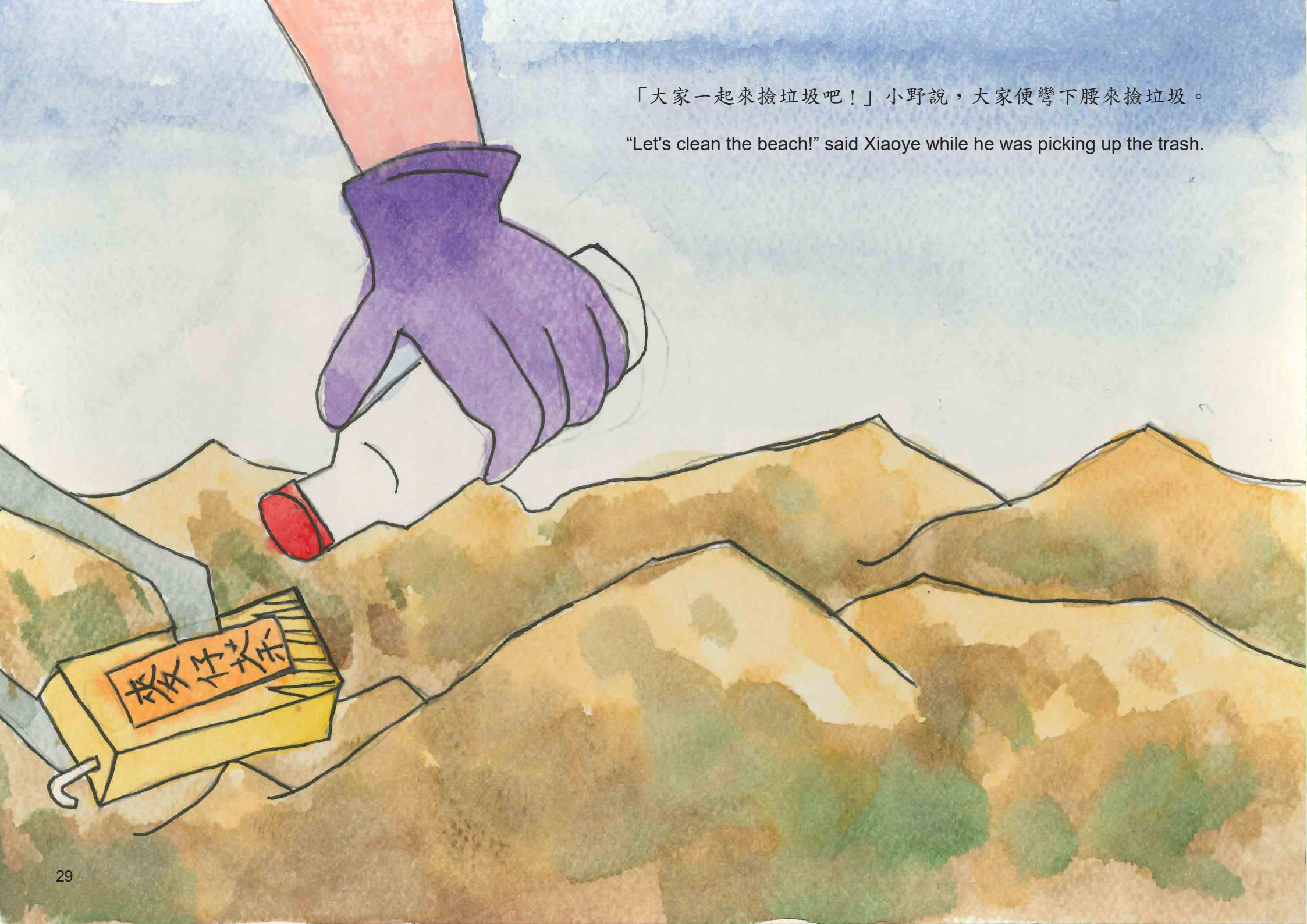
「這麼漂亮的海岸竟然飄來寶特瓶！」小玲喊著。
小野生氣的說：「真沒公德心，破壞環境生態。」

Xiaoling yelled, "How come there are so many PET bottles scattered on such a beautiful seashore?"
Xiaoye said angrily, "This behavior is not just selfish but also ruining our environment."



「大家一起來撿垃圾吧！」小野說，大家便彎下腰來撿垃圾。

"Let's clean the beach!" said Xiaoye while he was picking up the trash.



「你們看，這是漂流木，我們可以撿回去彩繪創作。」小玲說。

「對啊！浮標、浮球或漂流木都可以再利用，我有個好點子。」小野說。

Xiaolin said, "Look! It's driftwood. Let's take it back and we can color it and make it an art piece."

Xiaoye talked to everyone, "We can reuse the buoys, balls and driftwood. I have a good idea!"



