



PŪNIU RIVER CARE INC.
A REGISTERED CHARITY

TE AUKAIAO

CERTIFICATE IN INTRODUCTORY RIVER ENHANCEMENT (APPLIED)

Student Workbook

Kōnae Ako 5 – *Rangatiratanga*

Ingoa:

STUDENT WORKBOOK

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STUDENT WORKBOOK

PEPEHA

Mōkau ki runga, Tāmaki ki raro

Pare Waikato, Pare Hauraki

Te Kaokaoroa o Pātetere

Mangatoatoa ki waenganui

Ā muri i a au

Kia mau tonu ki tēnā

Kia mau ki te kāwau mārō

Whanake ake, Whanake ake!

E kore au e mate

He kākano i ruia mai i Rangiātea

Mai te wāhi ngaro ki te mata o te whenua

Ko au te maunga, ko te maunga ko au

Ko au te moana, ko te moana ko au

Ko au te ngahere, ko te ngahere ko au

Ko au te awa, ko te awa ko au

He kaitiaki tūturu ahau arā Te Kāhui ā Hiwa

Tihei Mauriora!

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THE NAME: TE AUKAIAO

The name of the programme Te Aukaiao was given to this kaupapa by Paraone Gloyne.

'Te au' refers to the current in any body of water. In this case, the current of the Pūniu river and all the other smaller streams and waterways that lead to the Pūniu river.

Similarly, each individual person also has a current flowing within them and as kaitiaki, we have an obligation to care for and contribute to the mauri of our waterways. Our individual mauri combines with that of the river to bring and sustain life to the individual, the river and the wider taiao landscape.

'Kaiao' is another word for ora (living) and together the name encapsulates the kaupapa of this programme and represents the interdependence of kaitiaki and taiao alike.

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NGĀ UARA

Tupu te kākano
Tupu te taketake
Tupu te pihinga
Tupu te māhuri
Tupu te rākau
Ko au ko koe, ko koe ko au
Tihei Mauriora



Koha – *Limitless generosity acknowledging the celebration of life*

Is about celebrating life, acknowledging life and being grateful for the opportunities that arise. To Pūniu River Care it is to give without receiving, to contribute with endless generosity and to nurture all that is life.

Mauri – *Boosting a new life force into a sustainable world*

Kākano – literal translation is seed. This can also mean a provider of new growth. We are also trying to clean up our rivers and our waterways. Water is life, or a life force and we as people, and everything breathing has a life force. It is an interdependent relationship that affords mutual respect.



Whanaungatanga – *Strategic relationships and empowering whānau*

Pihinga are seedlings and as seedlings come into the world, with it comes a colony of whatever species they are. As we grow as people we find ourselves surrounded by whānau and then we find more whānau. We find new relationships and make new friends and before we know it, we find ourselves in partnerships we might never have thought possible.

Māramatanga – *To know your place in a sustainable world*

Māhuri is a young tree at an adolescent stage of life. This is a stage of life where youth are trying to find themselves and where they think they can contribute to life. We also need to figure out some things in life and in what we do to be sure of why we do what we do and understand the significance of what you do in life is also understood by those in and around your circle.



Rangatiratanga – *Self-determined to take the lead for a sustainable world*

Rākau is the fully established tree that has stood its ground from the humble seed. A giant kauri tree that stands in awe is a sight of pride and power and has an establishment of control and self-governance. For people to become and feel the same as this rākau will only know that feeling when a challenge in front of them has been met to the best of their ability. Whether it be buying food for the cupboards to buying their own home. Having a sense of ownership, knowing and understanding who you are and where you fit in this world by being self-governed will give you a sense of rangatiratanga.

Kaitiakitanga – *Keepers of our waterways, rivers, whānau and home*

Taketake – is the root of all things growing. For the life of a tree to thrive, it needs a good root system and needs to be carefully nurtured from inception. This can also be reflected within the homes of where if we want the best for our younger ones, we must ensure they are grounded first and with the right caring and nurturing we can ensure they will strive to be all they can be in a safe and healthy upbringing. We also do what we need to do to ensure we lead by example and show we can be guardians of our waterways, our families and homes.



