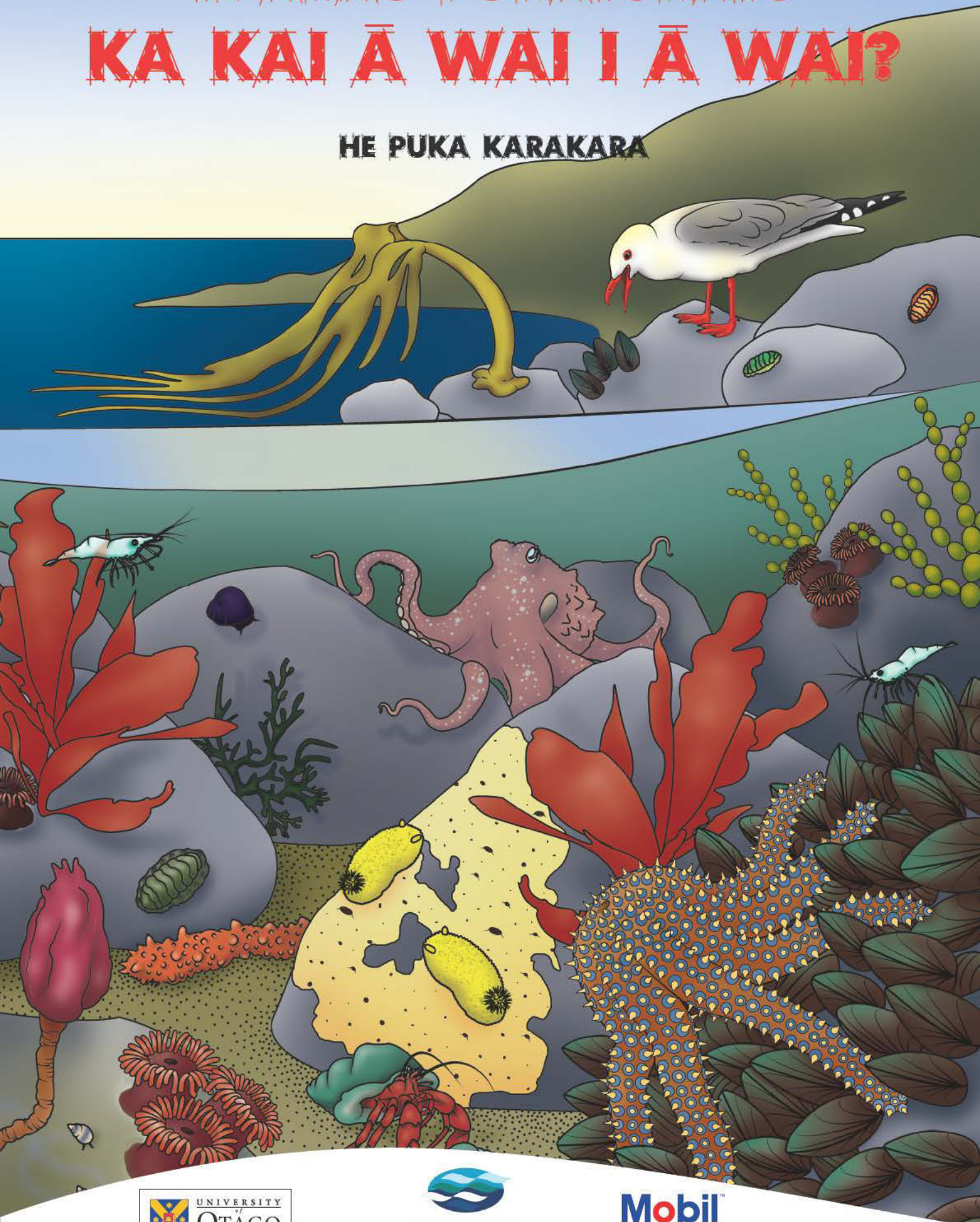


TE ĀKAU PŌHATUHATU KA KAI Ā WAI I Ā WAI?

HE PUKA KARAKARA



NGĀ KARAREHE O NGĀ ĀKAU PŌHATUHATU O AOTEAROA

I waihangatia tēnei puka karakara e ngā kaimahi o te Whare Mātai Moana o Aotearoa.
Nā Corlis Schneider ngā pikitia, nā Tessa Mills i whakaemi, ā, nā Rangiiria Barclay-Kerr i whakamāori.

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He kōrero mā ngā kaiako me ngā mātua. He puka mahi tēnei e hāngai ana ki ngā kararehe me ngā tipu e ora ana i ngā ākau pōhatuhatu o Aotearoa. Ko ngā pikitia ēnei e whakaatu ana i ngā kai a ngā kararehe, i ngā āhuatanga kōhi kai, me ā rātou rautaki hei huna mai i ngā kōnihi hoki. He mea akiaki i ngā tamariki ki te whakaahua i ō rātou whakaaro mo ngā pikitia, ā, he aha hoki ētehi o ngā āhuatanga e whai pānga ana ki ēnei e ora nei ki ngā ākau pōhatuhatu o Aotearoa. He kohinga kōrero anō kei te whārangi whakamutunga o te puka mahi nei mō ngā kararehe rerekē. Mā te waihanganga i tētehi tukutuku kai e matatau ai ngā tamariki ki ngā kararehe rerekē e noho ana i te taiao o te moana. Ko ētehi kaupapa hei wānanga ake mā koutou ko ngā āhuatanga e panoni ai ngā tukutuku kai a ngā kararehe, he aha hoki i pērā ai. Ka taea e ngā tamariki ētehi pikitia te tā hei whakaatu i ō rātou whakaaro hei tiaki, hei whakarauora i tēnei momo taiao.

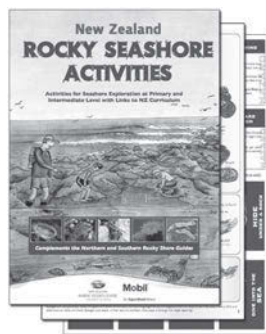
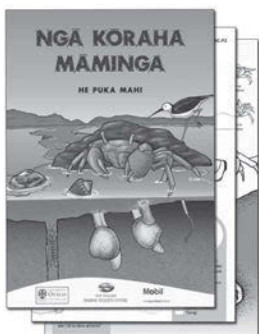
E whakaae ana kia whakamahia ngā pikitia i te pukapuka nei mo ngā whakaakoranga anake.

He pūtea tā **Mobil Oil New Zealand Limited** mo ngā kaupapa ā-hāpori e tautoko ana i ngā mahi o te Whare Mātai Moana o Aotearoa nō te tau 2008. He maha ngā tuhinga takutai moana kua tautokona e Mobil, ko ētehi o ēnei tuhinga ko ngā Pukapuka Arataki mo ngā takutai pōhatuhatu o te Raki me te Tai Tonga, te puka mahi Ngā Kōraha Māminga, te puka karakara Te Ākau Pōhatuhatu: ka kai ā wai i ā wai? E rua ngā Puka Arahi, kotahi mo te Raki, kotahi mo te Tonga.

He rauemi ēnei mō ngā kura, mo ngā hāpori, mo ngā whānau hoki e whakahau ana i te tāpua o te tiaki i ngā oranga katoa o te moana.

