

TE WAIHANGA

RŪ ANA, TAKATŪ ANA

I TE ĀPŌPŌ

RAUEMI KAI AKO



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## NGĀ RAUEMI

# MŌ TĒNEI RAUEMI

**I Te Waihanga i te Āpōpō - Rū ana, Takatū ana, ka whai wāhi ngā ākonga ki te āwhina i ngā hāpori i pāngia e ngā rū whenua me te whanake i ētahi ārai pai hei kaupare i ngā parekura o te ao tūroa.**

Ka whai ngā ākonga i te tukanga Te Whakaaro Hoahoa a Stanford, me te whai i ngā pae rerekē e mārama ai rātou ki te tukanga ka whāia e tētahi kaihoahoa ki te whakaoti i tētahi rapanga. He tukanga pai tēnei hei whakahāngai mā ngā ākonga ki kaupapa kē atu, ā, he ara pai hei raweke i ngā hangarau i te Marautanga o Aotearoa.



### I te Rautaki Teina

Ka rangahau ngā ākonga i ngā pānga kinotanga o te rū whenua ki tētahi whare. Ka tirohia ngā take i pērā ai me ngā panonitanga hei kaupare i aua pānga.

Kātahi rātou ka kōwhiria kia toru kia whā rānei ngā rapanga hei whakaoti, hei whakamātau mā rātou i roto i te akomanga.

Ka mahi tahi rātou ki te ohia manomano i tētahi tauira whakamātau ki te whakaoti i tētahi rapanga, ā, ka whakamātauria, ka arotakehia, ka whanakehia anō hoki e ai ki ngā hua arotake me ngā whakahokinga kōrero.



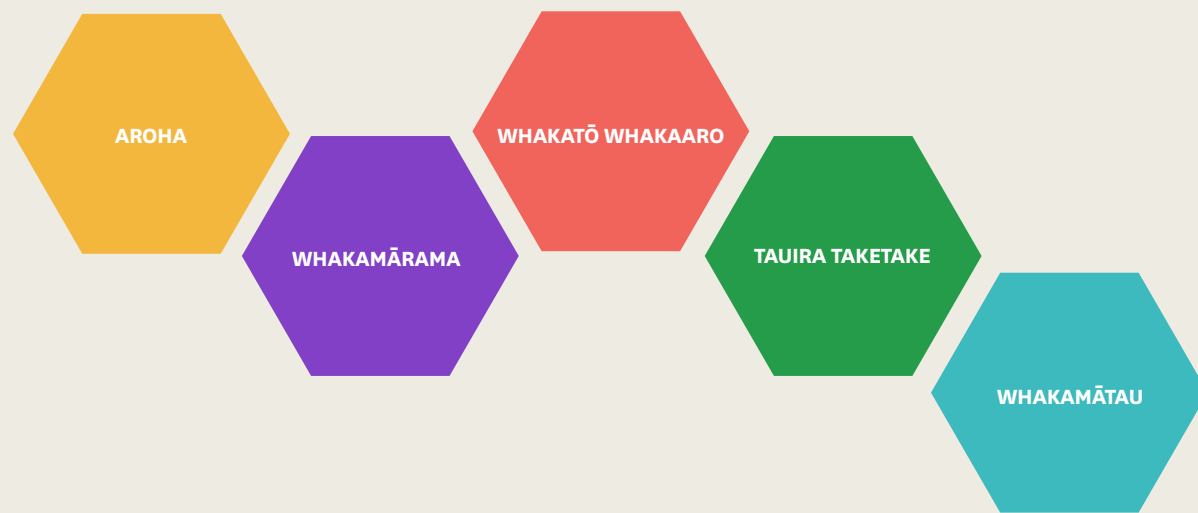
### I te Rautaki Tuakana

Ka tīmata ngā ākonga ki te rangahau i ngā pānga kinotanga o ngā rū whenua i ōna momo katoa. Kātahi rātou ka titiro ki ngā take matua me te hua aketanga o aua take. Mutu ana tērā, ka whakarōpūhia rātou, ka kōwhiria tētahi rapanga, ka wānangahia ētahi whakaotinga.

Ka kōwhiria te whakaotinga pai, ka whakamātauhia ai ki te whakarite tauira whakamātau me te tuhi i ngā mahi katoa. Hei whakakapi ake, ka kauhau i ngā āhuatanga katoa ki te akomanga me te whakaaroaro i te ara whakamua ki te whāia tonutia ā rātou whakaritenga.

# TE WHAKAARO HOAHOA A STANFORD

He tikanga a Te Whakaaro Hoahoa a Stanford ka whakamahia e ngā kamupene me ngā rōpū maha puta noa i te ao ki te whakaoti rapanga. E rima ngā pae hei whaiwhai ake mā te hunga auaha i te waihanganatanga me te whakahoutanga i tētahi taonga.



## Te Tukanga Pae-Rima

### Aroha

Uia te tangata māna te taonga ka waihanganatia ake. Mā wai? He aha ōna hiahia ake? He aha ngā āputa i ngā taonga o te wā?

### Whakamārama

Arotakengia ō kitenga ka whakarite i tētahi pūrongo rapanga e mārama ake ai ki ngā mea me waihanga.

### Whakaaro

Huahua/waihanganatia mai ētahi taonga maha hei whakaoti i te rapanga. Kōwhiria te mea pai.

### Tauira Taketake

Waihanganatia mai tētahi tauira whakamātau o te whakaaro tino pai.

### Whakamātau

Whakamātauhia tēnei tauira whakamātau.

## Te Whakaaro Hoahoa mā ngā Tamariki

I mahi tahi te Stanford Design School me te Children's Creativity Museum i Amerika ki te waihanga i tētahi wānanga e toru-rā e hāngai ana ki tēnei huarahi mā te tamariki. I āpitihia tētahi pae i te mutunga: tuari. I tuari ngā ākonga i ā rātou kōrero me ā rātou whakaritenga ki ō rātou hoa me te hunga whai pānga.



### He pitopito kōrero anō i Ideaco

<http://www.ideaco.org/2013/07/standfords-design-process-for-kids-teaching-big-picture-problem-solving/>

### Te tō mai i te Whakaaro Hoahoa ki ngā ākonga i ngā kura

<https://ed.stanford.edu/news/design-thinking-kids-an-interview-with-stanford-about-bringing-the-process-to-students-in-school-not-just-workplaces>

### He ngohe hei whakauru i ngā ākonga ki te tukanga hoahoa.

<https://dschool.stanford.edu/resources/getting-started-with-design-thinking>

### Te Marautanga o Aotearoa-reo Ingarihi

<http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum>

# NGĀ HONONGA ĀHUATANGA MATUA

## TE WHAKAARO

Ka whakamahia e ngā ākonga ngā kōrero i rangahaua hei ārahi i ō rātou whakaaro. Mā rātou ētahi whakaaro auaha e waihanga, ā, me tuhi i ō rātou whakaaro hei tuari ki te akomanga i te mutunga iho.

## TE WHAKAHAERE I A KOE ANŌ

I te mea e whai ana ngā ākonga i ā rātou ake tikanga hoahoa, mā rātou anō rātou e ārahi, e whakahaere i runga i te whakaaro kotahi.

## E HĀNGAI ANA KI ĒTAHI ATU

Me kōhi kōrero whānui ngā ākonga e mōhio ai rātou ki ngā uauatanga ka pā atu ki ngā tāngata i muri tata mai i te rū whenua. Mā ēnei kōrero rātou e āwhina ki te waihanga i tētahi taonga pai ake, ngāwari te whakamahi, ā, me whai whakaaro rātou ki ngā matea me te hunga ka whakamahi i te taonga.

## TE MAHI TAHI ME TE TAKOHA

Ka mahi ā-rōpū ngā ākonga nō reira me mātua whakarongo, whakaute anō hoki i ngā whakaaro o te katoa.



# TAUMATA 3-4

## NGĀ HONONGA MARAUTANGA

### TE REO PĀKEHĀ TAUMATA 3-4



#### Kōrero, Tuhituhi me te Whakaaturanga

Hei mahi mā te ākongā:

##### **Ngā hātepe me ngā rautaki**

Whakamoea ngā puna mātauranga, ngā hātepe me ngā rautaki hei tohu, hei hanga, hei whakaputa whakaaro hoki.

##### **Whakaaro**

Tohua, waihanga me te whakaputa whakaaro mō ngā kaupapa whānui.

##### **Whakatakotoranga**

Me āta whakarite i ngā kōrero mā te whakamahi i ngā whakatakotoranga maha e hāngai ana.

### PŪTAIAO TAUMATA 3-4



#### Āhua o te Pūtaiao

Hei mahi mā te ākongā:

##### **Te mārama ki te pūtaiao**

Me mōhio he ara te pūtaiao hei whakamārama i te ao, ā, ka whai ngā mātauranga pūtaiao i te rere o te wā.