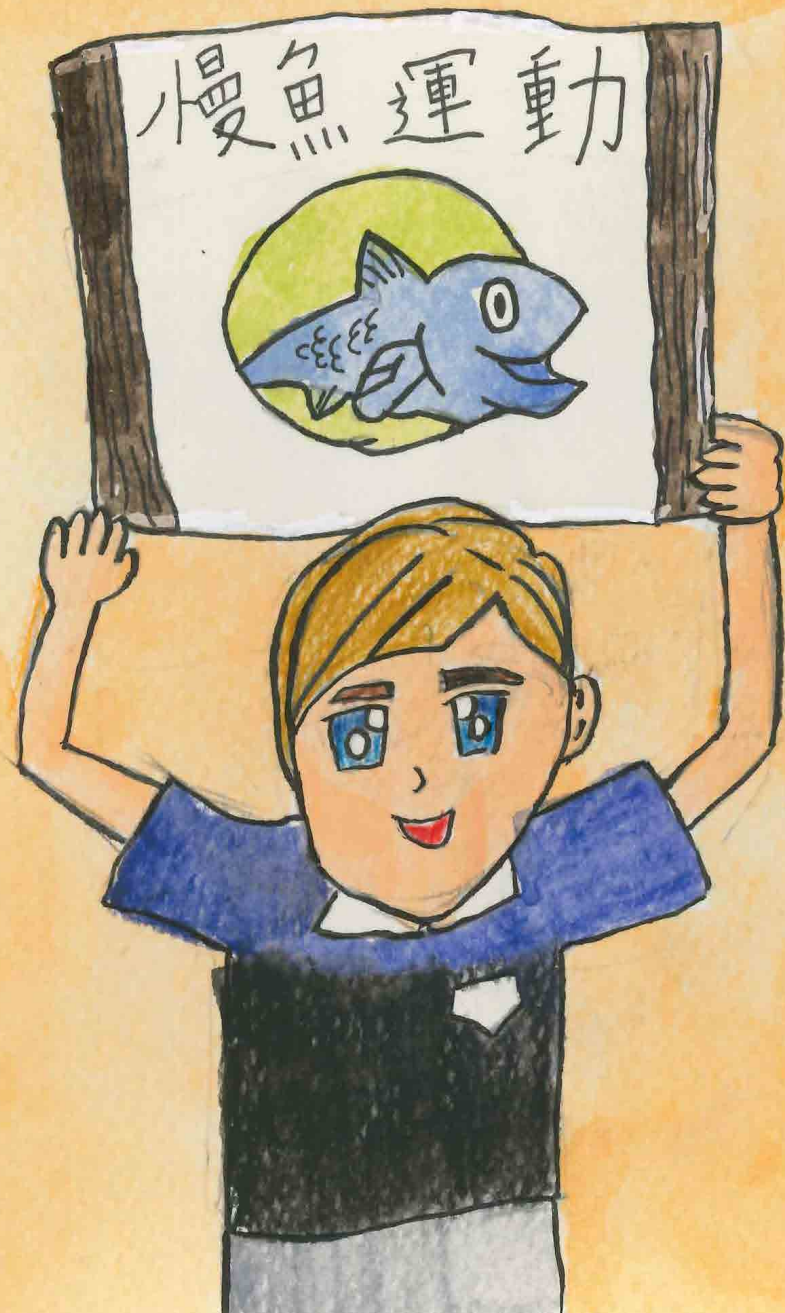
「我們可以利用這些海洋廢棄物創作一些吸引人的作品，再寫上一些愛護海洋的標語，掛在學校的圍牆上，提醒大家要愛護海洋，珍惜海洋資源。」

"We can change the ocean waste into artwork to attract people, write some slogans, and hang it on the school wall to remind everyone that we need to protect and cherish our ocean resources."



「嗯，我要宣導生活減塑，希望大家在平時的生活裡少用塑膠製品，或者重複使用。」小玲說。

「那我要來個慢魚運動，讓大家慢慢吃魚，吃在地，食當季，讓海洋永續存本，這樣我們才會一直有海鮮可以品嚐。」弟弟說。



Xiaolin said, "Yes. I'll promote plastic reduction. I hope that everyone can reduce or recycle plastic waste."

The brother said, "I want to do the 'Slow Fish activity' to tell everyone to eat fish slowly and eat the local or current season fish. This way, we will eventually have abundant seafood."