Ka taea e koe te tiki atu i ēnei tuhinga i te ipurangi mo te kore utu, hono atu ki te whārangi ipurangi o www.marine.ac.nz

He kōrero anō mō ngā mahi o Mobil ki te whārangi ipurangi o www.mobil.co.nz



Ka hono atu te Whare Mātai Moana o Aotearoa ki te Te Tari Pūtaiao Taimoana o Te Whare Wānanga o Ōtākou, ka whakaahua rātou i te oranga taimoana o ngā wai o Aotearoa ki te Tonga, ā, ka whakapuaki i ngā mātauranga e hāngai ana ki te taiao taimoana o Aotearoa. Ko te take matua o te kaupapa nei kia matatau ngā tamariki ki ngā āhuatanga o te taiao taimoana. Whakapā atu ki te Whare Mātai Moana o Aotearoa pēnā he pātai anō ā koutou.

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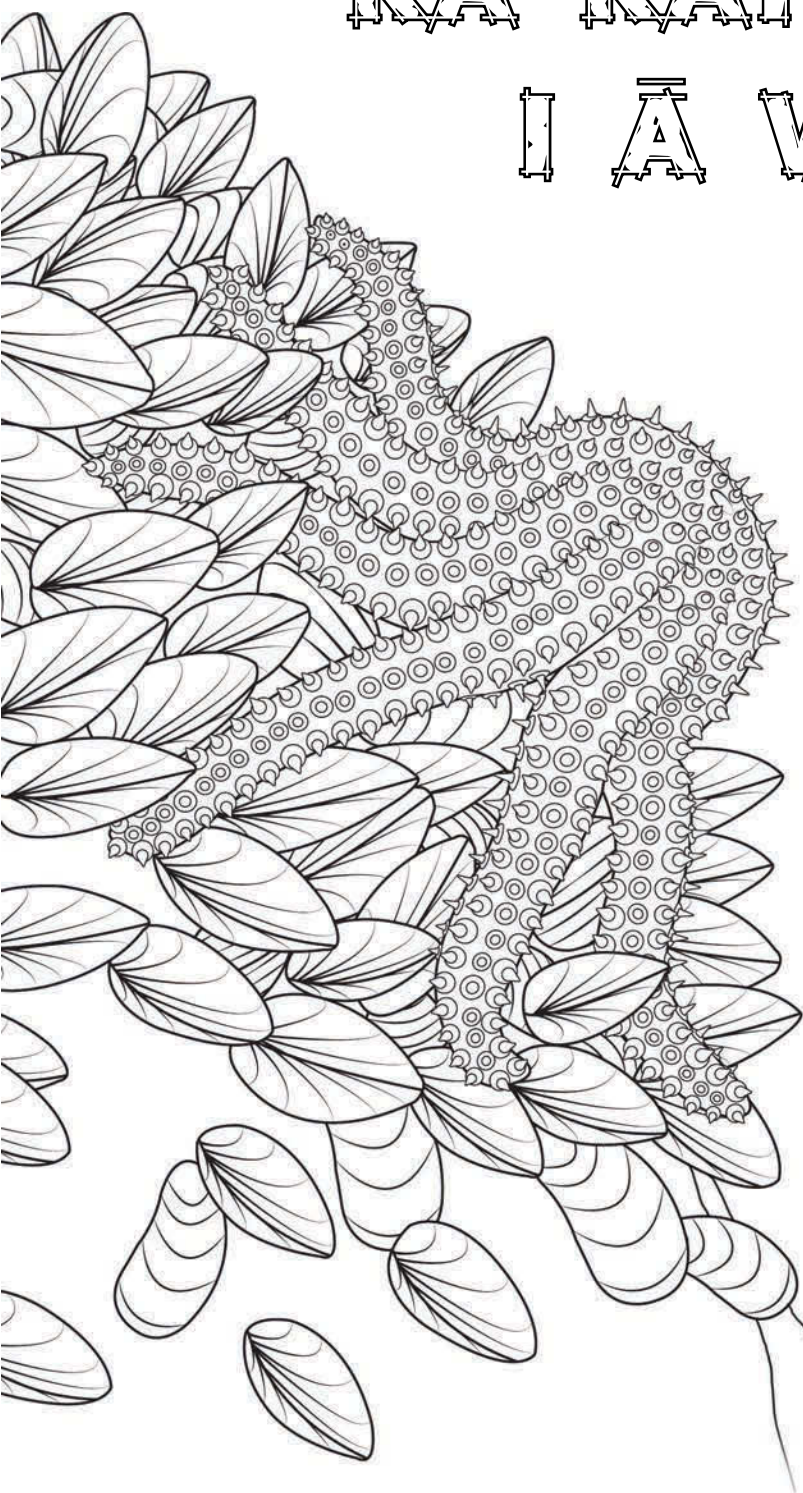
Ipurangi: www.marine.ac.nz

NGĀ ĀKAU PŌHATUHĀTU

○ AOTEAROA

KĀ KAI Ā WAI

I Ā WAI?



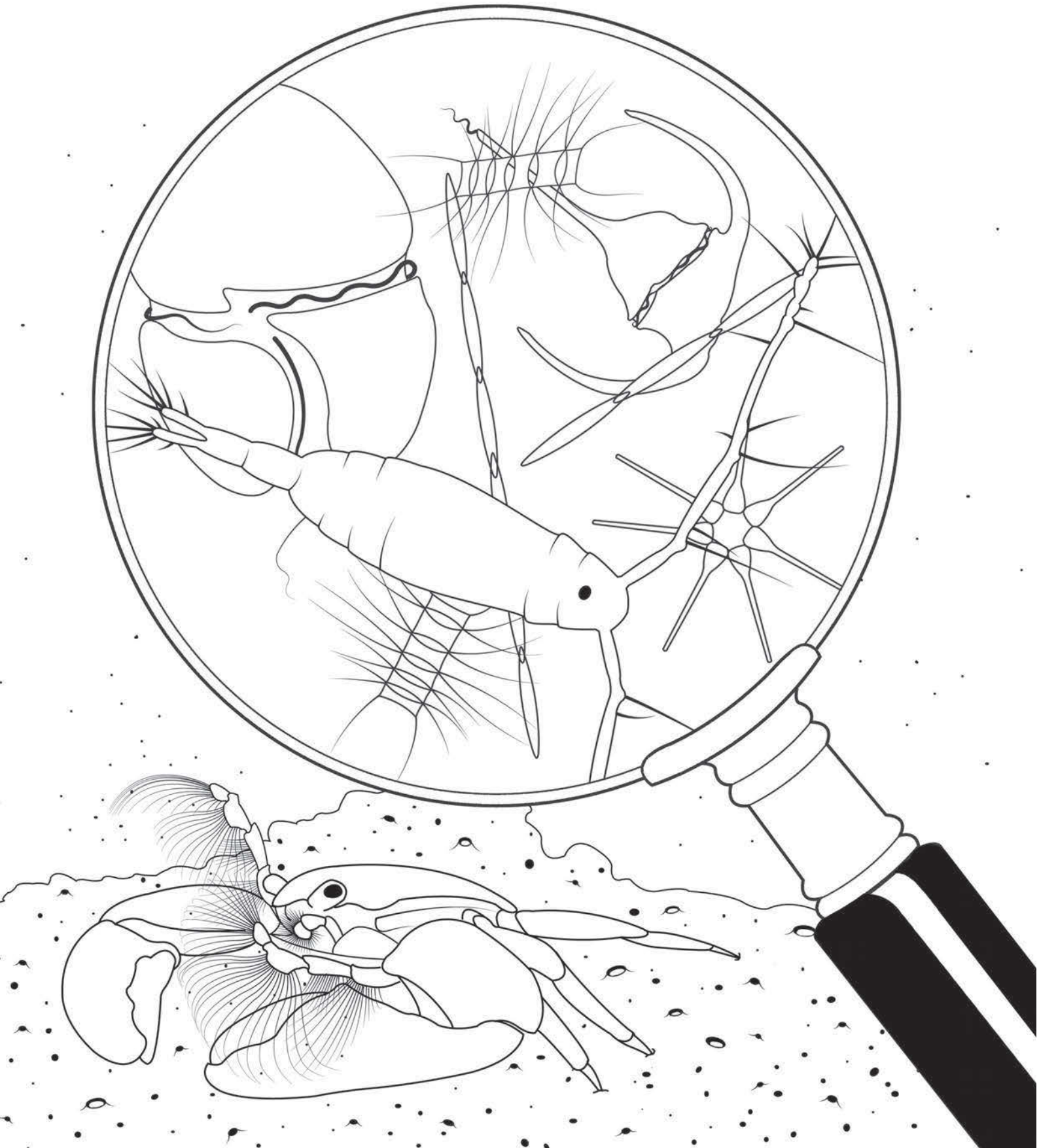
Tūhuratia ngā kararehe rerekē e noho ana ki waenganui i ngā tai o ngā ākau pōhatuhatu o Aotearoa.

