



# Pepeketua Hochstetter's Frog

NGĀ RARURARU O TE NGARO HAERETANGA O NGĀ WĀHI NOHO

E hiahia ana te rōpū ohaoha o NZFrogs ki te tautoko i te tangata ahakoa ko wai, nō hea hoki, kia whai wāhi mai ki ngā Pepeketaua, me te whai wāhi mai anō hoki ki te manaaki i ngā Pepeketaua o Aotearoa.

I te tau 2024, ka riro atu ki a NZFrogs he pūtea tautoko mai i te Unlocking Curious Minds Contestable Fund kia hua mai ko tētahi rārangi pukapuka mātauranga me ētahi atu pānui whakaahua tautoko. Ko te whāinga, ko te whakarite rauemi reo-rua, e pupuri ana ki ngā mātauranga pūtaiao hei kai mā te katoa, ahakoa te pakeke.

E whā ngā pukapuka me ētahi pānui whakaahua tautoko taunaki. Otirā, e rua ngā pānui whakaahua motuhake kei roto i te rārangi pukapuka o Aotearoa: *He aha e hirahira nei ngā Pepeketaua o Aotearoa?* Kātahi, ka rua, *Te tiaki Pepeketaua*. Kei **nzfrogs.org** ētahi kōrero kē atu mō NZFrogs, mō te rārangi *Pepeketaua o Aotearoa* hoki hei tirotiro māu.

**Kaipikitia**

**Ngā kaitito**

**Kaiwhakamāori**

**Tohunga Mātai Ika oneone**

**Kaiwhakaahua kararehe**

**Kaihoahoa whakairoiro**

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Hadley Muller rāua ko Tobia Dale

Te Ngaru Wehi

Luke Easton

Oscar Thomas

Lucy Arnold

Ka nui hoki te mihi ki ngā iwi e whai ake nei i tā rātou tautoko mai i ēnei rauemi: Ko Pare Hauraki, Ngāti Kuia, Ngāti Koata.

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Mōku anō tēnei pukapuka!



*Kua tāngia tēnei pukapuka ki te pepa kāore e tāmi i te taiao. I tāngia kētia ki te pepa kua tukuruatia, ā he mea whakamana anō hoki e ngā matatiki whai mana tonu. I waihangaia ki raro i te mana o ngā Pūnaha whakahaereanga taiao ISO14001, otirā, e kawe ana i te tohu whakamanatia ana puta noa i te ao, arā, ko te tohu tukurua BLUE Angel, Austrian Environmental Label & the NAPM Nordic Swan.*





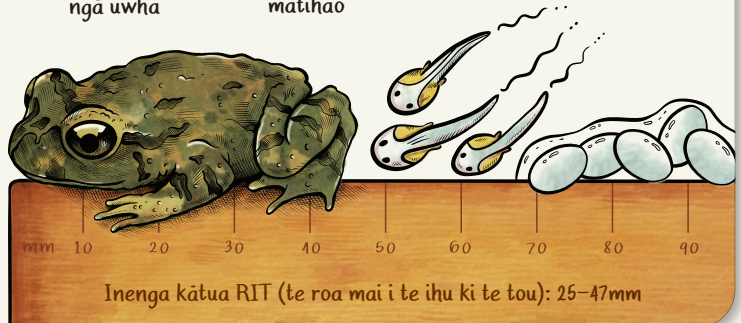
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## NGĀ ĀHUATANGA O TE PEPEKETUA

Ko te Pepeketua anake te Pepeketua nō Aotearoa e noho ana i roto i te wai. Tirohia ērā atu pukapuka i roto anō i te whakapaparanga *Pepeketua o Aotearoa*, ka haere atu rānei ki [nzfrogs.org](http://nzfrogs.org) ki te ako e pā ana ki ngā Pepeketua o Aotearoa.



# Te Pepeketua āhua-wai o Aotearoa

He nui tonu ngā **urutau** motuhake ki tā rātou **āhua** noho i te **wai** i ētahi wā. Nō reira, he rerekē o rātou āhua, whanonga hoki ki o ērā atu poraka. He huirapa kei muri o ō rātou waemuri mō te kaukau, otirā, i ngā wā o te ohorere, kua taea te tere peke atu. Ka noho torongū hoki te Pepeketua. He rerekē anō tēnei i te Kurī peke me te Pepeketua (Hamilton's), arā, kāore ngā mātua mō te manaaki i te kūao.