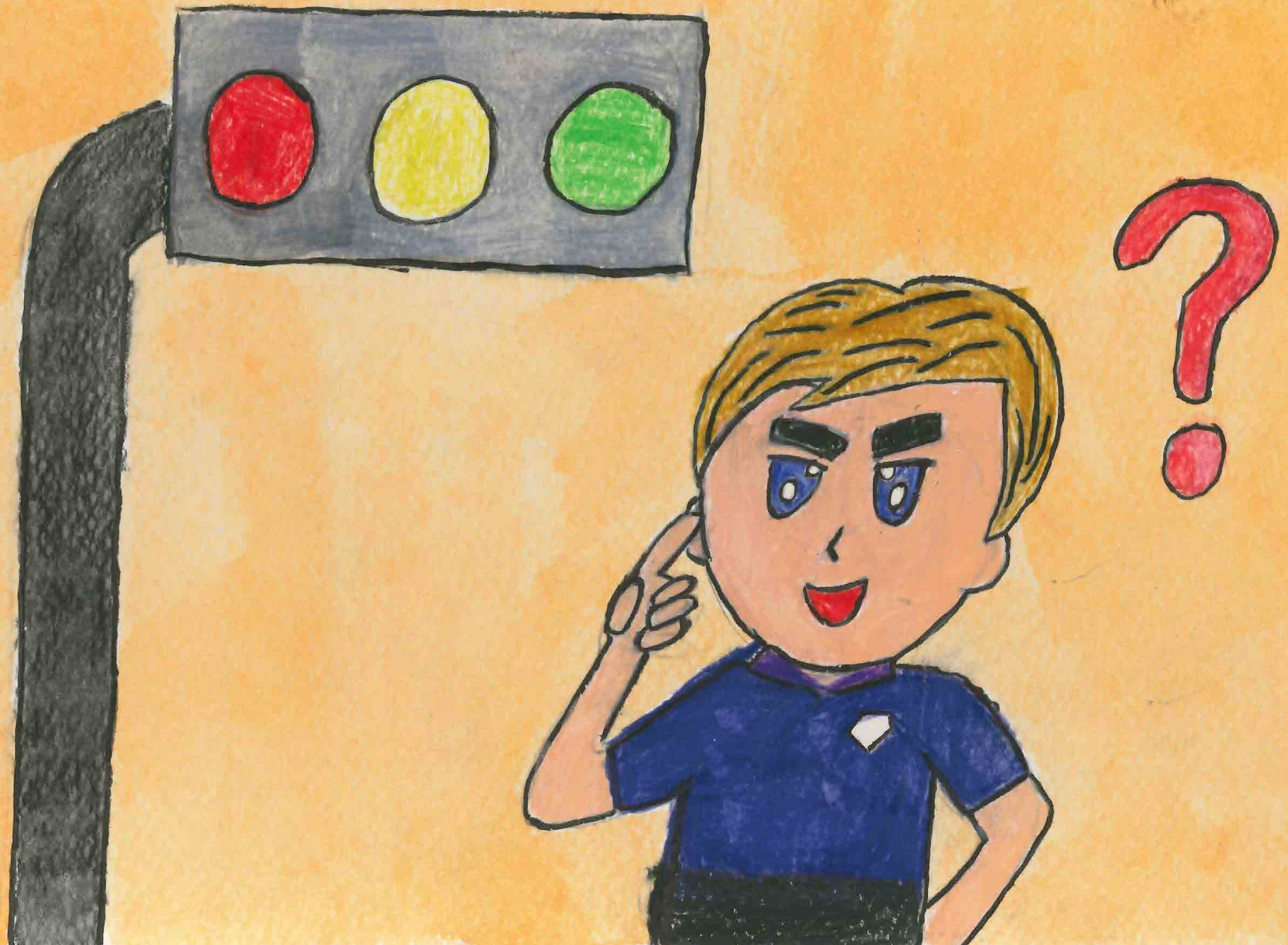
小野說：「那我要還要告訴大家海鮮選擇紅綠燈。」

Xiaoye said, "I will have everyone learn about the seafood traffic light."