Karakara i ngā pikitia, ā, me rapu tiwhirī e mōhio ai koe ki ā rātou kai, ā rātou rautaki rapu kai, me ā rātou rautaki huna hoki.

Hangaia tētehi tukutuku kai kia matatau koe ki ngā kararehe me ngā tipu o te moana.

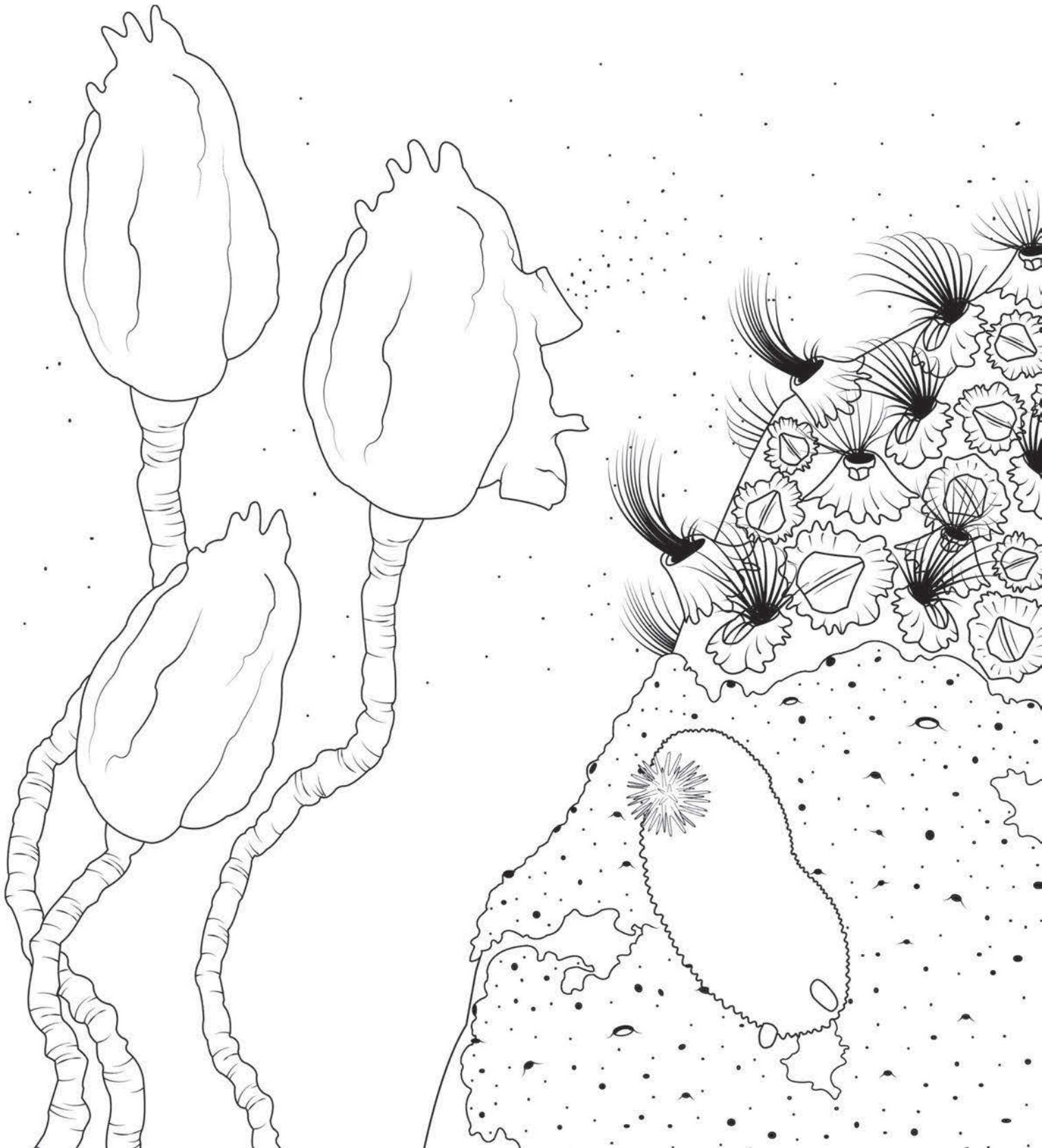
HUPA MEROITI

Ko ngā meroiti ngā kai matua o ngā kararehe o te moana. He nui noa atu ngā kai o ngā kararehe o te moana, ēngari ka pēhea tā rātou hopu i ēnei kai?