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PROGRAMME INFORMATION

Programme Name	Te Aukaiao - Certificate in Introductory River Enhancement (Applied)			
Level	4			
Credits	120			
Length	36 weeks			
Total hours	Teaching hours (on the job)	800 hours	Self-directed hours	400 hours
Graduate profile outcome statement	A graduate of this programme will be able to: Be a Pūniu River Care Kaitiaki that is: • Humble and respectful • Professional and reputable • Connected to the taiao • Strong in their identity • Competent in their mahi as an individual and as a team player Be a Pūniu River Care Kaitiaki that knows relevant: • Tikanga practices • Maramataka knowledge • Kaitiakitanga practices • Sustainable taiao practices Be a Pūniu River Care Kaitiaki that can [do]: • Apply knowledge of seed collection processes from a taiao worldview. • Apply knowledge of seed sowing processes from a taiao worldview • Apply knowledge of potting up processes from a taiao worldview • Apply knowledge of preparing planting sites from a taiao worldview • Apply knowledge of planting processes from a taiao worldview • Apply knowledge of maintaining plant processes from a taiao worldview.			
Programme outcome statement	At the end of this programme, graduates will be able to: 1. Demonstrate broad operational and technical knowledge in a values based planting approach towards a rākau Māori industry. 2. Select and apply relevant solutions to various stages of the planting process. 3. Select and apply relevant processes specific to Pūniu River Care that is relevant to the planting process. 4. Select and apply a range of communication skills relevant to the rākau Māori industry.			

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KŌNAE AKO 5 – RANGATIRATANGA

Programme Name	Te Aukaiao - Certificate in Introductory River Enhancement (Applied)			
Kōnae Ako name	Rangatiratanga			
Level	4			
Credits	20			
Length	6 weeks			
Total hours	Teaching hours (on the job)	150 hours	Self-directed hours	50 hours
Overview (aim)	The value of rangatiratanga represents being self-determined to take the lead for a sustainable world. Rākau is the fully established tree that has stood its ground from the humble seed. A giant kauri tree that stands in awe is a sight of pride and power, and has an establishment of control and self-governance. For people to become and feel the same as this rākau will only know that feeling when a challenge in front of them has been met to the best of their ability. Whether it be buying food for the cupboards to buying their own home. Having the sense of ownership, knowing and understanding who you are and where you fit in this world by being self-governed will give you a sense of rangatiratanga. In alignment with this description, this kōnae ako aims to examine and implement planting processes using tikanga practices within a taiao worldview.			
Learning Outcomes	At the end of this kōnae ako, students will be able to: 1. Demonstrate tikanga practices when planting (Range includes karakia, whakarite, pūrākau, mihimihi). 2. Demonstrate maramataka knowledge when planting (Range: phase, atua, month, and impacts on hinengaro, tinana, tāngata and taiao). 3. Select and apply kaitiakitanga practices when planting (Range: : plant care, recycling pots and trays, weeds are used for compost, reduce travel by loading plants in good order, leaving no rubbish on site, using compostable rubbish bags). 4. Implement plant health check prior to planting (Range: no weeds, watered, to grade/size/quality, loading up/handling). 5. Implement transport checks prior to planting (Range: vehicle and trailer, securing load, backing and hitching a trailer, plant placement in trailer) 6. Demonstrate knowledge of appropriate plant placement and layout when planting (Range: layout, spacing, plant niche, de-potting, de-bagging). 7. Demonstrate knowledge of plant and site care (Range: personal, site and plant hygiene, tools, reporting, data capture/site brief).			

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Graduate Profile Outcomes	Graduates of this programme will be able to: • Apply knowledge of tikanga practices to promote a taiao worldview. • Apply knowledge of the maramataka to enhance practice and production. • Implement kaitiakitanga practices to care for and maintain plants and people. • Implement sustainable practices to promote a taiao worldview. • Apply knowledge of planting processes from a taiao worldview.
Kōnae ako content	This kōnae ako will cover the following topics: • Tikanga (Karakia, whakarite, pūrākau, mihimihi) • Maramataka practices • Kaitiakitanga practices • Plant health checks • Transport checks • Sustainable practices • Plant placement and layout • Plant and site care
Resources	The maramataka section of this kōnae ako is to be completed in conjunction with the Matataiora Maramataka app.
Internal requirements	The following are required in this kōnae ako: • Trailer hitching and backing
External requirements/licences	The following are required in this kōnae ako: • Nil
Special notes	The species used throughout this programme are: 1. Mānuka / Tea tree (<i>Leptospermum scoparium</i>) 2. Kahikatea / NZ White Pine (<i>Dacrycarpus dacrydioides</i>) 3. Karamū (<i>Coprosma robusta</i>) 4. Whanake / Cabbage tree (<i>Cordyline australis</i>) 5. Tarata / Lemonwood (<i>Pittosporum eugenioides</i>)

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SPECIES IDENTIFIED FOR THIS PROGRAMME¹



Mānuka
(*Leptospermum scoparium*)

The many uses of Mānuka in rongoā is due to its strong anti-microbial properties and as a natural antiseptic, it is an ideal healer and protector for the body.