E tūponohia ana te Pepeketua ki roto i ngā ngahere puta noa i te Te Tai-tokerau mai i Te Tai Rāwhiti ki Te Hiku-o-Te-ika. E noho ana rātou ki roto i ngā kōawa mā, ngā māturuturunga wai hoki. E noho ana te Pepeketua ki ngā **rohe ākau** o roto i ngā ngahere, e hunia ana ki raro o ngā rau, ngā kōwhatu me ngā tipu e ora ana ki ngā taha tonu o te wai e rere ana. He raruraru nui te parahanga, te whakarerekē i ngā wāhi noho, me ngā kaikonihī ki Aotearoa. Otirā, he raru nui tēnei ki te oranga tonutanga o ngā **ākau** wai mō te Pepeketua!

E ora tonu ai te Pepeketua, ko tā tātou mahi hei kaitiaki, he manaaki i o rātou wāhi noho e toe ana kia kaha tonu tā rātou whakawhānau uri.

Te rangiwhāwhā  
o te Pepeketua  
ināianei



# Te hurihanga oranga o te Pepeketua

He tukanga motuhake te **kāhuarautanga** e kitea ana i ngā ika oneone. Ka tīmatahia mai i te torongū kia kātua rā anō. E kaha whakawhirinaki ana te noho a te Pepeketua ki ngā wāhi **āhua-wai**, engari kāore ia e noho hei kūao!

He roa tonu te oranga o te Pepeketua. Kia pau te 4 tau, kātahi kua kātua, ā, kua timata tana whai uri.



Ka whakaputaina e ngā uwaha kia rua ngā rārangi hua i te taha tonu o te kōawa.

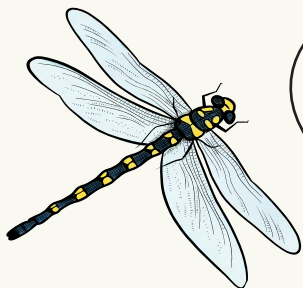


Nō muri i te putanga mai, he pēnei anō te kūao i te kātua pakupaku nei; 1cm te roa!

Ka whakahaumakotia e te tourawhi, engari kāore mō te tiaki. Ka pau nei te 40 rā, kātahi ka pao mai.



Ka noho wai katoa te torongū o te Pepeketua, engari ehara tonu i te kūao! Ko tā te kūao kai, he ngārara wai, he kapoke hoki. Engari kē te torongū Pepeketua, kāore e paku kai. Mā te **pūkoro kahu** kē e whāngai kia kātua rā anō!



Arā ētahi kōrero kua whakawhānau hua te Pepeketua ki roto i ngā rua nā te kapowai anō i kerī!





# Te oranga i te pō

Pēnei hoki i ngā Pepeketua katoa, he **āhua pōrehu** te Pepeketua. He kaha te Pepeketua ki te huna i te ao i roto i ngā tipu me ngā pōhatu nā tō rātou kiri pukupuku, me ōna tae rerekē o te kākāriki, paraone, me te hina. He moeao te Pepeketua, ka puta mai hoki i te pō ki te kai **tuaiwi-kore** iti.

Ka noho te Pepeketua hei kai ki ngā momo māori me ngā momo rāwaho. E whakamahia ana e ngā kaikonihī māori ngā karu ki te kimi kai. Nā te mea e uaua ana te kite atu i te Pepeketua, nā roto anō i te noho **pōrehu**, e kore ia e kitea. He rerekē anō ngā kaikonihī rāwaho, nā te mea ka whakamahi kētia te ihu ki te kimi kai māna, nā reira, he māmā te kimi atu i te Pepeketua!

Kāore te Pepeketua e tangi pērā i te nuinga o ngā poraka.  
E ai ki ngā kaupūtaiao, ko te **matū** pea te huarahi e whakawhiti kōrero ai rātou.