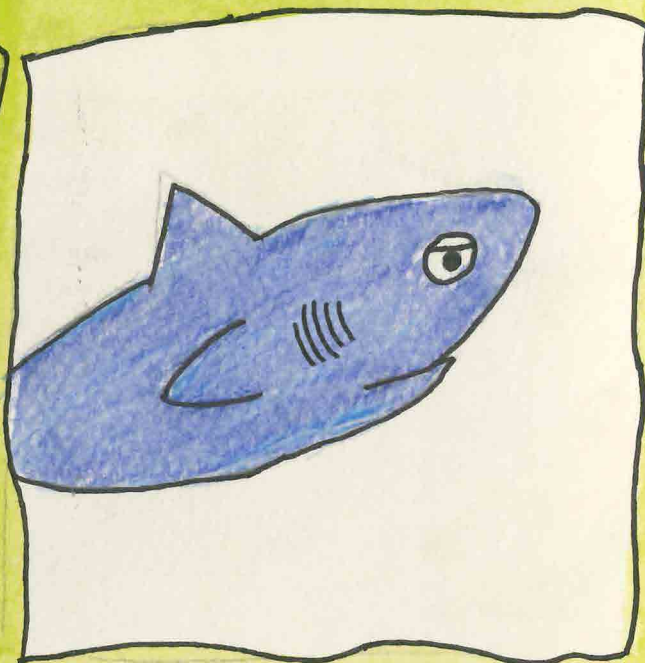
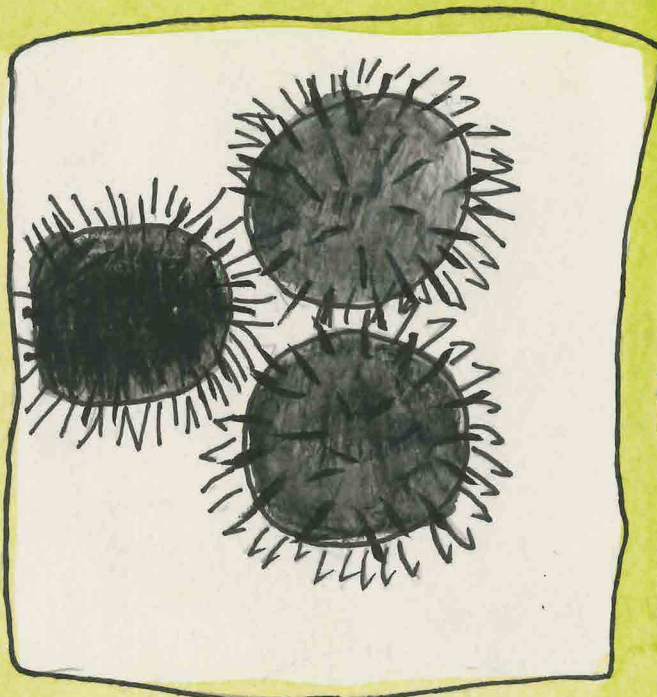
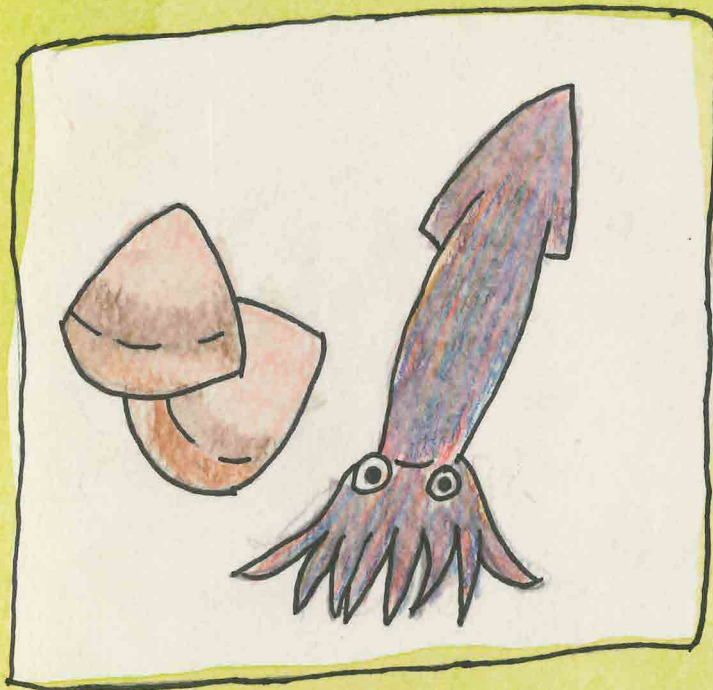
「海鮮也有紅綠燈？」小野弟弟好奇的問。

"There's also a traffic light for seafood?" Asked Xiaoye's brother.



「這個紅綠燈是把魚種分成可以常吃的綠燈組、想清楚再吃的黃燈組和建議勿食的紅燈組。像蛤蜊和小卷都是綠燈組海鮮，可以在生產季常常食用。小野說。

"We divided seafood into three traffic lights- green, yellow and red light. The green light group means 'eat more often' The yellow light group means 'think before you eat'. The red light group tells people 'better not to eat'. For example, clams and squids are in the green light group, so we can eat them more in the right season." explained Xiaoye.