Kahikatea
(*Dacrycarpus dacrydioides*)

The Kahikatea is the oldest member of the ancient Podocarp family and have been around for more than 160 million years.



Karamū
(*Coprosma robusta*)

It is a sacred plant to Māori and a branch of the Karamū was often used by tohunga when conducting a karakia over a sick person.



Whanake
(*Cordyline australis*)

All the parts of the Whanake have important uses such as food, fibre and medicine. The root, stem and top are all edible, a good source of starch and sugar.



Tarata
(*Pittosporum eugenioides*)

Tarata was used to make perfume and hair oils. The gummy resin that oozes from the bark was mixed with bird fat and the Tītoki and Kōhia and rubbed over the hair and body.

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KŌNAE AKO 5 – ASSESSMENT

Assessment overview	The assessment for this kōnae ako will be a combination of written and practical activities. Learning outcome 1 and 2 will be assessed and evidenced through the Student Workbook. Learning outcomes 3 – 7 will be assessed and evidenced through the Assessment Observation Checklist.
Learning outcomes	At the end of this kōnae ako, students will be able to: 1. Demonstrate tikanga practices when planting <i>(Range includes karakia, whakarite, pūrākau, mihimihi).</i> 2. Demonstrate maramataka knowledge when planting <i>(Range: phase, atua, month, and impacts on hinengaro, tinana, tāngata and taiao).</i> 3. Select and apply kaitiakitanga practices when planting <i>(Range: plant care, recycling pots and trays, weeds are used for compost, reduce travel by loading plants in good order, leaving no rubbish on site, using compostable rubbish bags).</i> 4. Implement plant health check prior to planting <i>(Range: no weeds, watered, to grade/size/quality, loading up/handling).</i> 5. Implement transport checks prior to planting <i>(Range: vehicle and trailer, securing load, backing and hitching a trailer, plant placement in trailer)</i> 6. Demonstrate knowledge of appropriate plant placement and layout when planting <i>(Range: layout, spacing, plant niche, de-potting, de-bagging).</i> 7. Demonstrate knowledge of plant and site care <i>(Range: personal, site and plant hygiene, tools, reporting, data capture/site brief.</i>
Assessment evidence	The evidence of assessment for this kōnae ako is: 1. Student Workbook completed by the student 2. Assessment observation checklist completed by Assessor

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KŌNAE AKO 5 – ASSESSMENT OBSERVATION CHECKLIST

Student name			
Assessor name			
Assessment date(s)			
Assessment activity			
		ACH	YTA
Learning outcomes	1. Demonstrate tikanga practices when planting <i>(Range includes karakia, whakarite, pūrākau, mihimihi).</i>	☐	☐
	2. Demonstrate maramataka knowledge when planting <i>(Range: phase, atua, month, and impacts on hinengaro, tinana, tāngata and taiao).</i>	☐	☐
	3. Select and apply kaitiakitanga practices when planting <i>(Range: plant care, recycling pots and trays, weeds are used for compost, reduce travel by loading plants in good order, leaving no rubbish on site, using compostable rubbish bags).</i>	☐	☐
	4. Implement plant health check prior to planting <i>(Range: no weeds, watered, to grade/size/quality, loading up/handling).</i>	☐	☐
	5. Implement transport checks prior to planting <i>(Range: vehicle and trailer, securing load, backing and hitching a trailer, plant placement in trailer)</i>	☐	☐
	6. Demonstrate knowledge of appropriate plant placement and layout when planting <i>(Range: layout, spacing, plant niche, de-potting, de-bagging).</i>	☐	☐
	7. Demonstrate knowledge of plant and site care <i>(Range: personal, site and plant hygiene, tools, reporting, data capture/site brief).</i>	☐	☐
Final result (ACH or YTA)		☐	☐
Assessor signature and final date assessed			
Assessor feedback			

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KŌNAE AKO 5 – PLANT HEALTH CHECKLIST (LOADING UP)

Student name				
Tuakana name				
Date				
Maramataka phase				
		YES	NO	ACTION PLAN REQUIRED
Things to check	Site load identified (loading out, labelling)	☐	☐	☐
	Vehicle safety check:	☐	☐	☐
	• WOF	☐	☐	☐
	• Kms	☐	☐	☐
	• Load secured	☐	☐	☐
	• Lights	☐	☐	☐
	• Trailer check	☐	☐	☐
	• Diesel	☐	☐	☐
Action plan (if applicable)				
Tuakana signature				
Date				

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HE AHA TĒNEI PUKAMAHI? – WHAT IS THIS WORKBOOK?