Tohu i ētahi ara e mahi tahi ai ngā kaipūtaiao, ā, taunakihia ō rātou whakaaro ki ētahi taunakitanga.

##### **Te rangahau i roto i te pūtaiao.**

Whanakehia ngā wheako ō mua, mā te mahi tahi ki te hora me te mātai i ngā mātauranga o te katoa.

Me tuku pātai, me whai taunakitanga, me mātai i ētahi tauira māmā, ā, me kawē ake i ētahi whakamātau hāngai hei hanga whakamāramatanga māmā.

##### **Te mahitahi me te takoha**

Whakamahia ngā mātauranga pūtaiao hei tiro i ngā take o te wā.

Tirohia ngā āhuatanga whānui o tētahi take, ā, whakatauhia ētahi ara whakamua.

# TAUMATA 3-4

## NGĀ HONONGA MARAUTANGA

### HANGARAU TAUMATA 3



#### Mahi Hangarau

Hei mahi mā te ākongā:

##### **Te whakamahere i ngā mahi**

Ka whakamahere i ngā mahi hei tohu i ngā wāhanga matua me ngā rawa hei whakamahi ki te whai i tētahi hua. Ka hoki atu ki ngā mahi whakamahere me te arotake i te whanaketanga me te tohu i ngā pānga ki ngā whakataunga ka whai ake.

##### **Te waihanga i ngā tohutohu**

Ka whakamārama i te āhua o ngā otinga kei te mea ka puta. Ka whakamārama i ngā āhuatanga matua e hāngai ana ki te whanaketanga me te arotakenga o tētahi putanga.

##### **Te arotakenga me te whanaketanga i te putanga**

Rangahau i tētahi horopaki ki te whanake i ētahi whakaaro mō ētahi putanga pito mata. Whakamātauhia, ā, arotakengia ēnei e ai ki ngā āhuatanga matua hei tohu, hei whanake hoki i tētahi putanga e hāngai ana ki tētahi hiahia, whai wāhitanga rānei. Arotakengia tēnei putanga e ai ki ngā āhuatanga matua me tana hāngai ki ngā hiahia, ki ngā whai wāhitanga rānei.

#### Mātauranga Hangarau

Hei mahi mā te ākongā:

##### **Tauira hangarau**

Me mārama he nui ngā momo tauira āheinga ka whakamahia hei whāngai i ngā whakataunga i te whanaketanga o ngā mea hangarau e taea ana, me te aha, e āhei ana te whakamahi i ngā tauira whakamātau hei arotake i te hāngai o ngā putanga hangarau mō ngā whanaketanga kei tua.

##### **Ngā taonga hangarau**

Me mārama ki te hononga o ngā rawa ka whakamahia me te hua o ngā mahi i roto i ngā taonga hangarau.

##### **Ngā pūnaha hangarau**

Me mārama e whakaahuatia ana ngā pūnaha hangarau mā ngā tohu reo me te mārama ki ngā mahi a te 'pouaka pango' i ngā pūnaha hangarau.

# TAUMATA 3-4

## NGĀ HONONGA MARAUTANGA

### HANGARAU TAUMATA 3



#### Āhua o te Hangarau

Hei mahi mā te ākongā:

##### **Ngā āhuatanga o te hangarau**

Me mārama ki te pānga o te hangarau ki te hapori me te taiao i ngā horopaki tawhito me ngā horopaki ō naianei, ā, ki te tika te hangarau ka hua ake ko te mātauranga hangarau.

##### **Ngā āhuatanga o ngā hua hangarau**

Me mārama ki te whakaaro ka hua mai ngā hua hangarau i te hononga o te āhua me te whakamahinga o ngā hangarau.

### HANGARAU TAUMATA 4



#### Mahi Hangarau

Hei mahi mā te ākongā:

##### **Whakamahere i ngā mahi**

Ka whakamahere i ngā mahi hei arotake i te āhua o ngā mahi me ngā rauemi ō mua, te tiro i ngā hua ka hua i ngā mahi kei mua i te aroaro me te nanao atu ki ngā rauemi, me te whai whakaaro ki ngā kōrero whakahoki a te hunga whaipānga, hei whanake i tētahi hua.

##### **Te waihanga i ngā tohutohu**

Ka whakamana i te āhua o tētahi urupare me te hua hoki ka puta. Ka whakamārama i ngā āhuatanga matua i tohua i roto i ngā whakahoki kōrero a te hunga whai pānga, me te aha, ka hua ake ko te whanaketanga o tētahi urupare me tana arotakenga.

##### **Te arotakenga me te whanaketanga o te hua**

Rangahau i tētahi horopaki whanake i ētahi whakaaro mō ētahi hua. Whakaritea ētahi tauira hāngai ki ngā kōrero whakahoki a te hunga whai pānga hei tohu, hei whanake hoki i te hua tika mō ngā pūmanawa matua. Arotakehia te hāngaitanga o te hua ki te hiahia hei tā ngā whakahokinga kōrero ā te hunga whai pānga.

# TAUMATA 3-4

## NGĀ HONONGA MARAUTANGA

### HANGARAU TAUMATA 4



#### Mātauranga Hangarau

Hei mahi mā te ākongā:

##### **Tauira hangarau**

Me mārama ki te whakamahinga i ngā momo tauira āheinga rerekē hei whai i ngā ara maha me te whakaū i ngā whakataunga, me te whakamahinga i ngā tauira whakamātau hei raweke i ngā putanga hangarau.

##### **Ngā taonga hangarau**

Me mārama e taea ana ngā rawa te waihanga, te whakaraweke, te whakarerekē rānei hei whanake i te mahi tika o te taonga hangarau.

#### Āhua o te Hangarau

Hei mahi mā te ākongā:

##### **Ngā āhuatanga o te hangarau**

Me mārama ki te whānuitanga o ngā mea e taea ana e te tangata mā ngā whanaketanga hangarau me tā te hangarau nanao atu ki ngā mātauranga i ngā kaupapa whānui.

##### **Ngā āhuatanga o ngā putanga hangarau**

Me mārama ka hāngai ngā putanga hangarau ki te tirohanga o tana whakamahinga me te tangata whakamahi i a ia hoki, ā, he mahi tō ia mea, he mahi atu anō hoki ka taea.



# TAUMATA 1-2

## NGĀ HONONGA

### MARAUTANGA

#### TE REO PĀKEHĀ

##### TAUMATA 1



#### Kōrero, Tuhituhi me te Whakaaturanga

Hei mahi mā te ākongā:

##### **Ngā tukangā me ngā rautakī**

Me rangahau, me whakamahi hoki i ētahi puna mātauranga, tukangā, rautakī hoki hei tohu, hei hanga, hei whakaputa whakaaro hoki.

##### **Ngā whakaaro**

Waihanga me te whakaputa whakaaro mō ngā kaupapa maha.

#### TE REO PĀKEHĀ

##### TAUMATA 2



#### Kōrero, Tuhituhi me te Whakaaturanga

Hei mahi mā te ākongā:

##### **Ngā tukangā me ngā rautakī**

Me māia te tohu, te whakamahi hoki i ētahi puna mātauranga, tukangā, rautakī hoki hei tohu, hei hanga, hei whakaputa whakaaro hoki.

##### **Ngā whakaaro**

Me tohu, waihanga me te whakaputa whakaaro mō ngā kaupapa maha.

##### **Whakatakotoranga**

Me āta whakarite i ngā tuhinga mā te whakamahi i ngā rangaranga maha.

# TAUMATA 1-2

## NGĀ HONONGA

### MARAUTANGA

#### PŪTAIAO

##### TAUMATA 1-2



#### Āhua o te Pūtaiao

Hei mahi mā te ākongā:

##### **Te mārama ki te pūtaiao**

Me whakamānawa i tā ngā kaipūtaiao whakatū rangahau mā te tuku pātai me te hirahiratanga o te hinengaro mākohakoha i te āhua ki ngā whakamārama maha.

##### **Te rangahau i roto i te pūtaiao**

He whanake i ngā wheako me ō rātou whakaaro mō te ao tūroa mā te tūhura, te tākaro, te pātai me te wānanga i ētahi tauira māmā.

##### **Te whakawhiti whakaaro pūtaiao**

Ka whakapakari i te reo, ka whanake hoki i ngā mōhiotanga o ngā whakaahuatanga maha o te ao tūroa

##### **Te mahi tahi me te takoha**

Ka tūhura, ka whai hoki i ngā take me ngā pātai ka honoa mai i ngā akoranga pūtaiao me tō rātou oranga.