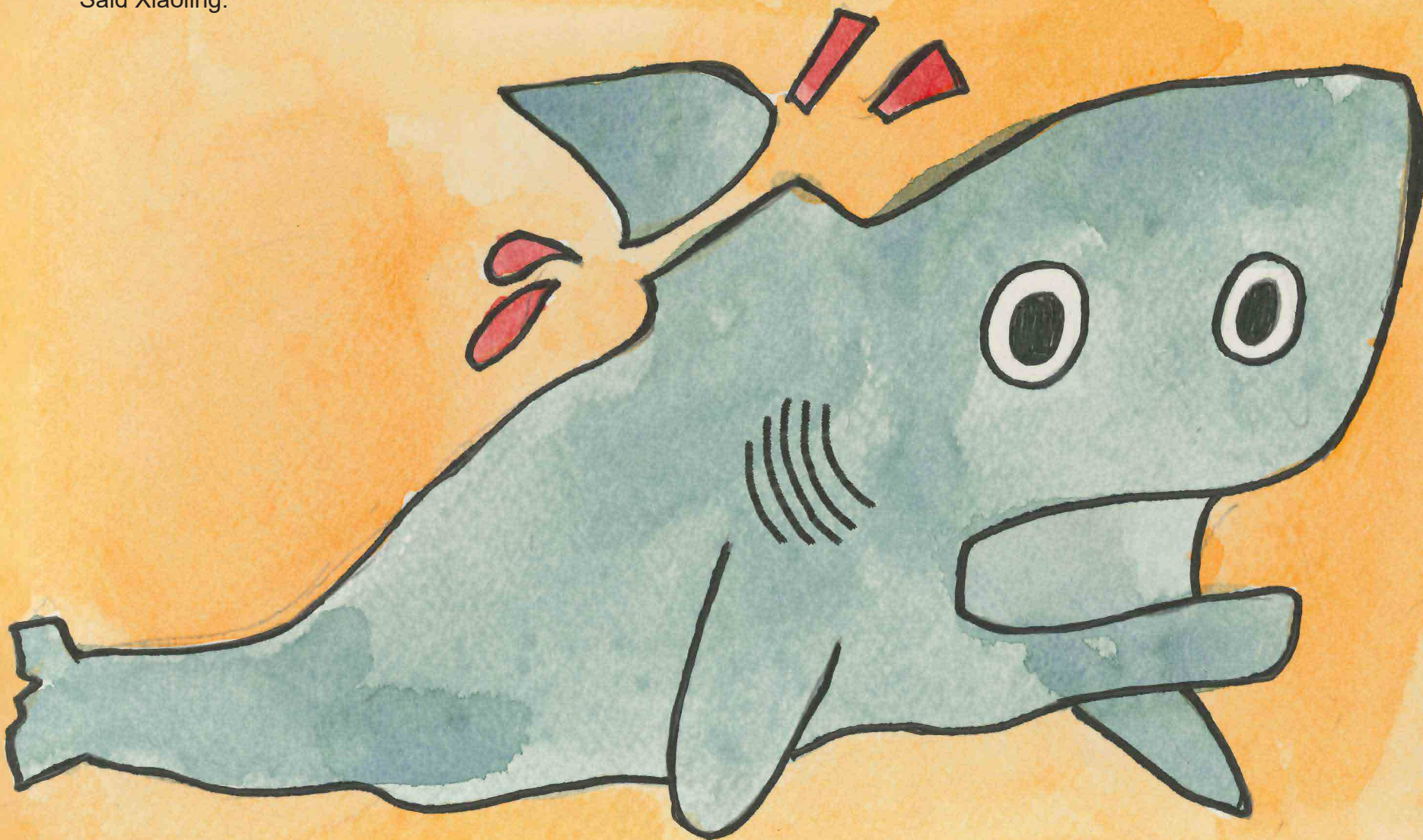
綠燈

黃燈

紅燈

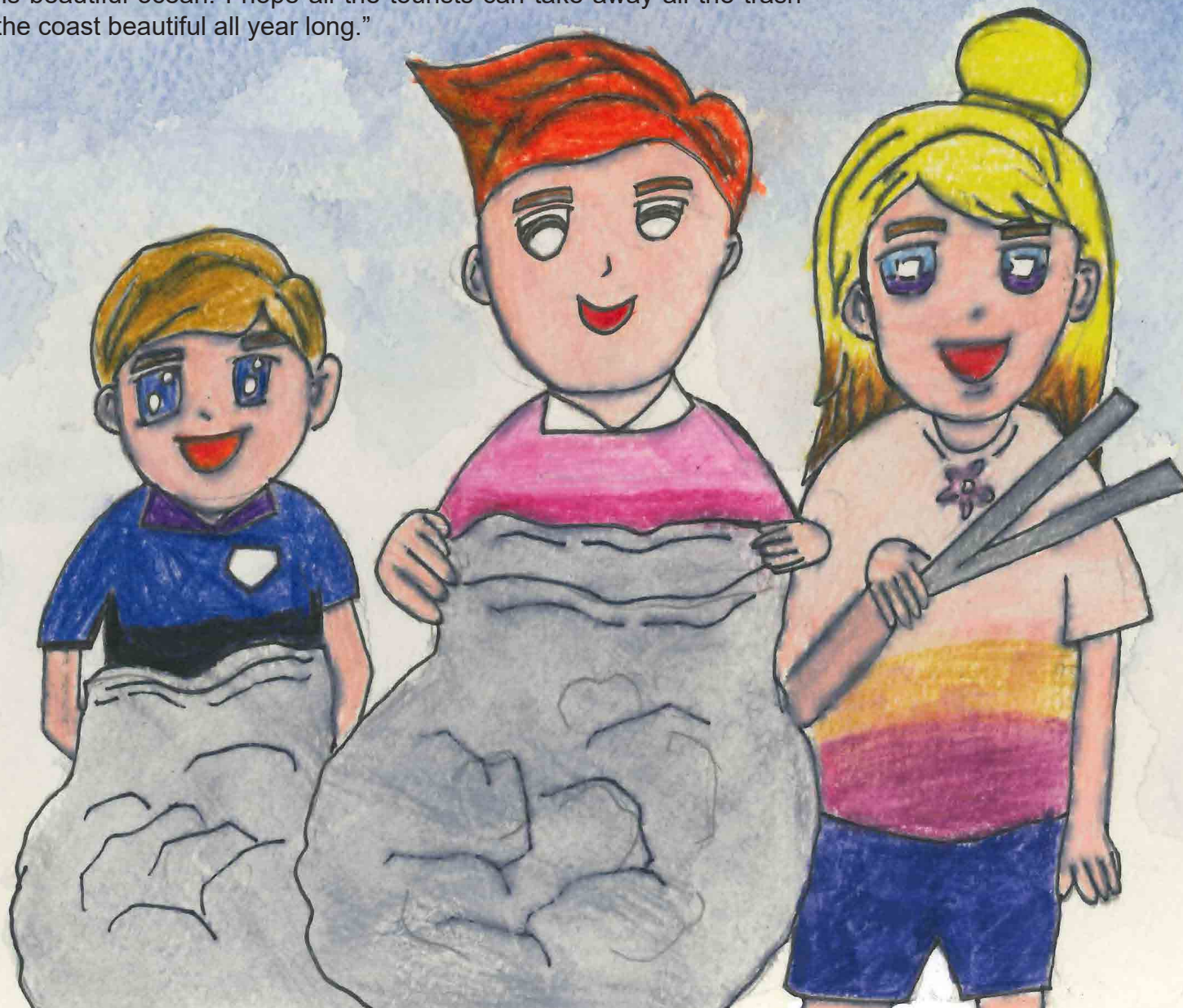
「以前我很愛吃魚翅，現在我也不吃了，因為是紅燈組海鮮，要捕殺大量的鯊魚，只取牠的魚鰭，很殘忍。」小玲說。

"I loved eating shark fins so much but I don't anymore. Shark fins