This workbook can help support and guide you through your mahi for this programme. This workbook contains:

- Additional information to support what you have learnt with your kaiako and your class.
- Some activities to help you consolidate your learning.
- Some key words (and their meanings) to help you through your journey.
- Ideas of additional resources to help you along the way.

NGĀ TOHUTOHU MŌ TĒNEI PUKAMAHI – WHAT TO DO WITH THIS WORKBOOK

- 1) Look at what you have learnt during this kōnae ako and the assessment material.
- 2) Work through each exercise of this workbook – it is a support tool for you. You can make notes in it, highlight important ideas and things you want to make special note of.
- 3) Have a think about how particular activities relate to your mahi at Pūniu River Care to help understand its significance.

NGĀ TOHU ĀWHINA – HELPFUL ICONS

The following section explains several helpful icons that you will see throughout this workbook to help navigate and guide you through this workbook.

	He kupu āwhina – <i>Some tips to help you work through an activity.</i>
	He mahi takitahi – <i>An individual activity.</i>
	He mahi pānui – <i>A reading activity.</i>
	He mahi whakarongo – <i>A listening activity.</i>
	He mahi tuhituhi – <i>A writing activity.</i>
	He mahi titiro/mātakitaki – <i>A observation activity.</i>
	He mahi arotake – <i>A reflection activity within your journal.</i>
	Ētahi atu rauemi – <i>Additional resources.</i>

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HE PAPA KUPU – GLOSSARY

This glossary contains Māori words and their meanings that are found through this workbook.

Māori word/phrase	English translation
Awa	River
Ētahi rauemi	Some (additional) resources
He kupu āwhina	Tips - Some tips to help you work through an activity
He mahi pānui	A reading activity
He mahi takitahi	An individual activity
He mahi titiro/mātakitaki	A looking/watching activity
He mahi whakarongo	A listening activity
Hei mahi	Activity
Hei tauira	An example/an introduction
He papa kupu	Glossary
Hinengaro	Mind
Ingoa	Name
Iwi	Tribe
Kaiako	Teacher
Kaitiakitanga	The keeping of our waterways, rivers, whānau and home
Kākano	Seed
Karakia	Ritual chant, prayer
Kaupapa ako	Learning topic
Koha	Limitless generosity acknowledging the celebration of life
Kōnae ako	Module
Mahuri	A young tree at an adolescent stage of life
Marae	Traditional meeting place/complex
Maramataka Māori	Māori lunar calendar
Māramatanga	To know your place in a sustainable world
Maunga	Mountain
Mihimihi	To greet, pay tribute
Papatūānuku	Earth mother
Pepeha	An introduction of yourself using physical landmarks to share where you are from/who you are
Pihinga	Seedlings
Pukamahi	Workbook
Pūrākau	Story
Rākau	Tree
Rangatiratanga	Self-determination; to take the lead for a sustainable world
Taiao	Natural world/environment/outdoor activities
Taketake	The root of all things growing
Tāngata	In this context it means energy level ²
Taniwha	Guardian
Tapu	Sacred
Te whakarāpopototanga	The summary
Tikanga practices	Practices using Māori customs/values/worldview
Tinana	Body/physical wellbeing
Uara	Values
Waka	Canoe
Whakarite	To prepare
Whānau	Family
Whanaungatanga	Strategic relationships and empowering whānau

² Explanation given in Matataiōra app

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A light blue spiral graphic is positioned on the right side of the page, starting from a small circle and winding outwards. The background is white with horizontal lines.