# Te rohe ākau

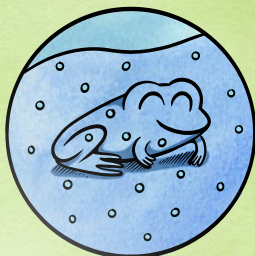
Ko ngā **ākau** ngā wāhi e tūhonohono nei i ngā hauropi o **tuawhenua**, me ngā hauropi o te **wai**. E kitea ana a ia i ngā tahatika o ngā awa, kōawa, roto, i ērā atu wāhi hoki e noho ai te wai. He maha tonu ngā momo tipu, kararehe hoki e noho ana i ngā ākau nei, e manaaki nei ngā hauropi wai. Nā, e whakawhirinaki atu nei te Pepeketua ki ngā **ākau**, kia ora tonu ai ia.

Me mātua noho te torongū Pepeketua ki te wai mā, pērā i ngā māturuturunga wai, puna, ngā matata i ngā tahatika o te wai. Kāore anō ngā pukapuka, pihapiha hoki o te torongū kia pakari. Nō reira, e uaua ana te whai hā mēnā e muia ana te wāhi noho e te parakiwai. Ka nui haere te parakiwai mēnā ka kino ngā **ākau** i te takatakahia ōna me te whakamahinga ōna e ngā tia me ngā poaka hei takotoranga.

He wai kino



He wai mā



E whakamahi hoki ana ngā Pepeketua me ngā kūao i ngā **ākau**. I te ao, kua hoki ngā Pepeketua ki ngā **āhurutanga** ki waenga o ngā toka, pōhatu, ki raro rānei i te tipu kua hinga. I te pō, ko te **ākau** te wāhi hei kimi **tuaiwi-kore**.

I ētahi wā e kitea tahitia ana te Pepeketua me te Kuri peke. Kei rō ngahere ngā Pepeketua e noho ana, otirā, e whakamahi hoki ana ngā momo e rua i ngā **āhurutanga** kotahi i te ao.





# Te panoni haeretanga o te whakamahinga o te whenua o Aotearoa

Kau mātua **urutau** te Pepeketau ki ngā **ākau** anake ki rō ngahere. I mua i te taenga mai o te tangata, neke atu i te 80% o Aotearoa i muia ki te ngahere māori. He mā, makariri hoki ngā kōawa o ngā ngahere māori. He pai rawa atu tēnei mō te Pepeketau!

Ināianei, 24% noa iho o Aotearoa e kapi ana i ngā ngahere māori. Ko Aotearoa te kāinga o te rima miriona tāngata, nā, ko te nuinga o ngā whenua e whakamahia ana mō te ahuwhenua, mō te whakawhanake taone hoki rānei. Nō reira, kua tino rarururungia ngā hauropi o ngā ngahere māori. Me te aha, kua **marara**, kua pāitiiti haere hoki ngā taupori nō te whakahinganga o ngā ngahere māori.



He tāwhaiwhai te āhua o tā ōna waewae kauhoe, ka mutu ko ōna ringaringa e rua kei mua i a ia. Kāore e pērā rawa ana te pai o tēnei taera kaukau i o ērā atu Pepeketau e whakamahi nei i te 'kau āpuru poraka'.