#### HANGARAU

##### TAUMATA 1



#### Mahi hangarau

Hei mahi mā te ākongā:

##### **Te whakamahere i ngā mahi**

Whakaritea he rautakī hei tautoko i te whanaketanga i tētahi putanga me te tohu i ngā pae me ngā rawa tika.

##### **Te waihanga i ngā tohutohu**

Whakamāramahia te putanga e whanaketia ana me te tohu i ngā āhuetanga tika, me te whai whakaaro ki ngā hiahia, ngā whai wāhitanga rānei me ngā rawa e rite ana.

##### **Te whanaketanga me te arotakenga o te putanga**

Rangahau i tētahi horopaki hei whakaputa whakaaro mō ngā putanga pito mata. Arotakehia ēnei e ai ki ngā āhuetanga; tīpakohia, ā, whanakehia tētahi putanga me te whakahāngai ki ngā āhuetanga kua tohua.



# TAUMATA 1-2

## NGĀ HONONGA MARAUTANGA

### HANGARAU TAUMATA 1



#### Mātauranga Hangarau

Hei mahi mā te ākongā:

##### **Tauira hangarau**

Me mārama ka whakamahia ngā tauira āheinga hei whakaahua i te ao me te whakamātau i ngā tikanga hoahoa, me te mōhio ka whakamahia ngā tauira taketake hei whakamātau i ngā putanga hangarau.

##### **Ngā taonga hangarau**

Me mārama he mea hanga ngā taonga hangarau i ngā rawa whai āhuatanga mahi.

##### **Pūnaha hangarau**

Me mārama he wāhanga tāuru, he wāhanga raweke āhua, he wāhanga huaputa hoki tō ngā pūnaha hangarau.

#### Āhua o te Hangarau

Hei mahi mā te ākongā:

##### **Ngā āhuatanga o te hangarau**

Me mārama ko tā te hangarau ko te whakatau whai take mā te mahi hoahoa.

##### **Ngā āhuatanga o ngā putanga hangarau**

Me mārama he taonga, he pūnaha hoki ngā putanga hangarau kua whanakehia e te tangata, ā, he taha ōkiko, he taha mahi hōki ō rātou.

### HANGARAU TAUMATA 2



#### Mahi Hangarau

Hei mahi mā te ākongā:

##### **Te whakamahere i ngā mahi**

Me whanake i tētahi mahere hei tohu i ngā wāhanga matua me ngā rawa hei whakamahi ki te whakaoti i tētahi putanga.

##### **Te waihanga i ngā tohutohu**

Me whakamārama i te āhua o te putanga me ngā āhuatanga matua e hāngai ana ki te whanaketanga, te arotakenga rānei, me ngā rawa maha.

##### **Te arotakenga me te whanaketanga i te putanga**

Tūhuratia tētahi horopaki ki te whanake i ētahi whakaaro mō ētahi putanga pito mata. Arotakengia ēnei e ai ki ngā āhuatanga matua hei tohu, hei whanake hoki i tētahi putanga. Arotakengia tēnei otinga e ai ki ngā hiahia, ngā whai wāhitanga rānei.

# TAUMATA 1-2

## NGĀ HONONGA MARAUTANGA

### HANGARAU TAUMATA 2



#### Mātauranga Hangarau

Hei mahi mā te ākongā:

##### **Tauira hangarau**

Me mārama he nui ngā momo tauira āheinga ka whakamahia hei tūhura, hei whakamātau, hei arotake hoki i ngā tikanga hoahoa mō ngā putanga pito mata, ā, ka whakamahi i ngā tauira tuatahi hei whakamātau i te hāngai o ngā putanga hangarau mō ngā mahi.

##### **Ngā taonga hangarau**

Me mārama ki te hononga o ngā rawa ka whakamahia me te hua o ngā mahi i roto i ngā taonga hangarau.

#### Āhua o te Hangarau

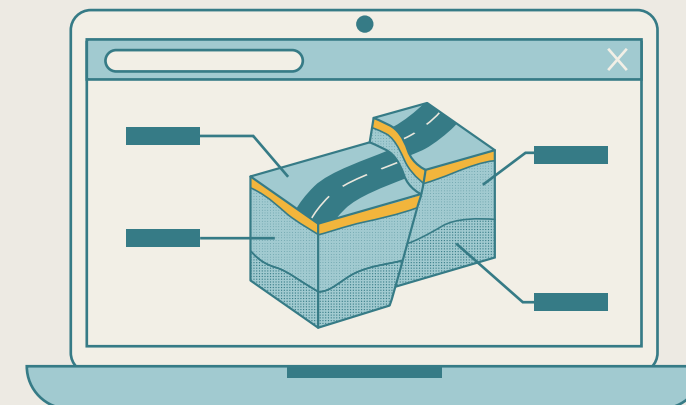
Hei mahi mā te ākongā:

##### **Ngā āhuatanga o te hangarau**

Me mārama ka whakaahua, ka panoni hoki te hangarau i te haporī me te taiao, ā, ka whakawhānui hoki i ngā pūkenga o te tangata.

##### **Ngā āhuatanga o ngā putanga hangarau**

Me mārama he mea whanake ngā putanga hangarau mā roto i ngā mahi hangarau, ā, he hononga taha ōkiko, taha mahi hoki ō rātou.



# TAUMATA 3-4

# NGĀ MAHERE

# AKORANGA

## TAUMATA 3-4

## NGĀ MAHERE

## AKORANGA

### 1. AROHA



Wā ki te whakaoti:  
1-2 ngā akoranga

### Whakatakinga Akoranga

I tēnei akoranga, ka kite ngā tauira i ngā pānga kinotanga o ngā rū whenua. Mā rātou e tohu ngā momo pānga rerekē, ā-kiko, ā-hapori anō hoki, mā te pānui me te whai i ngā mātauranga tika.

### Ētahi Ngohe

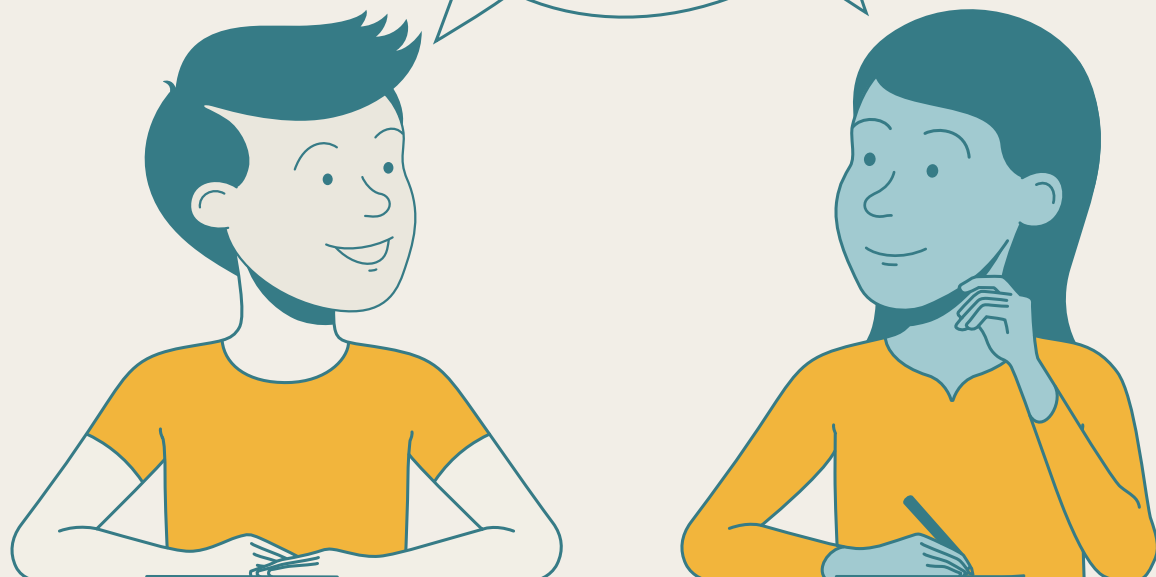
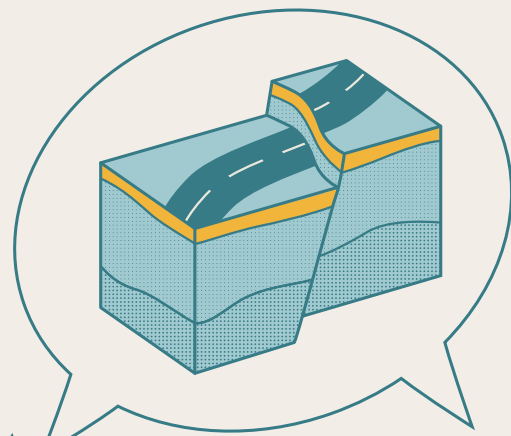
Wānanga akomanga:

1. Hora i te kaupapa me te wāhi i ngā kōrero mō ngā rū whenua.
2. Mā tētahi ngā kōrero e tuhi ki te papamā (tauira mai, kaiako mai rānei). Tōia mai ngā kōrero rū whenua mai i ngā tauira. He pai ngā kōrero katoa.
3. Uia ngā ākongā kia kite mēnā rānei he kōrero ā rātou, he kōrero rānei mō ētahi atu, e pā ana ki ngā rū whenua. He pai tēnei mō te mauri o te karaehe.
4. Mā ngā ākongā e whakaaroaro ētahi o ngā take ka pā ki ngā hapori i muri mai i te rū whenua. Kia tīmata ki ngā take ā-kiko (ngā mea ka kitea pēnei i ngā turakitanga whare me ngā mate rori, te mea, te mea) Whakaarohia, kōrerohia, horahia ngā take ka hua ake, ka pā rānei ki ētahi i muri mai i ngā rū whenua.
5. Mā ngā ākongā e whakaaro ake ētahi o ngā take ā-hapori (me uaua pea ka kite, engari ka pā tonu ki te tangata). Whakaarohia, kōrerohia, horahia ēnei whakaaro, ka mutu, āpitihia ki te ōhio manomano.
6. Tohua kia kotahi, kia rua rānei ngā kiriata, ngā pānui rānei i te rārangi rauemi (p 35) e whakaaro nei koe ka whai pānga ki ngā ākongā, ā, pānuitia te mea tuatahi ki a rātou.
7. Mā rātou te take e wānanga, te pānga ā-hapori, ā-kiko rānei, me ngā kāre ā-roto ka tūpono pā ki a rātou mēnā rānei tēnei ka hua ake.
8. Hei takirua, tukuna ētahi mēneti ki a rāua hei whakaaroaro ake i ētahi urupare whakatika, āhuatanga whakaheke rānei i te pānga o te take.
9. Tōaitia mō te pānui/kiriata tuarua inā hiahiatia ana.



### WHĀINGA

Me mārama ngā ākongā ki te rerekētanga o ngā take ā-hapori, ā-kiko anō hoki ka hua ake i ngā rū whenua me te whai whakaaro ki te hunga whai pānga.





# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 1. AROHA

#### Ngā pātai

He aha te rū whenua? Kua pā rānei te rū whenua ki a koe? I pēhea ō kare ā-roto? Kei te mōhio koe ki tētahi, tōna whare me ngā taonga i pāngia kinotia e te rū whenua? I aha rātou? I pēhea ō rātou kare ā-roto? He aha te rapanga 'ōkiko'? He aha ētahi tauira o ngā rapanga ōkiko ka pā i ngā wā o te rū whenua? He aha te mate 'pāpori'? He aha ētahi tauira o ngā mate pāpori ka pā i ngā wā o te rū whenua?

#### Ngā rawa e hiahiatia ana

Kotahi, e rua rānei ngā rawa i te rārangi rawa (w 35)  
(he mea nāu anō rānei i whiriwhiri)

He mea hei tuhituhi (papamā, papahangarau, he pepa nui, te mea, te mea)

### 2. WHAKAMĀRAMA

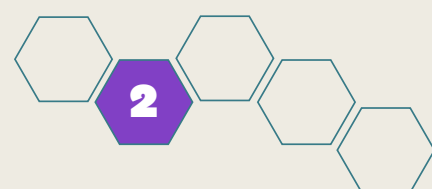
#### Whakatakinga akoranga

Me tohu ngā ākongā i ngā rapanga katoa me te hora i ngā kōrero katoa mō aua rapanga. Mā konei e mōhio ai rātou ki te rapanga tika hei whakaoti mā rātou, ā, ka mārama hoki ki te pūtake o taua rapanga. He wā pai tēnei hei kōrero i ngā mahi ka taka mai, e pai ai tā rātou whakaaroaro mō ngā mahi kei mua i te aroaro.

#### 1. Ētahi Ngohe

Wānanga akomanga:

1. Kia noho takirua ngā ākongā, ā, kia kotahi te rawa ki ia tokorua.
2. Me wānanga i ngā kōrero tika hei tango mai i ngā tuhinga e pai ai te whakamārama atu i te tikanga ki ngā ākongā (he mea tango mai i ngā take kōrero ēnei).
3. Ka mahi tahi ngā tokorua ki te wherawhera i te tuhinga, i te ataata rānei, me te tautohu i ngā wāhanga matua/whakautu rānei i ngā pātai ki ngā take kōrero.



Wā ki te whakaoti:  
2-3 ngā akoranga

# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 2. WHAKAMĀRAMA

#### Ētahi Ngohe

Wānanga akomanga tonu:

4. Ka tukuna ēnei ki te akomanga me te āta tuhi. He pai te waihanga i tētahi mauhanga toha (mā Kūkara, he taputapu matihiko rānei e paingia ana) e āhei ai ngā ākongā ki te āpiti i ngā rapanga kua kitea, he pai hoki RANEI te pukapuka, te pepa rānei hei ara tuhituhi mā ngā ākongā. Me whakaatu i tēnei ki roto i te akomanga kia pai ai te hoki atu ki ngā kōrero.

#### He kōwhiringa

#### Ngā hurihanga pānui

He wāhanga pea ngā kōrero ā-tuhi o ngā hurihanga pānui, ā, mutu ana tētahi, ka āpitihia ki tētahi rārangi.

#### Rangahau motuhake

Ka noho takirua ngā ākongā hei rangahau i ngā whakaoti rapanga e taea ana (TŪPATO: ka kitea pea he whakaahua mōrearea), ka whiwhi RANEI ki te rārangi rawa (w 35) hei kōwhiringa mai.

#### 2. Te Tohu i te Kaupapa

(Kōwhiri te ara pai mā tō akomanga):

1. Ka whiriwhiri ngā ākongā i ngā kaupapa pai ki a rātou, ā, ka noho ā-rōpū rātou e ai ki te hunga e hiahia ana ki te whakaoti i tēhea kaupapa.

MĀNA

Ka whakarōpūtia rātou, ka tohu ai i te kaupapa hei whakaoti mā rātou.

2. Ka noho ngā rōpū ki te rangahau i te rapanga i te roanga atu o te akoranga (ki tētahi wā rānei kua whakaritea e koe). Ka whakamahia ngā take kōrero hei ārahi i ngā rangahau, kātahi ka tuhia (ki ngā tuhinga matihiko tuari, pukapuka, ki hea atu rānei).



#### Whāinga

Mutu ana te wā ki ēnei mahi, ko tōna tikanga kua taunga ngā ākongā ki te rapanga ka whakaotia, ki ngā tauira o te wā me te wāhi i pā atu ai, me ngā putanga tērā pea kua whakamātauria kētia.

# TAUMATA 3-4

## NGĀ MAHERE

### AKORANGA

## 2. WHAKAMĀRAMA

### Ngā pātai

He aha te kaupapa o te tuhinga? He aha ngā pānga o te rū whenua? He aha ngā uauatanga hei whakatika? Me whai otinga mō te aha?

### Ngā pānga kinotanga

Ngā tūāpapa whare kua whati/tawhā/karawhiti, he whare kāore anō kia whakaitahia, kua kore i āhei ki te whakarite paearu e haumaruru ai te whare i ngā wā o te rū whenua, he wē, kua tawhā te raima i waho, he pāhekeheke ngā tuanui, kua raru ngā kōrere wai, kua kore he wai/hiko/rārangi kōrero mō tētahi wā, he waipeke, ka turakina he whare tuku iho (hei tauira, te whare karakia i Ōtautahi), kua katia he rori, kua hē ngā ara tereina, he nui te māharahara o ngā tamariki, he tokomaha ka wehe i ngā taone, ka heke te mākete whare, he mate inehua, te mea, te mea.

### He pātai mō ngā Rangahau ki Tua

He aha te rapanga? He aha i hua ake ai te rapanga? He aha ētahi kōrero matua? He aha ētahi o ngā ‘pānga ka hua ake’ (nā te rapanga nei)? Ka pā tēnei ki a wai, ā, ka pēhea? Kua pēnei i mua atu? He tauira tūturu? Kua ngana tētahi ki te whakaoti i tēnei rapanga? Pēnā āe, he aha ngā whakaotinga i whakamātauhia? He aha ētahi o ngā take o aua otinga?