are in the red light group which means people kill many sharks just for their fins. It is really cruel." Said Xiaoling.



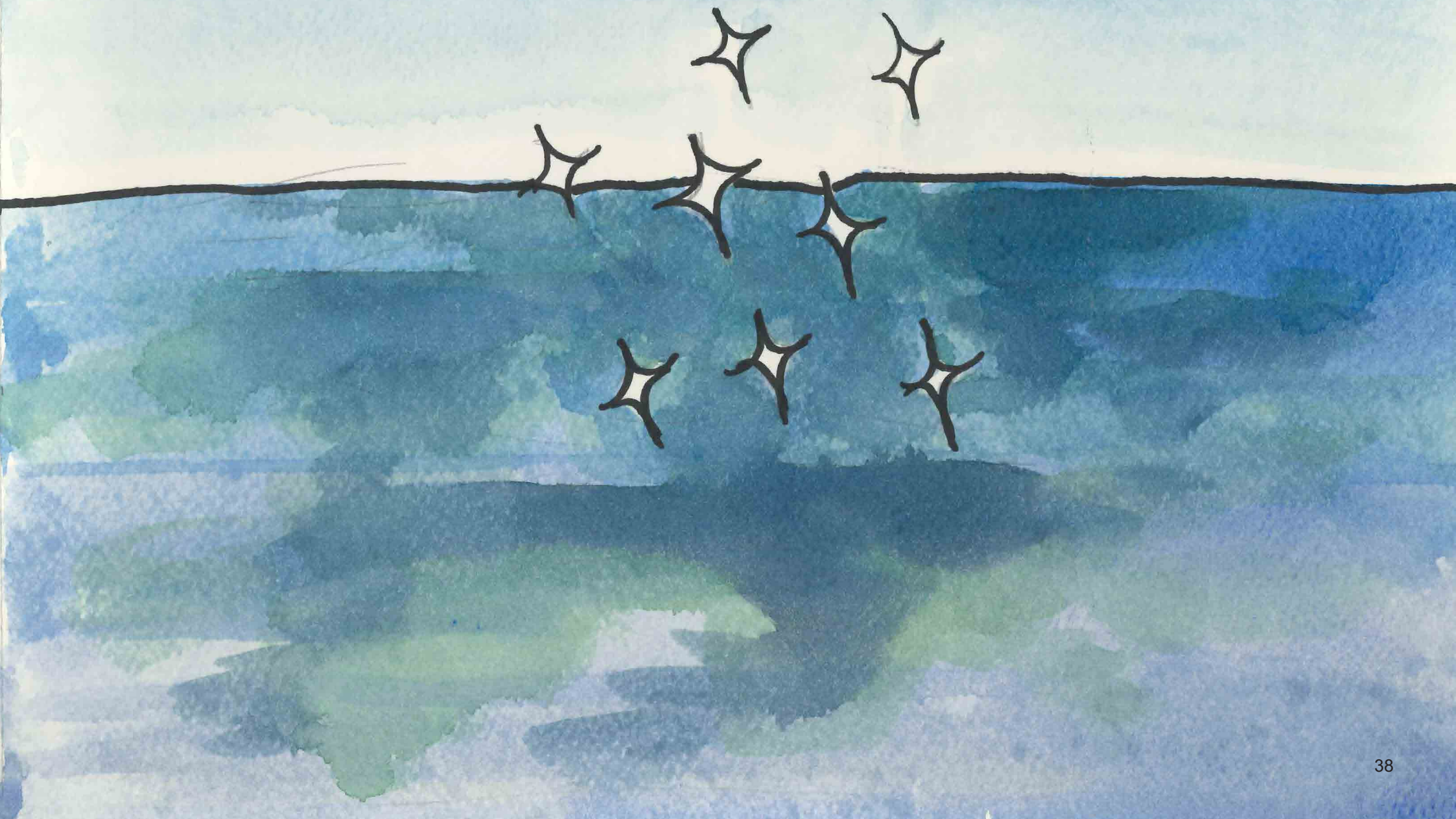
「看看這片美麗的海洋，希望遊客可以把自己的垃圾帶走，讓海岸
一年四季都有不同的風貌。」大家在心裡期許著。