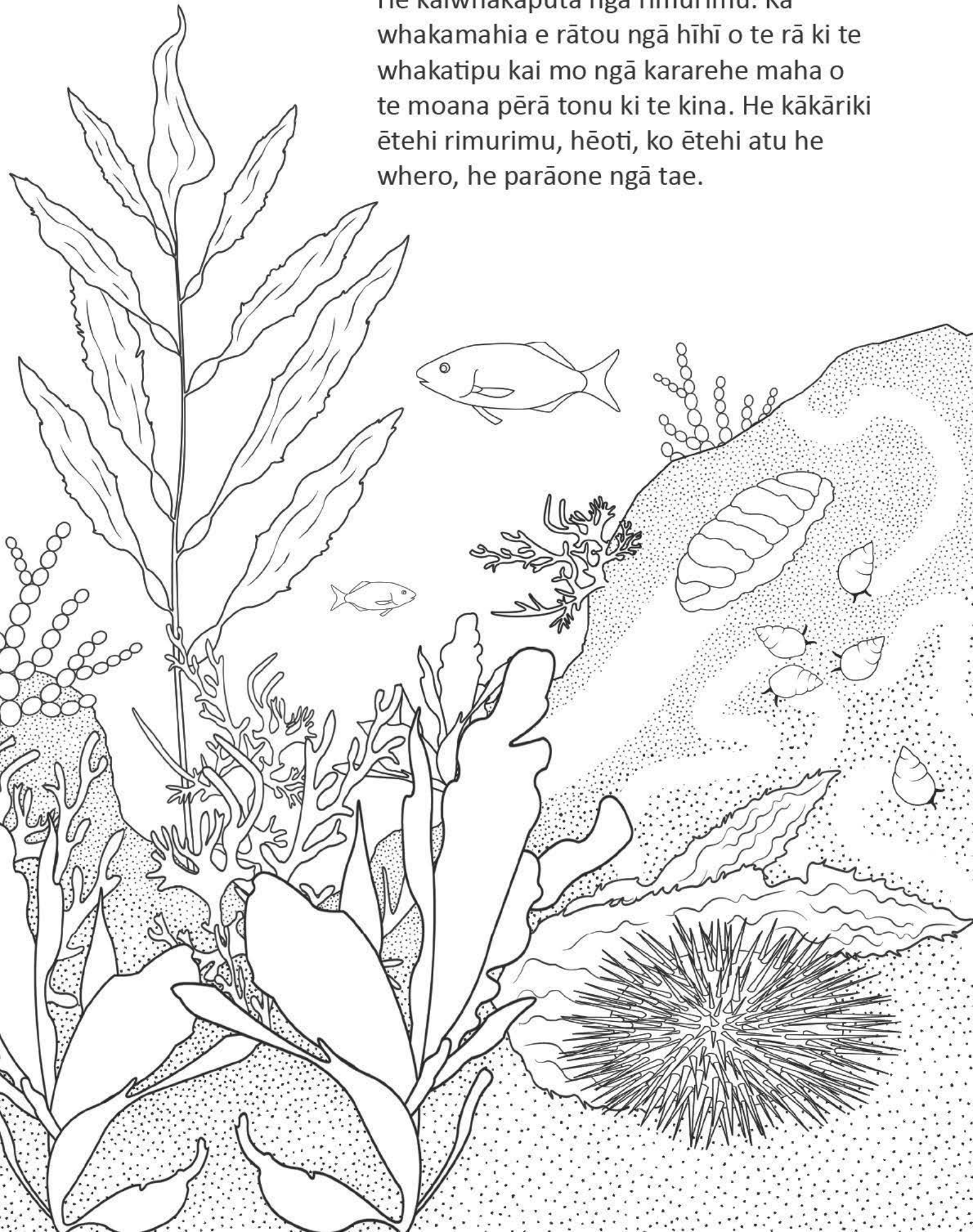
KARAREHE TĀTARI

He waewae iti tō ngā tiotio hei hopu i ngā meroiti. Ka ngongo ake ngā kāeo i te wai ki roto i te tomokanga kotahi, ā, ka rere ki roto i tētehi tātari ki te whakawehe i ngā meroiti mai i te wai, nā, ka panaia te wai ki waho i tētehi tomokanga rerekē.



NGĀ RIMURIMU

He kaiwhakaputa ngā rimurimu. Ka whakamahia e rātou ngā hīhī o te rā ki te whakatipu kai mo ngā kararehe maha o te moana pērā tonu ki te kina. He kākāriki ētehi rimurimu, hēoti, ko ētehi atu he whero, he parāone ngā tae.



NGĀ KAITĪTONGI

He kaimanga ngā kaitītongi. Kei te kite koe i te rori pango, i te pāua, i ngā papatua, i ngā kākahi, i ngā ngaeti me ngā māihi i tēnei pikitia? Ka rapirapi rātou i ngā kōhatu ki ō rātou ārero roa hei tango haere i ngā rimurimu.



NGĀ HAMUHAMU

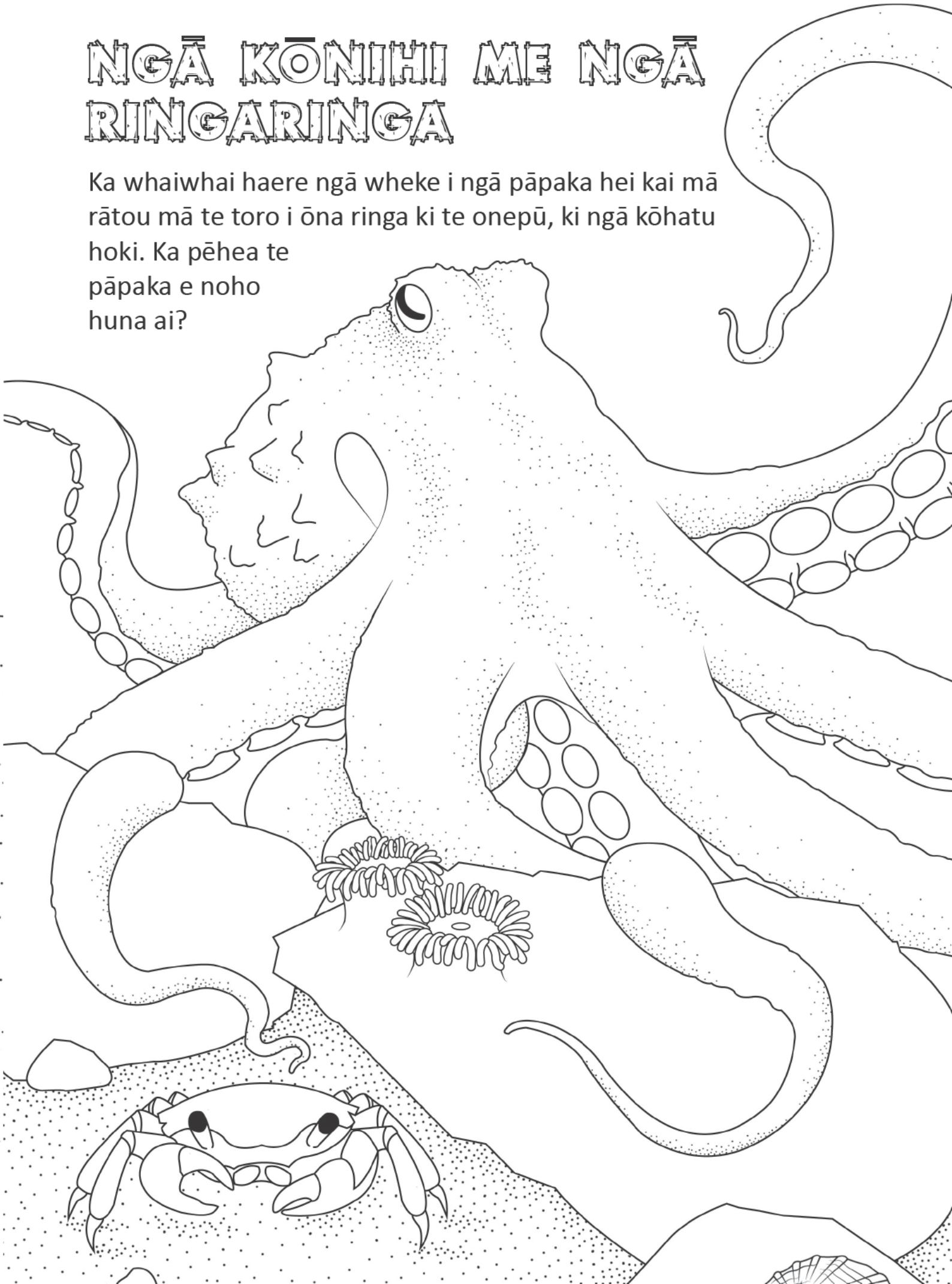
He tāpua ēnei kaikohi rāpihi mo te oranga o te moana.