### Ngā rawa e hiahiatia ana

- Rārangi rawa
- Rorohiko hei pānui
- Tuhinga Kūkara (he taputapu matihiko e paingia ana rānei)

MĀNA

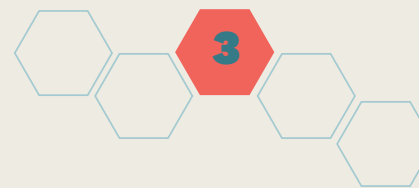
- He pepa nui
- Ētahi pene

# TAUMATA 3-4

## NGĀ MAHERE

### AKORANGA

## 3. WHAKATŌ WHAKAARO



Wā ki te whakaoti:  
**2-3 akoranga**

### Whakatakinga akoranga

**I konei, ka wānanga ngā ākonga i ētahi otinga ki ngā rapanga. Mā rātou e whakamahere i ētahi whakaotinga rerekē ki ngā rapanga, ka whakatau ai i te mea pai hei whakamātau, e ai ki ngā rawa me te wā ki a rātou.**

### Ētahi Ngohe

Te whakaaturanga whakatō whakaaro:

1. Hei akomanga, me whakamahere i tētahi whakaotinga ki tētahi rapanga e mōhio ai ngā ākonga ki ngā mahi waihanga otinga. Hei whakatauiria ake, ka tirohia e mātou te rapanga “mahi paipa konganuku wai”, heoi anō e pai ana tō whakamahi i tētahi o ngā tuhinga nāu i pānui i te Pāe 1, he mea atu anō rānei.
2. Hoki atu ki te rapanga: i ētahi wā he mea hanga ngā paipa wai ki te konganuku, ā, ka neke ana ngā tūāpapa me te hanganga o te whare, ka neke hoki ko ngā paipa wai. E kore ngā paipa konganuku wai e neke me te whare, nō reira ka piko, ka whati hoki. He nui te utu me te wā hei whakatika i ngā paipa wai.
3. Mā ngā ākonga e whakarite whakaaro ki te whakatika, whakaiti rānei i tēnei rapanga. Whakamaharatia rātou, i ētahi wā ko te whakaiti i te rapanga he ōrite ki te whakatika. Ka kōrero takirua ngā ākonga mō te miniti kotahi, ā, ka tuhia ngā otinga, ka tohaina rānei ki te akomanga i te wā e tuhia ana e te kaiako. Kāore he otinga hē, me whakaae ki ngā mea katoa mō tēnei wā, inā hoki ka tautuhia ā muri ake e ai ki ngā here. Me tere, me nui te ngao e pai ai ngā whakaaro o ngā ākonga. Ko ētahi pea ka hono atu ki ngā kōrere wai rapa, he rūma motuhake i waho mō ngā whakamahinga wai katoa me te tuku i ngā wai a te haporī pērā me te mīraka i mua, me te nui o ngā taputapu kia tu takitahi/ kia whakakīia, kua ki te mahi paipa.
4. Kōrerotia ngā whakaaro me te whakatauiratanga o ngā otinga (wānangahia ngā tauira whakamātau ki te kore ngā ākonga e mōhio), me ngā rāhuitanga ā-wā, ā-rawa anō hoki i te kura, i te kāinga rānei. Me tīmata ki te whakakore haere i ngā otinga kāore i te whai wāhi ki ēnei here.

# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 3. WHAKATŌ WHAKAARO

#### Ētahi Ngohe

Te whakaaturanga whakatō whakaaro anō:

5. Mā rātou e whakatau kia rua, kia toru rānei hei whakamahere mā rātou. Ka tau ki ngā pūrere motuhake me ngā paipa wai rapa.

6. Whakaaturia te tuhi i tētahi hoahoa me te tapa i ngā wāhanga rerekē. He hirahira kia mōhio ki te mahi a ia wāhanga, ki ngā rawa ka whakamahia. Whakamaharatia rātou he mahere ēnei mō te tauira whakamātau, kua mō te otinga tūturu, heoi anō he āwhina nui i te whakaaturanga i tō otinga i te mutunga.

7. Whakatauria te tauira whakamātau ka waihangatia e koe. Ki te mahi i tēnei, me āta whakaaro ngā ākongā ki ngā momo whakamātau me te āhua o angitū. Mō te hīrere motuhake, ko te angitū ia ko te whai i tētahi hīrere hikawe, te whakakī i a ia anō, ka whakairi ki te pakitara ka wera anō i a ia anō. Nā ngā paipa wai rapa i pai ai te rere o ngā wai i tētahi wāhi ki tētahi atu, i pai ai hoki te āpiti i ētahi mea pēnei i ngā upoko hīrere, te heketua, te mea, te mea. Mō te tauira mahi tahi, ka tau ki ngā paipa wai i te mea he māmā ki te whakatauiria, he māmā hoki te wāhi ki ngā rawa (pū rapa, ngongo wai takawai, te mea, te mea) ā, he māmā ki te whakamātau.

8. Hei whakakapi ake, tuhia he rārangi o ngā mea e hiahiatia ana hei waihangā i te tauira whakamātau (ngā rawa, te ara hanga, ngā rapanga ka hua ake pea). He hirahira tēnei i te mea me āta tuhi ngā ākongā i ā rātou mahi kua oti, nā, ka whakaatuhia ana e rātou a rātou otinga i te mutunga.

#### Whakaaro ākongā

1. Ka whai ngā ākongā i te tukanga whakaaro mā ngā pukapuka, mā te ara rānei ka tohua e te kaiako.

#### Kaiako mā, kia mōhio mai koutou

Whāia te huarahi whakaako mā ngā pae ki tō akomanga i tērā i te ara whakaako i te katoa, mēnā he māmā ake tēnei mā ō ākongā.



#### Whāinga

Mutu ana tēnei akoranga me mārara ngā ākongā ki te whakaaroaro i ō rātou whakaaro hei whakatau i te hoahoa whakamutunga

# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 3. WHAKATŌ WHAKAARO

#### Ngā pātai

He aha te rapanga? Ka pēhea taku whakaoti? He aha ngā rawa e hiahiatia ana? He aha pea ētahi rapanga ka hua ake? Ka nui rānei te wā ki a au hei whakatutuki i tētahi tauira whakamātau? He tangata, he wāhi rānei hei whakawhirinakitanga māku? Ka pēhea taku tuhi i aua kōrero?

#### Ngā rawa e hiahiatia ana

- Papamā
- Ētahi pene
- Te ara rānei ka tohua e te kaiako ka tuhia ai (pukapuka, Tuhinga Kūkara, te mea, te mea)

### 4. TAUIRA TAKETAKE ME TE WHAKAMĀTAU



Wā ki te whakaoti:  
**E 5 ngā akoranga**  
(Kei te āhua ō te akomanga te nui te iti rānei)

#### Whakatakinga akoranga

**Ka whakamātauhia e ngā ākongā i te tino mahere whai hua me te tauira whakamātau. Me mātua tuhi rātou i ā rātou mahi kua oti, ngā piki me ngā heke, e pai ai tā rātou whakahoki kōrero i te mutunga.**

#### Ētahi Ngohe

Te whakamātau:

I ēnei akoranga ka waihangatia, ka whakamātau hoki ngā ākongā i ngā tauira whakamātau. He wā pai hoki tēnei hei whakapā atu ki ētahi mātanga hei āwhina i ngā ākongā ki te whanake i ngā otinga. (I tā tātou tauira, he pai pea te whakapā atu ki tētahi mātanga paipa wai ki te kite mēnā rānei he pai te tauira whakamātau i tētahi ine rahi ake.)

# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 4. TAUIRA TAKETAKE ME TE WHAKAMĀTAU

#### Ētahi Ngohe

Te tuhituhi:

I te roanga o tēnei tukanga he mea nui tā ngā ākonga mauranga i ngā rapanga me ngā otinga hei whakahoki kōrero mā rātou i te mutunga.

Ka tuhituhia mā te pukapuka, mā te whakaahua, mā te ataata/atataki rānei, mā te kaiako, te ākonga rānei e whiriwhiri.

Kia 10 miniti ki ngā ākonga i te mutunga o ia akoranga hei tuhi i ā rātou mahi i taua rā, ngā rapanga i pā mai, me ngā mahi hei mahi mā rātou i te akoranga e whai ake nei. Nā, kua rite anō.

#### Ngā pātai

He aha i hē? He aha ngā mea hei panoni? He aha i mūhore ai tēnā? Ka mahi tēnei i te ao tūturu nei? He aha ngā tauārai i te ao tūturu nei?

#### Ngā rawa e hiahiatia ana

Ka hāngai ngā rawa ki ngā matea a ngā ākonga, ā, me aro rātou mā rātou te kawenga ki te tiki i aua rawa tika i te wā tika.