“Look at this beautiful ocean. I hope all the tourists can take away all the trash
and leave the coast beautiful all year long.”



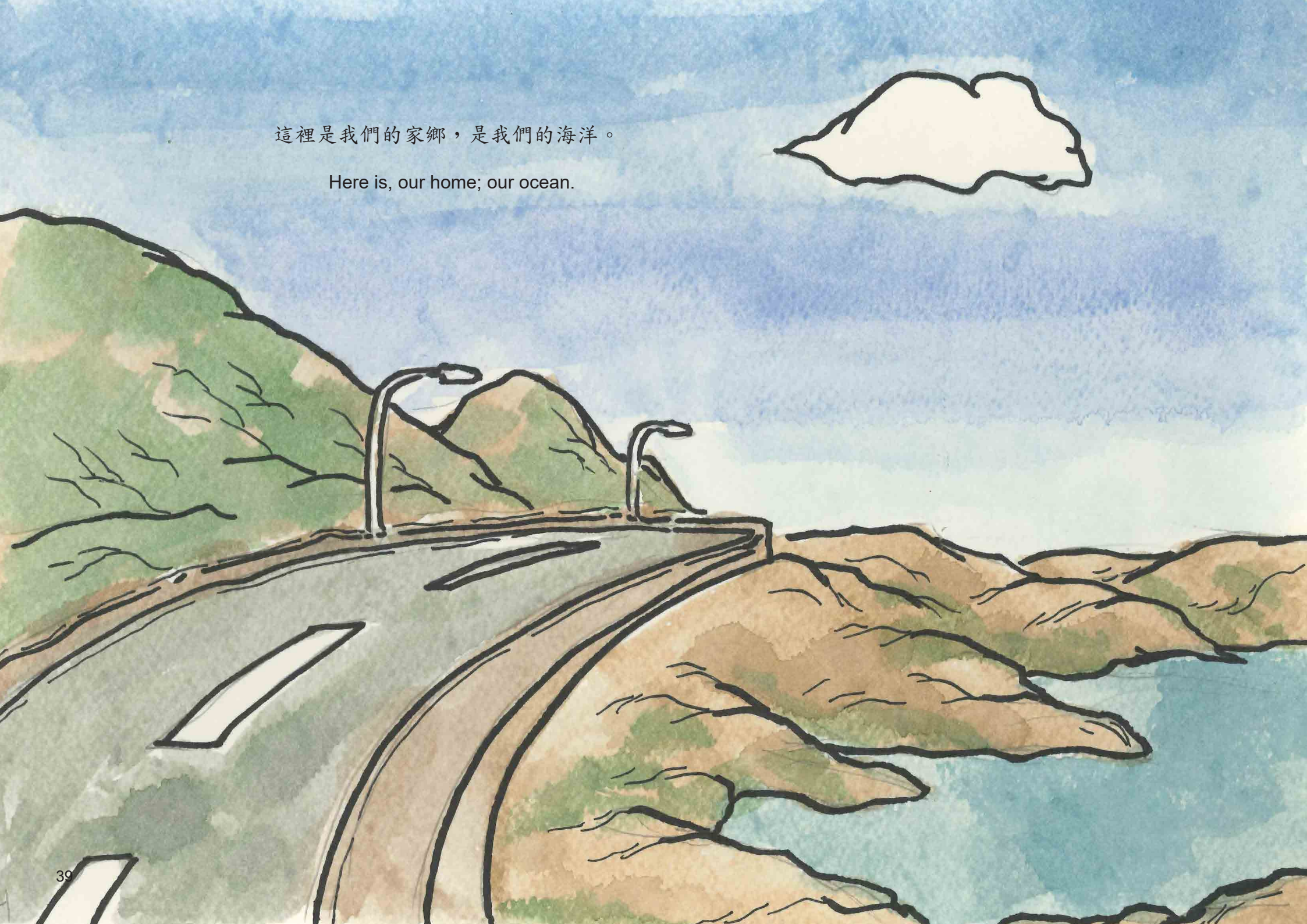
陽光下，大海波光粼粼閃耀著光芒，似乎正向我們回應著感謝。

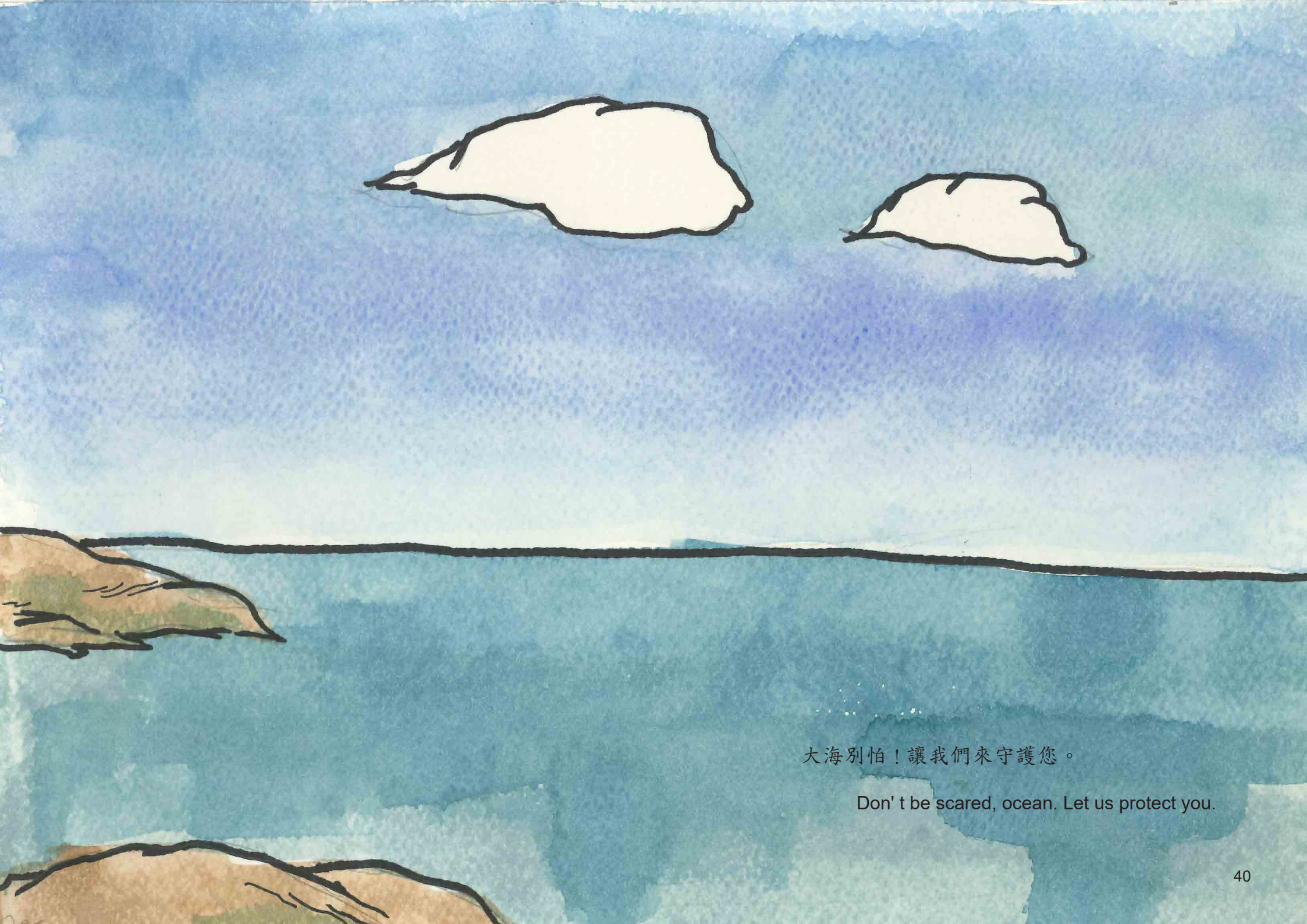
The waves of the ocean are shining under the sunlight, which seems like a response with gratitude to all of us.



這裡是我們的家鄉，是我們的海洋。

Here is, our home; our ocean.





大海別怕！讓我們來守護您。

Don't be scared, ocean. Let us protect you.