Ka kainga e ngā waerau, nga kōtore moana, ngā rori, ngā kōuraura me ngā papatangaroa i ngā tipu kua mate, ā, e takoto noa ana i te papa o te moana.



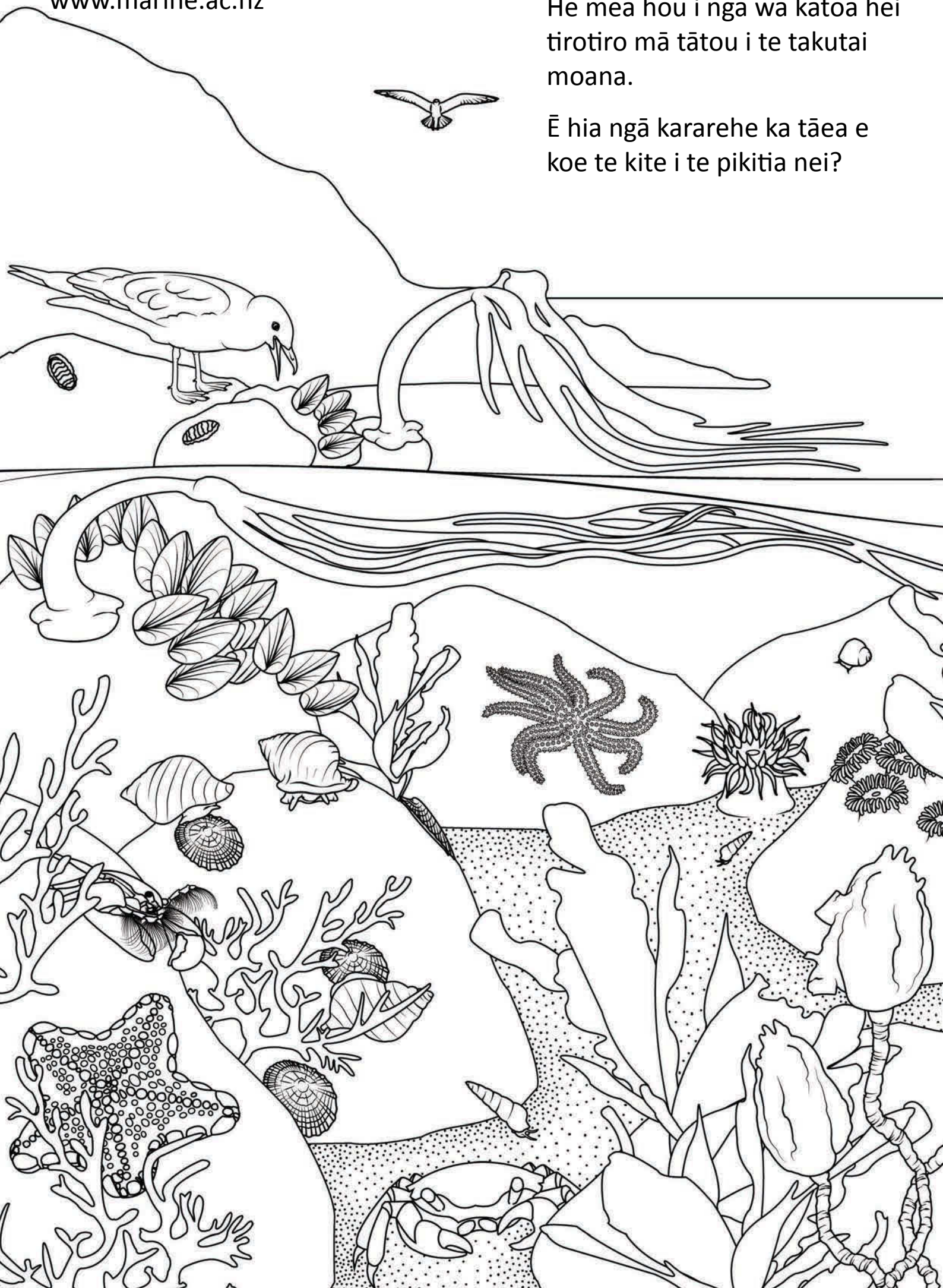
NGĀ KŌNIHI ME NGĀ RINGARINGA

Ka whaiwhai haere ngā wheke i ngā pāpaka hei kai mā rātou mā te toro i ōna ringa ki te onepū, ki ngā kōhatu hoki. Ka pēhea te pāpaka e noho huna ai?



He mea hou i ngā wā katoa hei
tirotiro mā tātou i te takutai
moana.

Ē hia ngā kararehe ka tāea e
koe te kite i te pikitia nei?