Te nuinga o ngā poraka



Pepeketau

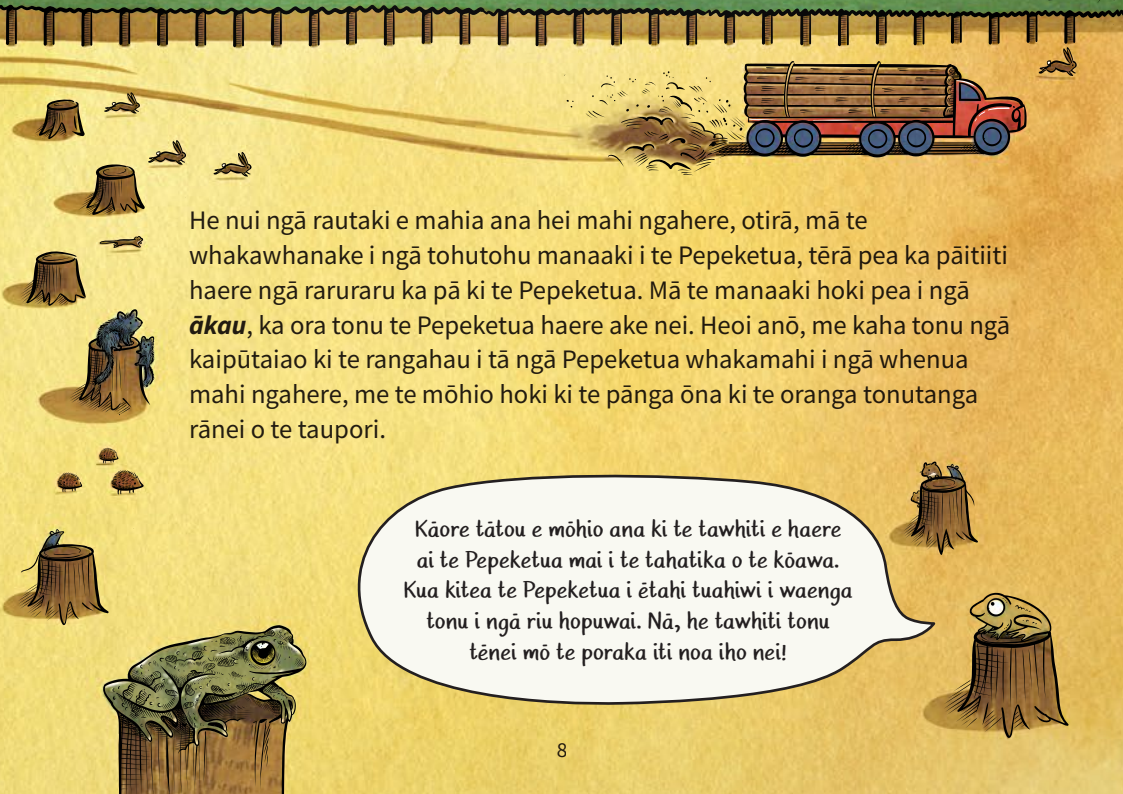




# Ngā raruraru o te mahi ngahere

E kitea ana te Pepeketaua e ora ana ki rō ngahere paina. Engari, ehara i te mea ka ora rawa atu nei ngā taupori i ēnei momo taiao. Kāore e nui ana ngā āhurutanga i ngā ngahere paina, otirā, he iti iho ngā **ākau**, ka mutu, inā whakaritea atu ki ngā ngahere māori, kāore e manawa piharau ana ia i ngā wā e waipuketia ai te whenua. Tērā pea e uaua ana te whakatipu i te taupori i te nui o te ngāhorohoro o te whenua, me te parakiwai. E taea ana e aua mea ngā kōhanga te whakararuraru, e taea ana hoki te whakakino ngā **āhurutanga** i te ao, te whakaiti hoki i te maha o ngā **tuaiwi-kore** hei kai māna. He tino **kaiwhakamaroke** hoki ngā hihi o te rā i te wai.


Ia 25–30 tau, ka werohia te oranga tonutanga o ēnei haporī Pepeketaua e noho ana ki ngā wāhi mahi ngahere i te wā e topetopehia ai. Ka iti haere te maha o ngā āhurutanga i te ao, ngā wāhi whakamarumarū hoki, ka mutu ka rahi ake ngā wāhi e karawhiua ai e ngā hihi o te rā. Ka mahia kinotia hoki te oneone i ngā mīhini nui, me te tōia o ngā rākau i te papa. Otirā, he nui tonu te oneone ka rere ki roto i ngā kōawa.



He nui ngā rautaki e mahia ana hei mahi ngahere, otirā, mā te whakawhanake i ngā tohutohu manaaki i te Pepeketaua, tērā pea ka pāitiiti haere ngā raruraru ka pā ki te Pepeketaua. Mā te manaaki hoki pea i ngā **ākau**, ka ora tonu te Pepeketaua haere ake nei. Heoi anō, me kaha tonu ngā kaupūtaiao ki te rangahau i tā ngā Pepeketaua whakamahi i ngā whenua mahi ngahere, me te mōhio hoki ki te pānga ōna ki te oranga tonutanga rānei o te taupori.

Kāore tātou e mōhio ana ki te tawhiti e haere ai te Pepeketaua mai i te tahaatika o te kōawa. Kua kitea te Pepeketaua i ētahi tuahiwi i waenga tonu i ngā riu hopuwai. Nā, he tawhiti tonu tēnei mō te poraka iti noa iho nei!