# TAUMATA 3-4

## NGĀ MAHERE AKORANGA

### 4. TAUIRA TAKETAKE ME TE WHAKAMĀTAU

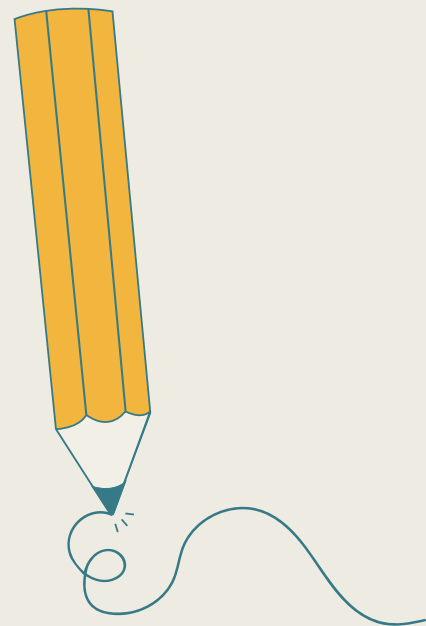
#### Ngā pātai

He aha te ara pai hei whakaatu atu i tēnei māku? Mā wai tēnei otinga? Me tīmata te otinga āhea? Ka tīmata ki hea? He aha ngā ara whakamua e puta ai ngā kōrero ki te hapori?

Kei te āhua o te whakaaturanga a te ākonga/kaiako te nui, te iti rānei o ngā rawa.

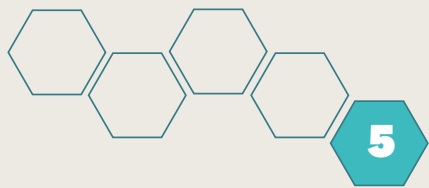
#### Paearu Aromatawai

He mea tango mai ēnei i ngā pitopito kōrero me whai e ngā ākonga i roto i ngā arotakenga, ki tā te whakamāramatanga whakaritenga whakaaturanga i te whārangi e whai ake nei. Ka hiahia rānei ki te whakauru i ētahi take kōrero, me ētahi atu paearu ka whakamahia e koe ki tō akomanga mō ngā aromatawai whakaaturanga.



# TAUMATA 3-4 NGĀ MAHERE AKORANGA

## 5. WHAKAATU



Wā ki te whakaoti:

### E 2 ngā akoranga

Kia 1 te akoranga ki te whakarite (kei te pai ki te mahi i te wā kotahi i te mahi whakatauirā, te whakamātau anō hoki, ā, kei te āhua o ngā ākonga)

Kia 1 te akoranga hei whakaatu atu.

### Whakatakinga akoranga

**Ka whakaatu ngā rōpū i ngā kitenga ki te akomanga. Ka kōrerotia te rapanga i kōwhiria me te ara ki te whakatau i te otinga, te whakamōhio i ngā raru katoa i kitea e rātou i roto i tēnei mahi.**

### Ētahi Ngohe

Te whakaritenga whakaaturanga:

**1.** Wānangahia me ngā ākonga ngā kōrero hei whakahoki mā rātou.

Ko ngā momo kōrero ko:

- ngā pitopito kōrero o te rapanga
- ngā otinga e toru i hua ake
- te mahere mō te taurā whakamātau me te taurā tonu
- te tukanga taurā whakamātau – he mea waihanga i te aha, i pēhea te waihanga, i kōrero atu rātou ki a wai, ngā rapanga i hua ake (ka ahu mai ēnei i a rātou tuhinga)
- te āhua o te whakamātau me ngā hua i puta.

**2.** Mā ngā ākonga e whakatau i te ara tika ki te whakaatu i tēnei. Tērā pea he PowerPoint, he pānui rahi, he whakakitenga, he ataata, he kauhau, he whārangi ipurangi, he pukaiti, te mea, te mea.

MĀNA

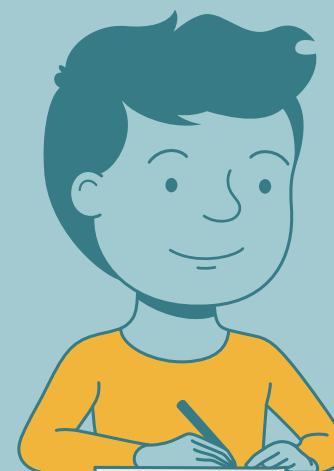
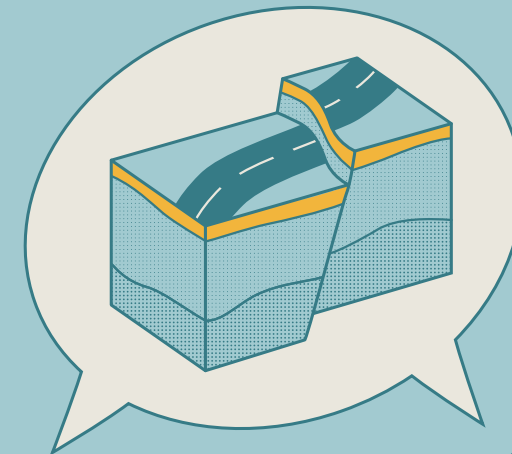
he ara atu anō e hiahiatia ana e te kaiako, ā, ka whaia i tēnā.

**3.** Tukuna he wā hei whakarite whakaaturanga mā ngā ākonga.

Te rā whakaaturanga:

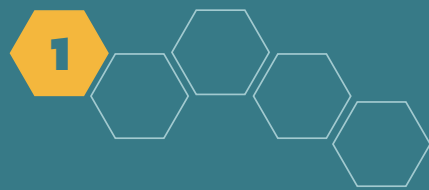
Ka whakahoki kōrero ngā ākonga ki te akomanga. Hoatu he wāhi ki ētahi atu ākonga ki te tuku pātai i te mutunga. Ko ngā take kōrero pea ka waiho hei huarahi ki te whakawhānui i ō rātou whakaaro mō te kaupapa ka taea ai te whakamahi hei pātai-āpiti i te mutunga o ā rātou whakaaturanga, ngā pātai rānei hei whakautu i te mutunga o te whakaaturanga.

# TAUMATA 1-2 NGĀ MAHERE AKORANGA



# TAUMATA 1-2 NGĀ MAHERE AKORANGA

## 1. AROHA



Wā ki te whakaoti:  
**1 ngā akoranga**

### Whakatakinga Akoranga

I tēnei akoranga, ka kite ngā tauira i ngā pānga kinotanga o ngā rū whenua.

### Ētahi Ngohe

Wānanga akomanga:

1. Hora i te kaupapa me te wāhi i ngā kōrero mō ngā rū whenua.
2. Mā tētahi ngā kōrero e tuhi ki te papamā (tauira mai, kaiako mai rānei). Tōia mai ngā kōrero rū whenua mai i ngā tauira. He pai ngā kōrero katoa.
3. Uia ngā tauira kia kite mēnā rānei he kōrero ā rātou, he kōrero rānei mō ētahi atu, e pā ana ki ngā rū whenua. He pai tēnei mō te mauri o te karaehe.
4. Mā ngā tauira e whakaaroaro ētahi o ngā pānga ka hua ake i ngā rū whenua. Whakaarohia, kōrerohia, horahia ētahi o ngā take e mōhiotia ana (ngā pakē pakitara & tuanui, ngā takahanga i ngā kāpata me ngā paenga, te turakitanga o ngā tumere me ngā tuanui, te komama o ngā kōrere, te korenga o te hiko, ka raru ngā rārangi waea, te mea, te mea).
5. Mā ngā tauira e whakaaroaro ake ngā kare ā-roto o te tangata ka tūpono pā ēnei āhuetanga ki a ia. Whakaarohia, kōrerohia, horahia ēnei whakaaro, ka mutu, āpitihia ki te ōhio manomano.

### Ngā pātai

He aha te rū whenua? Kua wheakohia e koe tētahi rū whenua? I pēhea ō kare ā-roto? Kei te mōhio koe ki tētahi i pāngia kinotia e te rū whenua? I aha rātou? I pēhea ō rātou kare ā-roto?

### Ngā rauemi e hiahiatia ana

— He mea hei tuhituhi (papamā, papahangarau, he pepa nui, te mea, te mea)

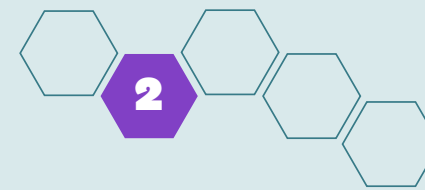


### Whāinga

Ka tohu ngā tauira i ngā pānga rerekē ka pā ki ngā whare i muri mai i ngā rū whenua me ngā pānga ki ngā tāngata.

# TAUMATA 1-2 NGĀ MAHERE AKORANGA

## 2. WHAKAMĀRAMA Whakatakinga akoranga



Wā ki te whakaoti:  
**1-2 ngā akoranga**

Me tohu ngā ākonga i ngā rapanga katoa me ngā kōrero katoa mō aua rapanga. Mā konei e mōhio ai rātou ki te rapanga tika hei whakaoti mā rātou, ā, ka mārama hoki ki te pūtake o taua rapanga. He wā pai tēnei hei kōrero atu i ngā mahi ka taka mai, kia taea ai e rātou te whakaaro ki te mahi e hiahia ana rātou ki te mahi.