Kōtore Moana

Wheke

Papatua

Papatangaroa

Pāpaka

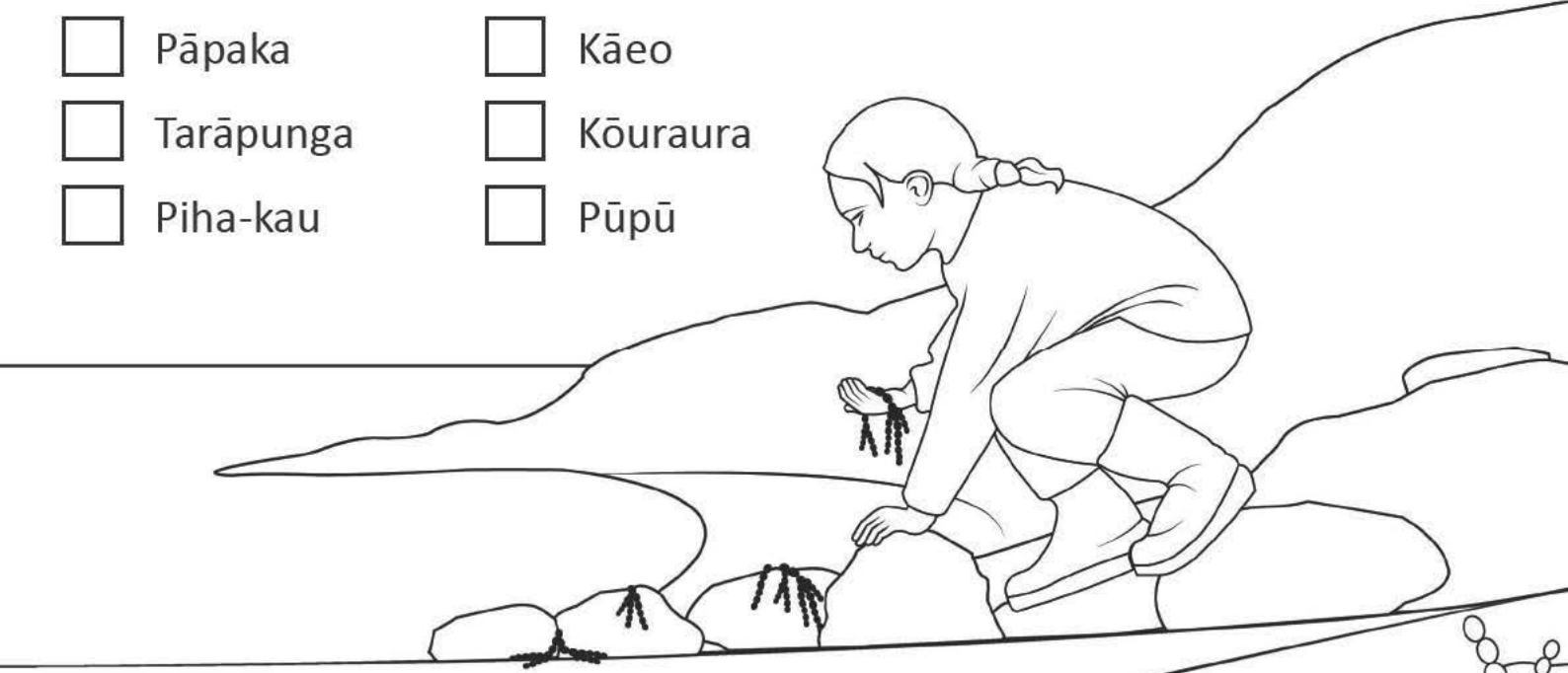
Kāeo

Tarāpunga

Kōuraura

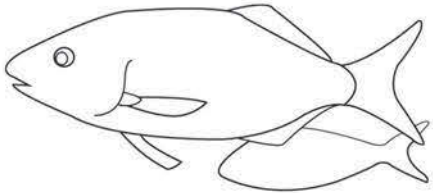
Piha-kau

Pūpū



NGĀ KŌNIHI IKA

Tēnā pea ka kainga e koutou te ika rāwaru, ēngari he aha hoki tāna kai? E rata ana ngā ika rāwaru ki ngā pāpaka. He aha te āhua o te huna o te pāpaka i te pikitia nei?



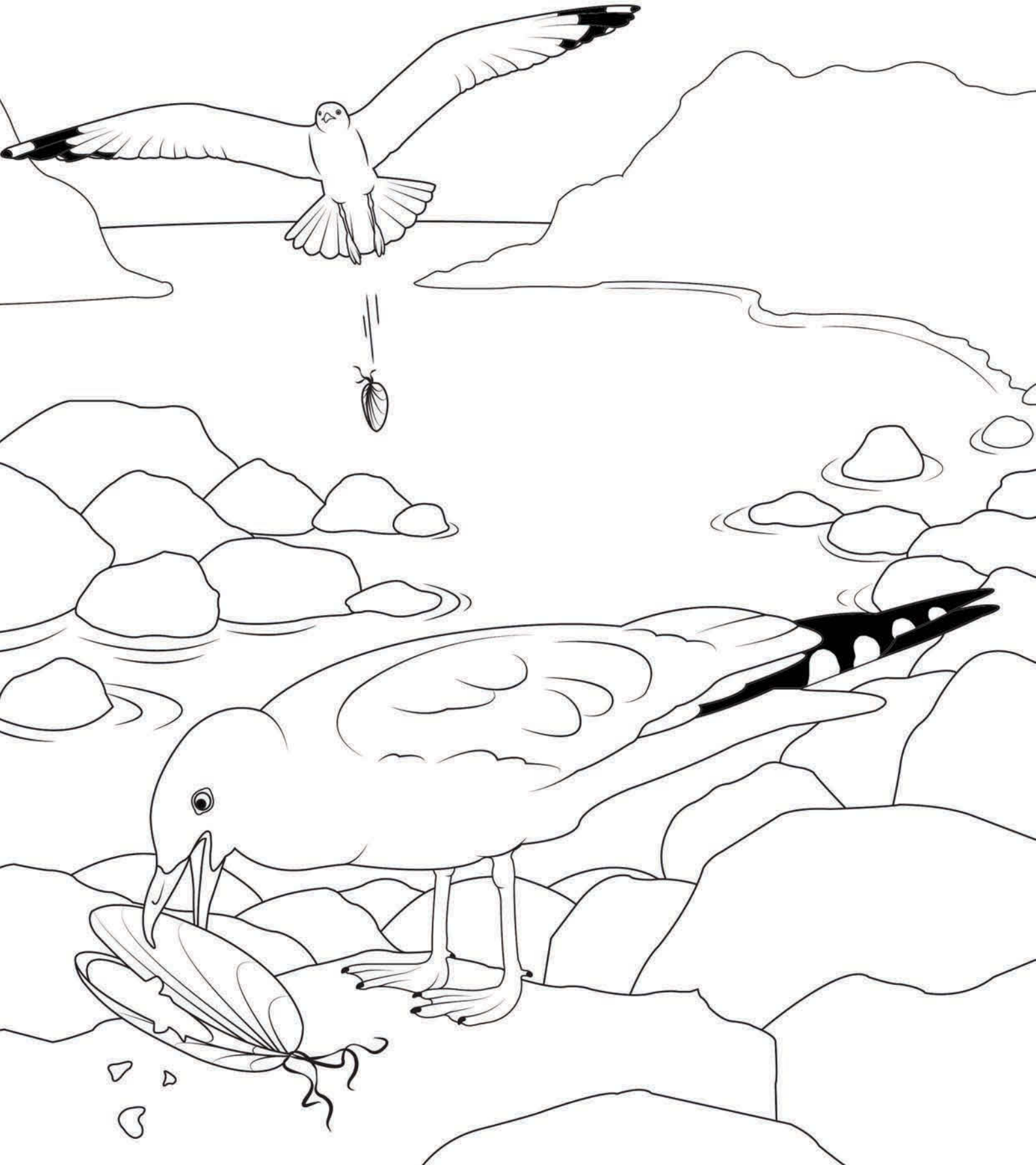
NGĀ KŌNIHI WHAI NIHO

Ka kitea ngā mango whāriki i ngā takiwā kōhatuhatu e tata ana ki te ākau. E rapu ana rātou i ngā pāpaka me ngā pūpū.



NGĀ KŌNIHI MANUHIRI

E rata ana ngā tarāpunga ki ngā mātaimai kaiota, eaoia, he uaua hoki te kuhu o te ihu ki ngā angaanga. Ka pēhea tā rātou pakaru i te anga kia tāea ai e rātou te kūtai te kai?