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ĒTAHI ATU RAUEMI – SUPPORTING RESOURCES

Videos:

Land, Air, Water Aotearoa - <https://www.youtube.com/watch?v=lwJGpFJJ9mc>

Momentum Waikato - <https://vimeo.com/300860022>

Pūniu River Care, Sustainable enterprises - <https://www.youtube.com/watch?v=3htUhFvIHog>

Pūniu River Care, Waterway restoration project - https://www.youtube.com/watch?v=-jjdaQ_xSnw

Pūniu River Care, Growing jobs back home - https://www.youtube.com/watch?v=X_onB47mAT0

Pūniu River Care, Freshwater Improvement Fund - <https://www.youtube.com/watch?v=8WpR5Fwdoks>

Pūniu River Care, Waikato River Authority - <https://www.youtube.com/watch?v=S0YpgaSve8Y>

Pūniu River Care, Hikoi May 2021 - <https://www.youtube.com/watch?v=h9ldZrcrCTE>

Waikato Tainui, Taiao Grant - <https://www.youtube.com/watch?v=lcGRGH-Rx-0>

Waikato BFEA Catchment Group Award - <https://www.youtube.com/watch?v=VTGT9giVg0c>

Matataiora Maramataka app by Maniapoto Māori Trust Board - <https://www.youtube.com/watch?v=zNki9cyqjKw>

(Available to download from Google Play or Apple Store).

Waiata:

Ehara i te mea: <https://www.youtube.com/watch?v=uJluANcY3fE>

E tū Maniapoto: <https://www.youtube.com/watch?v=ho7ANdEhE0> (@ 3:48)

Haere mai ki Maniapoto: <https://www.youtube.com/watch?v=ho7ANdEhE0> (@1:16)

He aha kei taku uma: <https://www.youtube.com/watch?v=bY9EISgYbrg>

Hoki hoki tonu mai: <https://www.youtube.com/watch?v=CL0-JJmclK>

Mangatoatoa: https://www.youtube.com/watch?v=W_00w3hY3wg (@0:00 - 0:51)

Mā wai rā: <https://www.youtube.com/watch?v=FRXjYJxYLCc>

Rimu rimu: <https://www.youtube.com/watch?v=hSCq3FIEQa0>

Tai aroha: <https://www.youtube.com/watch?v=awVVAaEILfw>

Tōia: https://www.youtube.com/watch?v=aZS_B8ZiIEo

Whakataurangi ake: <https://www.youtube.com/watch?v=n8uN4l3MkNs>

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NGĀ KAUPAPA AKO – RANGATIRATANGA (PLANTING PROCESSES)

The value of rangatiratanga represents being self-determined to take the lead for a sustainable world. Rākau is the fully established tree that has stood its ground from the humble seed. A giant kauri tree that stands in awe is a sight of pride and power, and has an establishment of control and self-governance. For people to become and feel the same as this rākau will only know that feeling when a challenge in front of them has been met to the best of their ability. Whether it be buying food for the cupboards to buying their own home. Having the sense of ownership, knowing and understanding who you are and where you fit in this world by being self-governed will give you a sense of rangatiratanga.

In alignment with this description, this kōnae ako aims to examine and implement planting processes using tikanga practices within a taiao worldview.

- Tikanga (Karakia, whakarite, pūrākau, mihimihi)
- Maramataka practices
- Kaitiakitanga practices
- Plant health checks
- Transport checks
- Sustainable practices
- Plant placement and layout
- Plant and site care



1. WHAKARITE



Whakarite are often used to prepare people and places to ensure a positive outcome. These are generally used to start and close occasions as well as blessing food. In general, the intention of whakarite is to prepare someone for what needs to be done and keep them safe and well.

Below is an example

Unuhia, unuhia

Unuhia ki te uru tapu nui

Kia wātea, kia māmā, te ngākau, te tinana, te wairua i te ara takatū

Koia rā e Rongo, whakairihia ake ki runga kia tina. TINA!

Haumi e, hui e, tāiki e!



HEI MAHI – ACTIVITY

Using what you know now, write another whakarite below that you would use when planting.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. In the top right corner, there is a small, light blue curved shape, possibly representing a piece of tape or a decorative element. The overall appearance is that of a clean, unused notebook page.