### Ētahi Ngohe

1. Wānanga akomanga:

Tirohia anō te rārangi o ngā momo pānga ki ngā whare i ngā wā o te rū whenua me te kite mēnā rānei he pānga anō kua kitea e ngā ākonga hei tāpiri ake.

HE KŌWHIRINGA:

Hei akomanga, hei takirua rānei, whakahaua ngā ākonga ki te titiro ki ētahi rawa (w 34) kia hua ake ko ētahi atu whakaaro mō ngā pānga

MĀNA

Whakahaua ngā ākonga kia kōrerotia ki te kāinga i te pō i mua atu e pai ai tā rātou whakahoki whakaaro mai ki te kura.

2. Te whakatau kaupapa:

Whakatauria kia toru, kia whā rānei ngā rapanga māmā mā ngā tauira te whakamātau ki te waihanga i ngā whakaoti. Hei whakatauria ake, ka whakamahi ai: i ngā mea ka taka iho i ngā paenga, ngā kāpata me ngā hautō e huaki ana, te takahanga o ngā paenga pukapuka. Mēnā ētahi o ō ākonga e hiahia ana ki te hoahoa pakitara/tuanui whati-kore, he whakaaro tino pai rānei hei whakamātau, tēnā tukuna.

Kōwhiria te ara pai mā tō akomanga:

Ka whiriwhiri ngā ākonga i ngā kaupapa pai ki a rātou, ā, ka noho ā-rōpū rātou e ai ki te hunga e hiahia ana ki te whakaoti i tēnā kaupapa.



### Whāinga

Mutu ana te wā ki ēnei mahi, tōna tikanga kua mārama ngā ākonga ki te rapanga e whakaoti ana, ngā tauira me ngā otinga kua whakamātauria kētia, arā, i hea, i nāhea.



# TAUMATA 1-2

## NGĀ MAHERE

### AKORANGA

## 2. WHAKAMĀRAMA



### Whāinga

Mutu ana te wā ki ēnei mahi, tōna tikanga kua mārama ngā ākonga ki te rapanga e whakaoti ana, ngā tauira me ngā otinga kua whakamātauria kētia, arā, i hea, i nāhea.

### Ētahi Ngohe

Te whakatau kaupapa tonu:

MĀNA

Ka whakarōpūtia ngā ākonga i a rātou, ka tohu ai i te rapanga hei whakaoti mā rātou.

Ka noho ngā rōpū ki te kaha rangahau i te rapanga i te roanga atu o te akoranga (mō tētahi wā rānei kua whakaritea e koe). Ka whakamahia ngā take kōrero hei ārahi i ngā rangahau, kātahi ka tuhia ai i runga i te ara tika ki a koe (ki ngā tuhinga matihiko tuari, ngā pukapuka, ki hea atu rānei).

### He pātai mō ngā Rangahau ki Tua

He aha te rapanga? He aha i hua ake ai te rapanga? He aha ētahi pītōpito kōrero matua? He aha ētahi o ngā 'pānga ka hua ake' (nā te rapanga nei)? Ka pā tēnei ki a wai, ā, ka pēhea? Kua pēnei i mua atu? He tauira tūturu anō? Kua ngana tētahi ki te whakaoti i tēnei rapanga i mua? Mēnā āe, he ata ētahi atu otinga kua whakamātauria? He aha ētahi rarurau ki aua otinga?

### Ngā rawa e hiahiatia ana

- Rārangī rawa
- Rorohiko hei pānui
- Tuhinga Kūkara (he taputapu matihiko e paingia ana rānei)

MĀNA

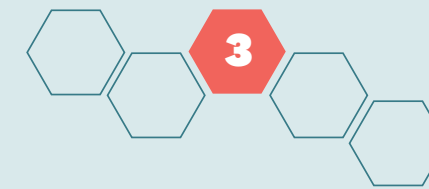
- He pepa nui
- Ētahi pene

# TAUMATA 1-2

## NGĀ MAHERE

### AKORANGA

## 3. WHAKATŌ WHAKAARO



Wā ki te whakaoti:  
2-3 ngā akoranga

### Whakatakinga akoranga

**Ka wānanga ngā ākonga i ētahi otinga ki ngā rapanga ka taea, ka whakawhāiti ki tētahi whakaaro kotahi, kua rite ki te whakatakoto tauira whākamātau.**

### Ētahi Ngohe

Te whakaaturanga whakaaro:

1. Hei akomanga, wānangatia tēnā me tēnā rapanga.

a. Hoki atu ki ia rapanga me te kōrero i ngā kare ā-roto ka hua ake inā pā mai te raru nei ki a rātou.

b. Whakahaua ngā ākonga ki te pōhewa i ēnei āhuatanga mehemea kāore he here. Hei tauira, mēnā i a rātou te wā, ngā moni me ngā pūkenga katoa, he aha ētahi whakaaro hei whakatika i ngā raru. Whakakipakipa i a rātou ki te whakaputa whakaaro maha, i te mea kāore he whakautu hē. Ko ētahi tauira mō ngā 'mea ka taka iho i ngā paenga' ko ngā paenga he mea hanga i te pera, he paenga oko te āhua, he paenga ngutu te āhua, he paenga hāpiripiri, te mea, te mea.

c. Kia pēnei mō ia rapanga.

d. I te mutunga iho, me whai whārangi otinga mō ngā rapanga katoa.

Te whakataki i ngā whakamātautau:

1. Whakaatu atu ki ngā ākonga i ngā whakamātautau me ngā otinga me tutuki. E rua ngā ara hei whakatutuki i tēnei, ka mutu, mā ngā rawa me ngā pūkenga o ngā ākonga tēnā e whakatau.

a. Ko te whakamātautau pea ko te tītakataka o tētahi tēpu e rima ngā wā, nā te ringa o te kaiako, ā, me waihanga ake he otinga e ngā ākonga i konā tonu.

MĀNA

b. Ka tukuna tētahi paenga, he kāpata rānei ki ngā ākonga hei whakaraweke mā rātou. Me āhei tēnei mea ki te rūrū, me noho rānei ki tētahi papa whērūrū ai hei whaihanga i te rū whenua.

Kei te whārangi e whai ake nei te toenga o te akoranga

# TAUMATA 1-2 NGĀ MAHERE AKORANGA

## 3. WHAKATŌ WHAKAARO

### Ētahi Ngohe

Te tohu tauira:

1. Ka kite koe i ngā whakamātautanga, kōrero ki ngā ākonga mō te wā hei hanga tauira me ngā rawa e wātea ana (nō te akomanga me te kāinga). Wānangahia ēnei rāhuitanga mō ngā tauira, ā, kōrerohia hoki ētahi o ēnei.
2. Whakahokia ngā tauira ki ngā rōpū ki reira wānanga ai i ngā ōhio manomano mō ngā take. (Ki te nui ake i te kotahi te take mā ia rōpū, me kape pea ēnei, hei tuku ki ngā rōpū katoa.)
3. Mā ngā rōpū e whakakahore ngā whakaaro koretake e ai ki ngā rāhuitanga nā rātou i whakarite.
4. Mā ngā tauira e tohu ngā whakaaro pai e toru.

Te tuhi rautaki:

1. Mēnā e noho tauhou ana tēnei, tēnā whakatauirahia te ara tuhi hoahoa mō ngā urupare, ā, whakaingoatia anō hoki.
2. Me tuhi e rātou ngā wāhanga katoa, te rawa i whakamahia, me ētahi atu kōrero hirahira e pā ana ki te hoahoatanga.
3. Ka rite ngā hoahoatanga mō ngā urupare katoa, mahitahi ki ngā rōpū hei tohu i te mea pai hei hanga mā rātou. Koinei te kōwhiringa e taea ana te whakatutuki i te wā e tika ana me ngā rawa e wātea ana.

### Ngā pātai

He aha te mate? Ka pēhea taku urupare i a ia? He aha ngā rawa e hiahia ana? He aha pea ētahi mate ka hua ake? Ka nui rānei te wā ki a au hei whakatutuki i tētahi tauira? He tangata, he wāhi rānei hei whakawhirinakitanga mōku?



### Whāinga

Mutu ana tēnei akoranga mē mōhio ngā tauira ki te whakaaroaro i ō rātou whakaaro hei whakatau i te hoahoatanga whakamutunga.