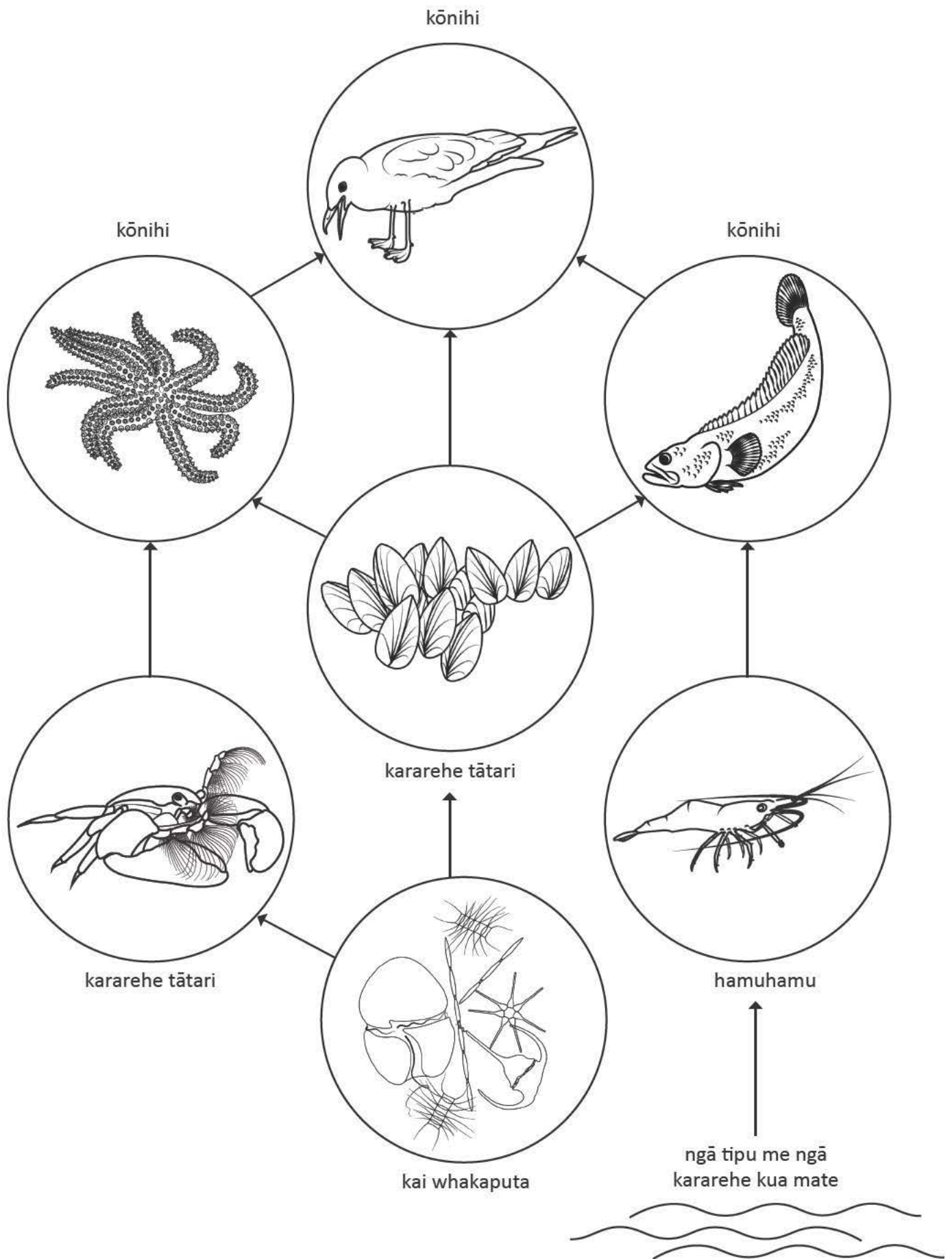
NGĀ KAIKOHIKOHI

He aha te kaimoana reka rawa ki a KOE?

I a koe e kahi kai moana ana, me mātua whai i ngā ture hī ika, i ngā ture kahi kai moana, ā, kia tāea tonu ai e ngā kararehe o te moana te rapu kai mā rātou.

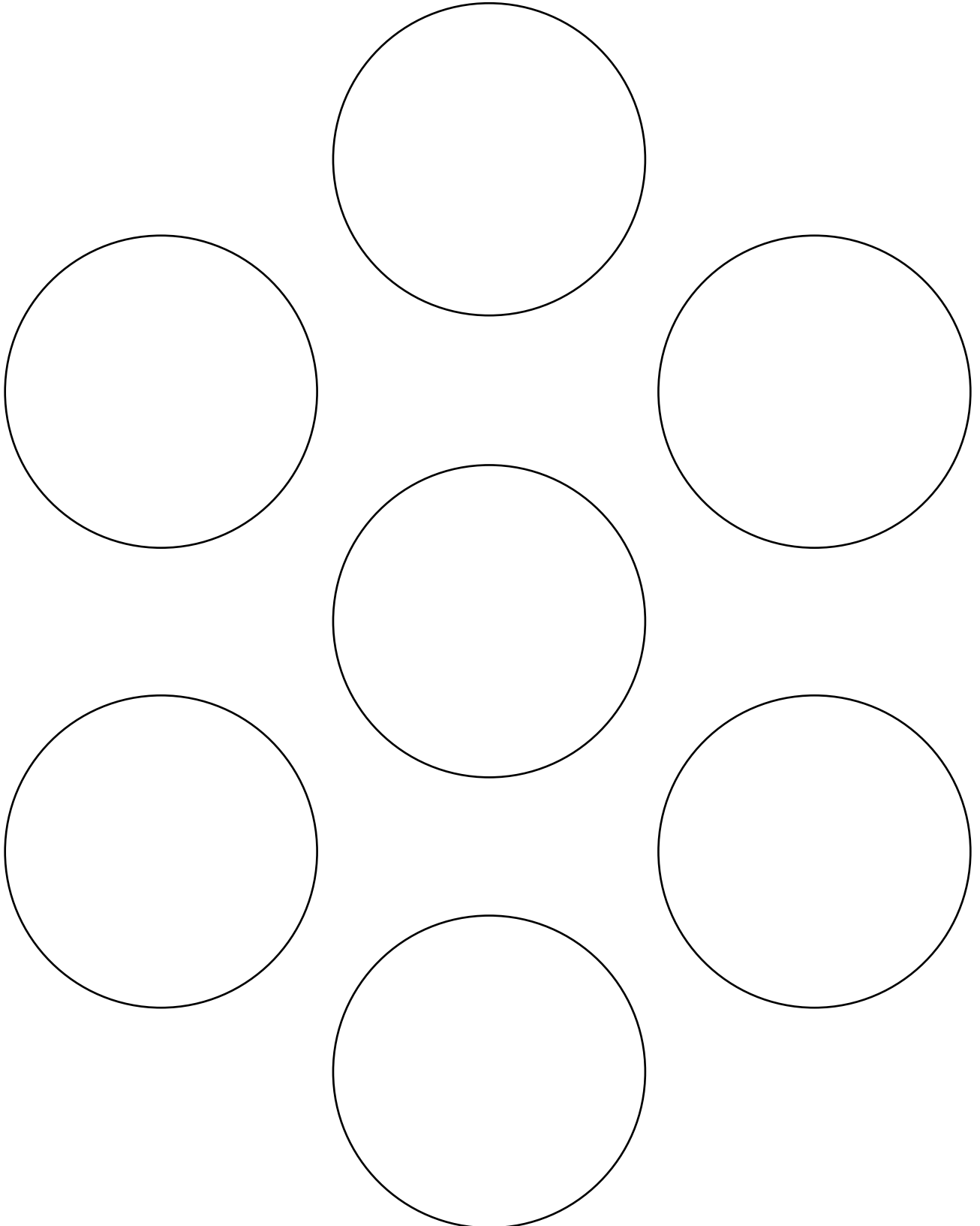


TUKUTUKU KAI



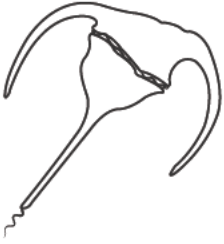
HANGAIA TĒTEHI TUKUTUKU KAI

Ka tāea e koe te whakamahi: i ngā kai whakaputa, i ngā kaitītongi, i ngā hamuhamu, i ngā kōnihi me ngā kararehe tātari hoki.