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2. PŪRĀKAU



HEI TAUIRA – AN EXAMPLE

*"Whirowhiro ana riporipo ana te au o Pūniu,
wai kaukau o Peketahi.
Ka titiro whakarunga ki Ōtautahanga ki te ana o
Takerepiripiri e mōwai mai rā.
Teretere taku tia rere
Hūkere hūkere kauria hei
Hūkere hūkere kauria hā
Kauria te ia o te awa tuku whakarite (Pūniu)
Tū mai rā Kakepuku,
te rerenga o Mukukai ki te tonga
Auē te aroha e (ki te tonga)
Waiwaiā paenga rau whakatau mai rā
Ko te kārohirohi e tere mai rā
Tō ata I te kahu roa o Waipā
I ō parārī I Rangitoto
Teretere taku tia rere
Hūkere hūkere kauria hei
Hūkere hūkere kauria hā
Puawhe a Whanawhana pōwhiritia
Ka titiro whakararo ki Kāwhia
Kei waho ko Raparoa puku kumara
Taku tai one ko te hauāuru
Papaki te moana ki Taramainuku
I Te Mānukanuka
Ko Kaiwhare riri Whakauka
Rangikakake e koro haere mai rā
Mihia a Karutahi me Paneiraira
Tūheitia he tupua, Tūheitia he tangata
Tēnei ka whakamānawa te kāhui taniwha
Te mana, te tapu, te wehi o tua whakarere
Teretere taku tia rere
Hūkere hūkere kauria hei
Hūkere hūkere kauria hā
Hei hā!"³*

Pūrākau are a way to capture stories of our whānau, hapū and iwi. These stories talk of our ancestors' successes, failures, lessons and history. Pūrākau are often used to teach younger generations about the significance of places and people in those stories.

Below is the pūrākau of Tūheitia.

This is an excerpt of a waiata composed by Paraone Gloyne, Ngahua Kopa and Te Aorere Tunoho which celebrates the taniwha who are the guardians of Pūniu, Waipā and Waikato rivers. Tūheitia in particular is known throughout the wider Waikato as a taniwha within their waterways. This is the story of Tūheitia.

Tūheitia

Tūheitia (the man) was a very influential tupuna. He was the father of Māhanga, the ancestor of Ngāti Māhanga. He was a fierce warrior in battle that is captured in his whakatauāki:

Haere mai ki a au, ki Te Papa-o-Rotu, ki te au tē rena, ki te urunga tē taka, ki te moenga tē whakaarahia. Ahakoa iti taku ngohi, he rei kei roto.

Come to me at Te Papa-o-Rotu where there is peace. Though my people are small in numbers, yet they have power.

It is said that Tūheitia was left to drown by his brother-in-law Tāhinga who had persuaded him to dive into the sea to loosen their snagged anchor.⁴ By supernatural means, Tūheitia then became a taniwha and came to reside in the Waipā river.⁵ The Waipā river is significant to Ngāti Māhanga and there are several sites of significance including the location of the taniwha Tūheitia.



Tūheitia (the taniwha) has his cave (Te Oneparepare⁶) along the Waipā river not far from Te Papa-o-Rotu marae. He is one of the guardians of that area and the waterways connected to Waipā including Pūniu and Waikato rivers.

Having an understanding of these taniwha of the waterways gives kaitiaki a deeper understanding of the importance of these taniwha and the role they play in caring for the awa.

³ Excerpt taken from composition 'Teretere Taku Tia Rere' by Paraone Gloyne, Ngahua Kopa and Te Aorere Tunoho.

⁴ https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_42292535/Wai%20898,%20A094.pdf

⁵ Te Ahukaramū Charles Royal, 'Waikato Tribes - Ancestors', Te Ara - the Encyclopedia of New Zealand, <http://www.TeAra.govt.nz/en/photograph/1726/tuheitia> (accessed 16 February 2022)

⁶ https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_42292535/Wai%20898,%20A094.pdf

⁷ In this carving, situated outside the Novotel Tainui hotel in Hamilton, Tūheitia is depicted with a fish-like tail, to signify his transformation into a taniwha. Source: <https://teara.govt.nz/en/photograph/1726/tuheitia>

STUDENT WORKBOOK



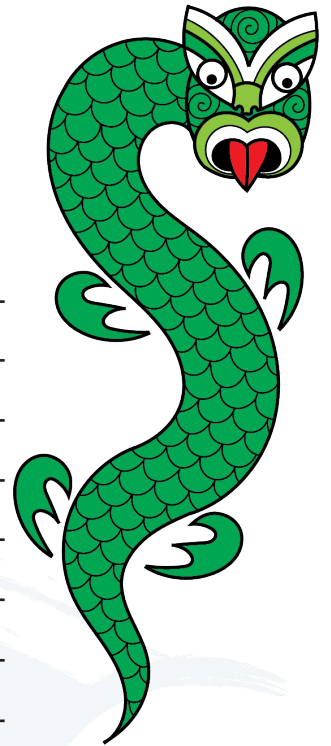
HEI MAHI – ACTIVITY

After reading the pūrākau of Tūheitia, what are 3 lessons you would take from it and use in your everyday practice?