## Ngā raruraru o te mahi maina

He nui ngā raruraru taiao huri noa i te ao ka puta mai i te mahi maina, ā, he raru nui hoki ki ngā taupori Pepekētua.

Me tere tonu te whakawhānui i te puna rangahau i Aotearoa, kia nui ake te māramatanga ki ngā raruraru e pā nei ki te Pepekētua, kei ngaro.

Ka whakapāitiitihia e ngā maina-rōnuku, e ngā maina puare hoki ōna wāhi noho, inarā ngā Pepekētua e noho nei i roto i te wai, pērā i te Pepekētua! Ka patu katoa ngā maina puare i ngā tipu! Ka rarurarungia e ngā maina-rōnuku ngā manawa-ā-whenua, ka tawhā rānei ētahi awa, nā, ka whakarerekētia te rere o te wai. Ka takakinotia hoki e ngā maina ngā awa ki ngā memeha kohuke.

E ora tonu ai ngā Pepekētua, me mātua kōrero tahi ngā kaiwhakahaere ki a Te Papa Atawhai, ngā Kaipūtaiao, me ngā iwi hei manaaki i a tātou.



# Ngā raruraru reremuri (o te awa)

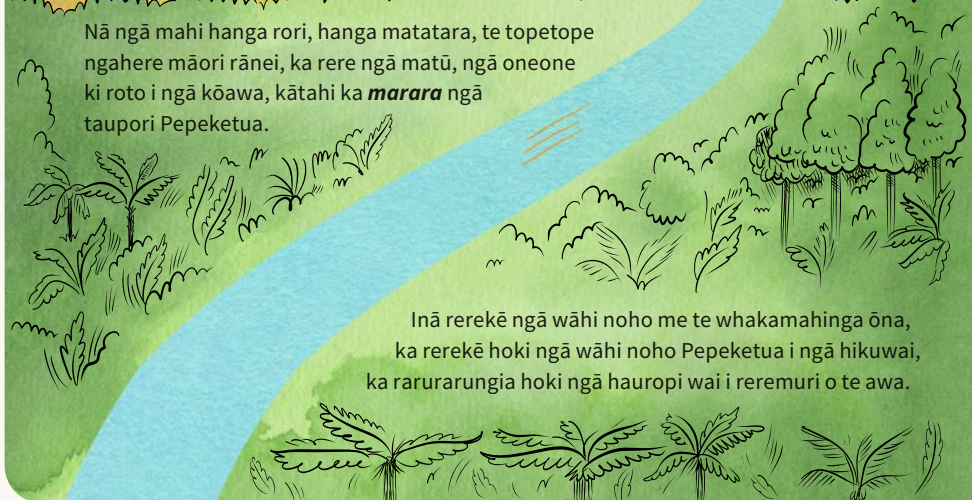
Ko ngā raruraru ka pā ki reremuri o te awa he āhuatanga kua pupū ake i te ngarongaro haere o ngā wāhi noho, o te rerekē rānei o te whakamahinga o ngā whenua kei reremua o te awa. I te nuinga o te wā, he mā, he mātao hoki te wai i te pūao tonu o te kōawa ka tīmatahia mai nō roto tonu i te wao nui-a-Tāne. Engari, ka takakino haere ngā awa i a ia ka rere nei i ngā wāhi mahi ngahere, ngā pāmu, me ngā tāone.



Ko te raru o te ahuhenua, ko tana tuku oneone, matū, ngā momo mētara rānei ki te wai.



Nā ngā mahi hanga rori, hanga matatara, te topetope ngahere māori rānei, ka rere ngā matū, ngā oneone ki roto i ngā kōawa, kātahi ka **marara** ngā taupori Pepeketau.



Inā rerekē ngā wāhi noho me te whakamahinga ōna, ka rerekē hoki ngā wāhi noho Pepeketau i ngā hikuwai, ka rarurarungia hoki ngā hauropi wai i reremuri o te awa.



# Whakapaunga kaha ki te whāomomo

Ahakoia ko te Pepeketua tā tātou momo Pepeketua rangiwhāwhā katoa, kāore tēnei momo e kaha whāomoomotia ana. Kua whai hua kē ngā Pepeketua i ngā mahi patu kaikonihī hei whakaora kē i ngā momo manu māori i ngā pae maunga o Hunua, i Tāmaki. I whakaritea tētahi taiapa ārai kaikonihī i Maungatautari i mua noa atu i te tūponotanga o te Pepeketua!