kai whakaputa

HE RĀRANGI INGOA



He rauropi pūtautahi **ngā meroiti**, ka whakamahi rātou i ngā hīhī o te rā ki te hanga i a rātou kai. He haerere noa te mahi a ngā meroiti nei, ā, ka noho rātou hei kai mā ngā kararehe tātari.



Ko **ngā rimurimu** ngā tipu o te moana, ka whakamahia e rātou ngā hīhī o te rā hei hanga i ā rātou kai pērā i tērā o te meroiti. He iti ētehi, ā, ko ētehi ka tipu neke atu i te 50 mita te roa hei hanga i ngā ngahere moana. Ka kainga ngā rimurimu e ngā kararehe maha o te moana.



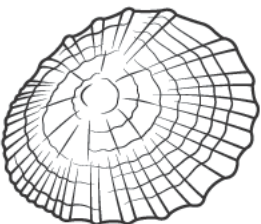
He kai tātari **ngā pāpaka kawekawe**. Ka whakamahia e rātou ngā kupenga hei hopu i ngā meroiti. Kīhai rātou e whakamahi ana i a rātou matihao hei kohi kai, engari kē ka whakamahia e rātou hei ārai i a rātou anō.



He hamuhamu **ngā pāpaka o te ākau**. Ka whakamahia e rātou o rātou matihao hei wetewete haere i ngā tipu me ngā kararehe kua mate hei kai mā rātou.



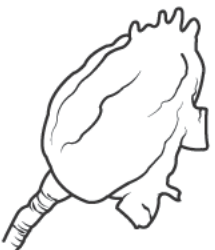
He whanaunga **te totito** nō te pāpaka me te kōura, engari he mea mau rātou ki ngā wāhi māro pērā ki tērā o te kōhatu. Tē tāea e rātou te whaiwhai haere i ā rātou kai. Ka whakamahia e rātou o rātou waewae ki te hopu i ngā meroiti hei kai.



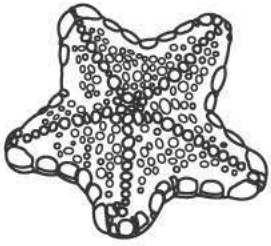
Ko te anga o **te ngākihi** anō nei he kōeko te hanga, he waewae kaha ō rātou hei pupuri ki ngā kōhatu. He kaitītongi ngā ngākihi. He arero roa tō te kākihi hei kohi rimurimu, nā, ka nekeneke haere i a rātou e rapu kai ana kātahi ka hoki anō ki te wā kāinga.



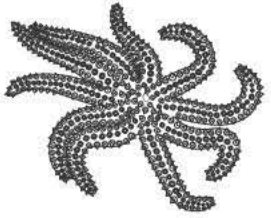
E waru ngā wāhanga rerekē o te anga o **te papatua**, he waewae kaha hoki ōna hei pupuri kōhatu. Ka kai hoki ngā papatua i ngā rimurimu, he niho kaha ō rātou kia kore ai e pakaru i a rātou e kohi kai ana. Me āta titiro atu ki ā rātou tapuwae.



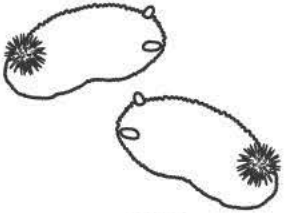
He ōrite te hanga o **te kāeo** ki tētehi tipu, engari he kararehe kē. Ahakoa tē tāea te tūripi moana te nuku, ka toro rātou i ō rātou pakiaka ki ngā wai e rere ai ngā meroiti.



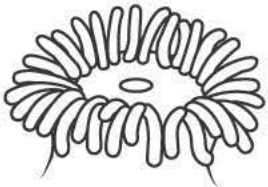
He maha ngā āhuatanga rerekē o te **papatangaroa**. He kai hamuhamu te whetū pihikete, ka kitea āna kai i te papa o te moana. Ka pana ngā whetū moana i ō rātou puku ki waho atu i te tinana ki te kai.



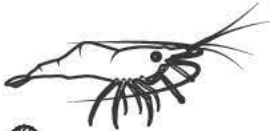
Ka whakamahia e ngā **papatangaroa kōnihi** ō rātou waewae hei wetewete haere i ngā kūtai me ērā atu o ngā mātaimai hoki. Tekau mā tahi ngā ringa o tēnei momo whetū moana.



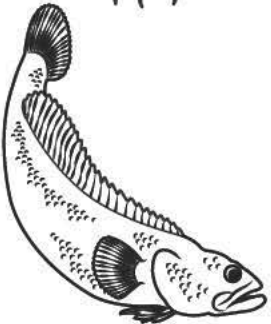
He kaikōnihi te **piha-kau**, ka kai rātou i ngā kōpūpūtai. I ētehi wā ka huri te tae o te piha-kau ki tērā o te kōpūpūtai i kainga e ia.



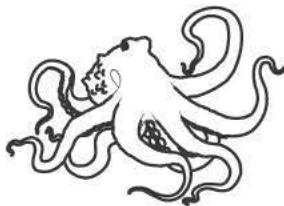
He kaikōnihi hoki te **kōtore moana**. Ka hopu rātou i ā rātou kai mā te wero i te kai me ō rātou wetewete. Ka kai rātou i ngā mea katoa ahakoa te aha.



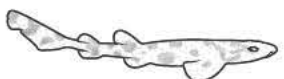
He kaihamuhamu te **kōura**, he uua ka kite i te kōura karaehe nōna i noho pūataata ai.



Ka kai ngā **ika tuamaka** i ngā potipoti e noho ana i ngā puna o te ākau. Ka huna rātou ki raro i ngā kōhatu i te wā ka timu te tai kia kore rātou e kainga e ngā ika nui.



He kaikōnihi te **wheke**, anō nei he ihu o te kākā tōna waha. Ka whakamahia ōna ngutu hei puaki i te anga o te potipoti. Nā te kaha o te panoni haere o te tae o te wheke, me uua ka kite i a ia.



Ka kai ngā **mango** i ngā pārurenga katoa o te moana, ahakoa e ora ana, ahakoa kua mate rānei.



Pērā i te mango, ka kai hoki ngā **tarāpunga** i ngā mea katoa. Ka whakataka rātou i ngā kūtai, i ngā pūpū hoki mai i te rangi hei pakaru i te anga kia māmā ake tā rātou kai i te mīti o roto.