1 _____

2 _____

3 _____



STUDENT WORKBOOK

3. MIHIMIHI



HEI TAUIRA – AN EXAMPLE

A mihimihi is a greeting or introduction that happens at the start of a meeting or gathering. A mihimihi is used to establish links between the speaker and the audience and the kaupapa of the gathering and may include a pepeha.

Below is an example of a mihimihi.

Pepeha

Ko Waikato te awa

Ko Taupiri te maunga

Ko Tūrangawaewae te marae

Ko Tainui te waka

Ko Pōtatau Te Wherowhero te tangata

Waikato taniwha rau

He piko, he taniwha

He piko, he taniwha



HEI MAHI – ACTIVITY

Using the space provided, write your pepeha from your māmā and pāpā and five PRC whakataukī (from the tikanga book).

	Ko.....waka
	Ko.....maunga
	Ko.....awa
	Ko.....marae
	Ko.....iwi
	Ko.....te/ngā rangatira
	Ko.....tōku māmā
	Ko.....ahau

STUDENT WORKBOOK

	Ko.....waka
	Ko.....maunga
	Ko.....awa
	Ko.....marae
	Ko.....iwi
	Ko.....te/ngā rangatira
	Ko.....tōku pāpā
	Ko.....ahau

Whakatauki

PRC Whakatauki	Meaning

STUDENT WORKBOOK

4. MARAMATAKA



HEI TAUIRA – AN EXAMPLE

The Māori lunar calendar called the Maramataka marks the phases of the moon in a lunar month. The maramataka was once used for almost any activity taking place in the community. Some days or nights of the maramataka were better to do certain activities than other days.



HEI MAHI – ACTIVITY

Using the Matataiora Maramataka app, complete the following table for today's date and write the impact of today's phase on planting.

	Date ⁸	
	Atua (Deity)	
	Maramataka (Month)	
	Hinengaro (Mindfulness)	
	Tinana (Physical wellbeing)	
	Tāngata (Energy level)	
	Taiao (Outdoor activities)	
	How does today's phase impact on planting?	

STUDENT WORKBOOK

5. SUSTAINABLE KAITIAKITANGA PRACTICES



HEI TAUIRA – AN EXAMPLE

Sustainability and kaitiakitanga are complementary when working in the taiao space. Kaitiakitanga practices allow efficiency and also respect Papatūānuku when working with the land.



HEI MAHI – ACTIVITY

Using the table below, describe what each kaitiakitanga practice means and why they are important when planting.

Recycling pots and trays	
Weeds are used for compost	
Reduce travel by loading plants in good order	
Leaving no rubbish on site	
Using compostable rubbish bags	

STUDENT WORKBOOK

6. PLANT HEALTH CHECK PRIOR TO PLANTING



HEI TAUIRA – AN EXAMPLE

Checking the health of the plant prior to planting gives the plant the best chance to thrive.



HEI MAHI – ACTIVITY

Complete a plant health check and write down what you found for each of the areas below.

Weeds <i>(Were there any weeds? If so, what action did you take?)</i>	
Watered <i>(Are the plants hydrated? How do you know?)</i>	
To grade? <i>(Are the plants to grade? How do you know?)</i>	
Loading up/handling <i>(What do you need to consider when loading up/handling?)</i>	

STUDENT WORKBOOK

7. TRANSPORT CHECKS PRIOR TO PLANTING



HEI TAUIRA – AN EXAMPLE

Completing the transport checks prior to planting saves both time and resources and ensures the safety of everyone involved.



HEI MAHI – ACTIVITY

Complete a transport check and write below what you checked for in each of the areas.

Vehicle and trailer <i>(What were the things you checked in the vehicle and the trailer?)</i>	
Securing load <i>(What measures did you take to secure the load? How do you know that the load is secure?)</i>	
Backing and hitching a trailer <i>(What did you check while hitching and before backing the trailer?)</i>	
Plant placement in trailer <i>(What did you consider when placing the plants in the trailer?)</i>	

STUDENT WORKBOOK

8. PLANT PLACEMENT AND LAYOUT WHEN PLANTING



HEI TAUIRA – AN EXAMPLE

Plant placement and layout are important factors to consider in the planting process for numerous reasons.



HEI MAHI – ACTIVITY

Using the table below, describe each of the below areas in the planting process and write down why each is important.

Layout	
Spacing	
Plant niche	
De-potting	
De-bagging	

STUDENT WORKBOOK

9. PLANT AND SITE CARE



HEI TAUIRA – AN EXAMPLE

The care of plants and planting sites throughout planting stages involves a number of considerations in order for plants to thrive in their new environment.