Ka whai hua te Pepeketua i te patunga o te kaikonihī, engari me mātua manaaki, whakahaumanu e tātou ngā ngahere māori e noho nei te Pepeketua. Ko te whakahaumanu i ngā ākau o ngā hikuwai tētahi rautaki hei whakapiki i te oranga o ngā hauropi wai o reremuri. Ko te whakahaumanu i ngā **ākau**, ko te patupatu haere rānei i ngā kaikonihī tētahi huarahi hei manaaki i te Pepeketua.

Ko te āta aromātai i ngā rerekētanga o te taupori, o ngā wāhi noho rānei tētahi rautaki whāomomo tino pai e whai hua ai te Pepeketua. Kua utaina e ngā kaupūtaiao he hopureo ki runga i ngā momo Pepeketua e toru, kia mātau ai te mōhio, ki hea hoki torotoro atu ai rātou i te ngahere!

# Kuputaka

**Urutaunga (urutau)** He tukanga kuneroa e tangata whenua ake ai te rauropi ki tōna taiao.

**Wai** E hāngai ana ki ngā wāhi noho wai.

**Āhua Pōrehu** Ko te kōrerotanga mō ngā whanonga me ngā āhuatanga tinana kei a te rauropi e kaha ana ki te huna. Ko te ‘cryptic’ te kupu Pākehā.

**Whakamaroke wai** Ko te hurihanga o te wai ki te kohu, i mua i te ekenga o te wai ki tōna koropupūtanga.

**Tuaiwi-kore** E whakaahua ana i te kararehe kāore ōna tuaiwi; hei tauira: ko te pūngawerewere, ngaro, ngata, te noho rānei.

**Kāhuarautanga** Ko te rahi o te whanake o te tinana, o ngā whanonga hoki o te kararehe; hei tauira, ko te whakawhanaketanga o te anuhe ki te pūrerehua, otirā, o te kūao ki te kātua rānei.

**Matū** He matū tēnei ka tīkona e te kararehe e whakarerekē hoki nei i ngā whanonga o te takitahi nō te momo kotahi. Ko te ‘pheromone’ te kupu Pākehā.

**Āhurutanga** He wāhi e huna ai te Pepeketaua i te ao, i te wā e paki ana rānei te rā.

**Ākau** Ko te wāhi e tūhonohono nei i ngā hauropi o tuawhenua, me ngā hauropi o te wai.

**Āhua-wai** E whakaahua ana i te rauropi e noho ki te wai, ki tuawhenua hoki.

**Tuawhenua** He rauropi ka noho ki tuawhenua.

**Pūkoru-kahu** He kiriuhi, engari he kai hoki mā te torongū.







**Me pēhea tō manaaki i ngā  
Pepeketua o Aotearoa?**

Me kaha tonu tō whakamōhio i te tangata i tāu i ako ai mō te Pepeketua. Kia tokomaha tonu te hunga e mōhio ana, a kāti, ka tokomaha hoki te hunga hei manaaki i te Pepeketua!

Me whai tonu i te mātauranga e pā ana ki ngā Pepeketua. E toru atu anō ngā pukapuka i te whakapaparanga *Pepeketua o Aotearoa*: ko Kuri Peke, Pepeketua (Hamilton's) me ngā momo māori kua mate-ā-moa.

Me totoro hoki atu koe ki te pae tukutuku, ki [nzfrogs.org](http://nzfrogs.org).





Ko te Pepeketaua (*Leiopelma hochstetteri*) tētahi o ngā momo whakamutunga ki Aotearoa e ora tonu ana. E tau ake nei te noho a tēnei Pepeketaua ki ngā ngahere māori o Aotearoa, engari e pāitiiti haere ana te taupori! Whāia ngā akoranga e pā ana ki ngā ākau, me te rarurungia hoki o te Pepeketaua i te rerekē o te whakamahinga o te whenua ki Aotearoa.

He mea waihangā e te tīma NZFrogs me ētahi tohunga ētahi rauemi hei whakamārama, hei whakaohoho, hei tautoko hoki i te katoa kia tautiakina ngā Pepeketaua!

**CURIOUS  
MINDS**   
HE HIIHII I TE MAHARA



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