# TAUMATA 1-2 NGĀ MAHERE AKORANGA

## 3. WHAKATŌ WHAKAARO

### Ngā rawa e hiahia ana

- Papamā, ētahi pene, te ara tuhi ka tohua e te kaiako hei tuhi i ēnei kōrero kōrero (ngā pukapuka, tuhinga Kūkara, te mea, te mea)
- Ētahi rawa whakamātau
- He rārangi rawa e rite ana hei whakamahi mā ngā ākonga ki te waihanga i ngā otinga.

## 4. TAUIRA TAKETAKE ME TE WHAKAMĀTAU



Wā ki te whakaoti:  
**E 2 ngā akoranga**

### Whakatakinga akoranga

Ka waihanga ngā ākonga i ā rātou hoahoa.

### Ētahi Ngohe

Ka whakamahi ngā ākonga i tēnei akoranga nei hei waihanga i te tauira whakamātau kua whakamaheretia.

### Ngā rawa e hiahia ana

Ka hāngai ngā rawa ki ngā matea a ngā ākonga, ā, me aro rātou mā rātou te kawenga ki te tiki i aua rawa tika i te wā tika.

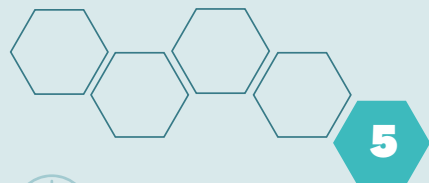


# TAUMATA 1-2

## NGĀ MAHERE

### AKORANGA

#### 5. WHAKAMĀTAU ME TE TŌAI ANŌ



Wā ki te whakaoti:  
**2 ngā akoranga**

#### Whakatakinga akoranga

Ka āwhina ngā kaiako i ngā ākonga ki te whakamātau i te tauira taketake me te tōai anō i te tauira whakamātau, i runga i tērā atu whakamātautanga me ngā whakahokinga kōrero i waenga i ngā ākonga.

#### Ētahi Ngohe

Whakamātau me te arotake:

1. Whakamātauhia ngā tauira whakamātau ā ngā rōpū katoa.
2. Kia kōrero ngā ākonga ki te akomanga mō te mea i waihangatia, me te rapanga e whakaoti ana.
3. Whakatutuki i te whakamātautau.
4. Kia kōrerotia e te akomanga ki te rōpū kia rua ngā mea pai, kia rua hoki ngā mea hei whakapai ake e pā ana ki te hoahoa. Kia hāngai ngā whakaaro ki te whakamahinga – whakamahia ngā pātai matapakī.

Tōaitanga anō i te tauira o mua:

1. Whakamahia tēnei akoranga mā ngā ākonga ki te whakarite panonitanga ki te tauira e ai ki ngā whakahokinga kōrero i puta i te akoranga whakamutunga nei.

#### Ngā pātai

He aha i hē? He aha ngā mea hei panoni? He aha i mūhore ai tēnā? Ka mahi tēnei i te ao tūturu nei? He aha ngā tauārai i te ao tūturu nei? Kei te ārai rānei e te otinga i te whakamahinga i te taonga tuatahi? He pai te āhua? Ka hokona rānei e te tangata? He tāngata rānei kāore e kaha ki te whakamahi i tēnei? Ka pēhea te hoko atu?

#### Ngā rawa e hiahiatia ana

- Ngā whakamātau i ngā tauira taketake
- Ngā rawa mō ngā panonitanga

# TAUMATA 1-2

## NGĀ MAHERE

### AKORANGA

#### 6. WHAKAMĀTAUTAU WHAKAMUTUNGA ME TE WHAKAATURANGA



Wā ki te whakaoti:  
**1-2 ngā akoranga**

#### Whakatakinga akoranga

Ka whakamātau ngā ākonga i te tauira pai ake whakamutunga, mutu ana tēnā ka arotakengia e rātou te ara ako.

#### Ētahi Ngohe

1. Ka kōrerotia ngā panonitanga ki ngā tauira i whakaritea e ngā ākonga, ā, he aha hoki i panonitia ai.
2. Ka whakamātauria anō e te kaiako ā rātou tauira whakamātau, me te whakatenatena i ngā ākonga ki te kōrero ko tēhea te mea pai ake, ko te tauira tuatahi, te tauira tuarua rānei, ā, he aha i pērā ai.

Arotakenga:

1. Ka arotake ngā ākonga i te tukanga e ai ki a rātou. Ka taea tēnei mā te tuhituhi, te ataata, te reo-ki-te-tuhi, te mea, te mea.
2. Mā rātou ēnei pātai e whai ake nei e whakautu:
  - He aha tō raru?
  - I waihanganga koe i te aha hei whakatika i te raru?
  - I ahatia i te whakamātautau tuatahi?
  - He aha ngā panonitanga ki te whakamātautau tuarua?
  - He aha ngā mea rerekē ki te whakamātautau tuatoru?

#### Ngā rawa e hiahiatia ana

Kei te āhua ki tā te kaiako tikanga e hiahiatia ai ki te tuhi i ngā arotakenga ngā rawa.

#### Paearu aromatawai

He mea tango mai ēnei i ngā pitopito kōrero me whai e ngā ākonga i roto i ngā arotakenga, me ētahi atu paearu ka whakamahia e koe ki tō akomanga mō ngā aromatawai whakaaturanga.



#### Whāinga

Mutu ana te wā ki ēnei mahi, tōna tikanga kua mārama ngā ākonga ki te rapanga e whakaoti ana, ngā tauira me ngā otinga kua whakamātauria kētia, arā, i hea, i nāhea.

# TAUMATA 1-4

## NGĀ RAWA

Patohia ngā hononga mō ō mātou rawa e ngakaunui ana



### Taumata 1-4:

**The primary effects of earthquakes: ground shaking, ground rupture, landslides, tsunamis, liquefaction, and fires (web page)**

<https://topex.ucsd.edu/es10/es10.1997/lectures/lecture20/secs.with.pics/node10.html>

**Earthquake facts for kids: what an earthquake is, where they come from, and how they are measured (video)**

[https://www.youtube.com/watch?v=cu\\_PBjBIFKI](https://www.youtube.com/watch?v=cu_PBjBIFKI)

**What is an earthquake (web page)**

<https://www.dkfindout.com/us/earth/earthquakes/effects-an-earthquake/>

**Hazardous earthquake effects (web page)**

<http://uwiseismic.com/General.aspx?id=14>

**What is an earthquake (cartoon video)**

<https://www.youtube.com/watch?v=dJpIU1rSOFY>

**All about earthquakes: a page of fun facts and videos (web page and videos)**

<https://www.theschoolrun.com/homework-help/earthquakes>

#### KIA MAHARA:

Ahakoia e tika ana te taumata o ēnei rawa katoa mo te reanga o te rōpū, tirohia ēnei hononga i te tuatahi. Kātahi ka tukuna atu ki ōu ākongā.

# TAUMATA 5-8

## NGĀ RAWA



**Earthquake effects (shaking, landslides, liquefaction, and tsunamis) (web page)**

[http://eqseis.geosc.psu.edu/~cammon/HTML/Classes/IntroQuakes/Notes/earthquake\\_effects.html](http://eqseis.geosc.psu.edu/~cammon/HTML/Classes/IntroQuakes/Notes/earthquake_effects.html)

**Earthquakes – causes and effects (picture slideshow with voiceover)**

<https://www.youtube.com/watch?v=FowixCmKNKs>

**The impacts of earthquakes (web page facts and pictures)**

<https://opentextbc.ca/geology/chapter/11-4-the-impacts-of-earthquakes/>

**Effects of earthquakes on humans and environments (brief essay)**

<https://www.ukessays.com/essays/sociology/the-disastorous-effects-of-humans-and-environments-sociology-essay.php>

**Psychosocial effects of the earthquakes: a New Zealand perspective (article)**

<http://www.stuff.co.nz/the-press/opinion/perspective/6892800/Psychosocial-effects-of-the-earthquakes>

**Health effects of Canterbury earthquakes (article and video)**

<https://www.stuff.co.nz/national/health/108978391/health-effects-of-canterbury-earthquakes-like-a-wartime-recovery>

**Public health impact and medical consequences of earthquakes (academic reading)**

<https://pdfs.semanticscholar.org/ec9c/b1750ad34f6ee022f3d32de69bf34f015476.pdf>

**What is an earthquake: facts and information (video)**

<https://www.youtube.com/watch?v=hlePrsXTGxQ>

**22 February 2011 Canterbury earthquake for kids (web page)**

<https://my.christchurchcitylibraries.com/canterbury-earthquake-2011-for-kids/>

**Canterbury earthquakes and mental health (web page)**

<https://www.sciencemediacentre.co.nz/2019/04/09/canterbury-earthquakes-and-mental-health-expert-reaction/>



**EQC**  
EARTHQUAKE COMMISSION  
Kōmihana Rūwhenua