HEI MAHI – ACTIVITY

Using the table below, What do you need to consider when caring for any plants and planting sites throughout all planting stages?

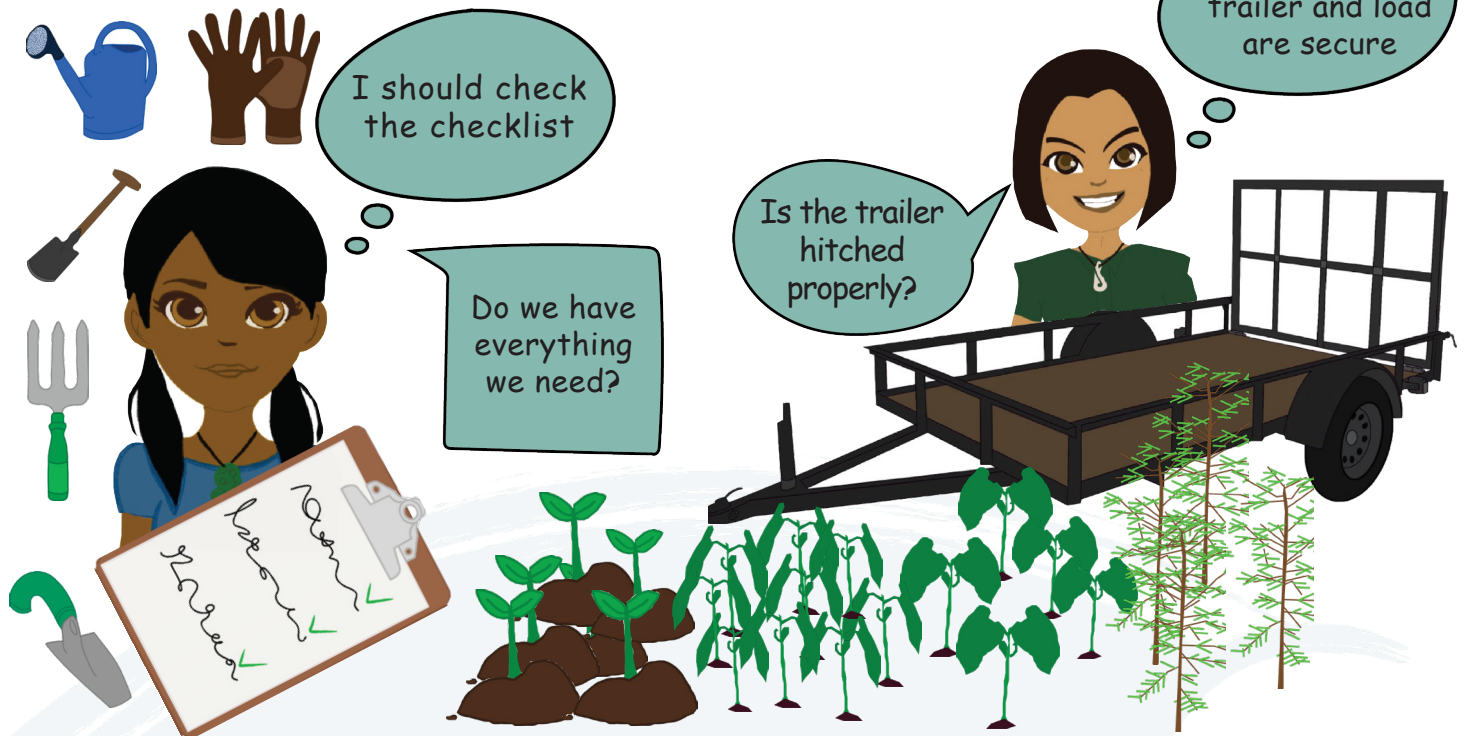
Personal, site and plant hygiene <i>(How do you implement the care of such throughout any planting stages?)</i>	
Tools <i>(What tools are needed to care for any plants and planting sites throughout all planting stages?)</i>	
Reporting <i>(What, how, when is reporting done and to who?)</i>	
Data capture/site brief <i>(What data is captured, where does it go and why?)</i>	

STUDENT WORKBOOK

A light blue spiral graphic is positioned on the right side of the page, starting from a small circle and winding outwards. The background is white with horizontal lines.

STUDENT WORKBOOK

TE WHAKARĀPOPOTONGA – A SUMMARY



RANGATIRATANGA





PŪNIU
RIVER
CARE INC.