

Tau 3 Ngā Rauemi mā te Kaiako



Māpura Matihiko
Digital Ignition

Me Mahi Hāngi Tātau

He Whakamārama

I roto i tēnei ngohe, ka whakaharatau ngā ākonga ki te tuhi hātepe, ki te patu iro hoki, kia arataki ai te tangata e kohi hua-whenua ana mō te hāngi. Ka āta wānangahia e ngā ākonga i ngā āhuatanga o te hāngi, ā, he aha hoki tōna hiranga ki te Ao Māori.

Te Tiaroaro Marau - Ngā Whaingā Paetae

Te Marau Hangarau: Hangarau Matihiko

Te Tupuranga Whakaaro Rorohiko

Whakatupuranga 1

Ko te whakaaro hātepe

- Ka wetewetea tētahi tūmahi rorohiko-kore ki ētahi tohutohu tika, tohutohu mārama, me kī, kia māmā ngā tohutohu (whakaaro hātepe). Ka taea te tuku tohutohu, ka tautohu mēnā kei te hē, ā, ka whakatika ai (te patuiro). Mā tēnei mahi e whakaatu ka taea e rātou te whakamahi i ō rātou pūkenga whakaraupapa hei wetewete i tētahi tūmahi ki ōna tohutohu iti nei.

Te Tupuranga Whakaaro Rorohiko

Whakatupuranga 2

Ko te whakaaro hātepe

- Ka mārama ko tēnei mea te hātepe, he tukanga tohutohu ki te whakaoti hopanga, ka taea hoki te whakamahi i ēnei ki te tuhi papatono rorohiko, ā, me tika, me hāngai ngā tohutohu kia taea ai e te rorohiko te whai. Ka hoatu, ka whai hoki i ngā hātepe patuiro ngāwari i roto i ngā taiao rorohiko, rorohiko-kore hoki. Ka taea ēnei hātepe te whakamahi ki te hanga papatono māmā mā te whakauru i ngā mea pēnei i te tāuru, i te tāputa me ngā raupapanga i tēnei taiao hanga papatono.

Ngā Taipitopito Awheawhe

Ngā Putanga Ako

Ka taea e ngā ākonga te:

- Mōhio ki ngā ingoa mō ngā hua-whenua ka kohia mō te hāngi.
- Wāwāhi i ngā raruraru kia whāiti ai.
- Tuhi hātepe (kia mārama pū, kia whakatakoto hoki i ngā nekehanga kia oti ai te rapanga).
- Mōhio mēnā kua puta he hua hē (arā, he iro).

- Mārama ka taea e ngā iro te whakararu i ō hātepe.
- Mārama mā te rautaki patuiro e kitea ai te tino raru ō roto i te hātepe.

Whakamutua te tukanga patuiro:

- a) Tīmatahia mai i te tīmatatanga ō taua hātepe.
- b) Āta whāingia te hātepe tae rawa ki te whakaraupapatanga o te hātepe matawhatiwhati.
- c) Whakatikaina taua hātepe
- d) Hoki ki te tīmatanga, ā, mahia mai ēnei whakaraupapahanga tae noa ki te wā e kitea ai te hua tika.

Hoki ki te tīmatanga, ā, mahia mai ēnei whakaraupapahanga tae noa ki te wā e kitea ai te hua tika.

Ngā Taputapu

- [] 1x Tīpakohia tō pepa mahi kai
- [] 1x Kohia te pepa mahi kai
- [] 1x Karawhiua ngā mahi patuiro!

Te roanga:

- 30 mīniti

Ngā whakaritenga

- Tāruatia ngā pepa mahi
- Me mōhio rawa ki ngā kupu me ngā whakamāramatanga e hāngai ana ki ēnei mahi. (Tirohia te kupu taka)
- Hei paku āwhina pea, pānuitia ētahi kōrero kei te ipurangi e pā ana ki te hāngi i mua tonu i te whakaako ki ngā ākonga. Hei āwhina anō, kua whakairia ētahi hononga ipurangi ki ngā rauemi akoranga.
- Kōwhiringa: Whakaritea ētahi rorohiko mā ngā ākonga, kia whakakipakipa i ā rātou ki ētahi kēmū hāngi kei runga i te ipurangi. Kei raro iho te hononga ipurangi ki te kēmū rā. (Let's make a Hāngi).

<http://wicked.org.nz/Interactives/Maori-themed-interactives-in-English/Hangi>

Mahere Ako:

Whakatakinga/Akoranga:

1. Pātaihia ki ngā ākonga he aha ā rātou mōhiotanga ki te mahi te hāngi. Tuku pātai atu, ko wai mā te hunga kua kai hāngi, me te wāhi i kaingia e rātou i taua hāngi. Tērā pea kua whakaritea kētia ētahi ō ngā ākonga i tētahi hāngi.
2. Hei rōpū kotahi, wānangahia ngā tūmomo kai e kitea ai i roto i te hāngi. Whakamaharatia ki ngā ingoa Māori mō ngā kai hei whakaritea i te hāngi.
3. Wherawherahia ētahi kōrero ki ngā tamariki hei kōrero mō ētahi tikanga i te Ao Māori mō whakareri kai me te hāngi.
4. Matapakitia ngā tukanga mō te whakarite hāngi, ā, mā rātou e taunaha he aha ngā tino tukanga hei whakarite.

Hei whaiwhakaaro:

- Te āhuatanga whakarite e hiahia ana
- Ngā hātepe tika hei whakamahi i ā koe e whakarite hāngi ana.
- Te whakakotahitanga ā te katoa ki te awhi ki ngā mahi whakarite hāngi.
- Ngā tūmomo kaupapa rerekē e kitea ai te hāngi e whakarite mai ana.

5. (Kōwhiringa): Whakaritea ētahi kēmu whakakipakipa i ngā tamariki mā runga i ngā rorohiko, ki ētahi kēmu hāngi hoki kei runga i te ipurangi. Kei raro iho te hononga ipurangi ki te kēmu 'Lets Make Hāngi'

<http://wicked.org.nz/Interactives/Maori-themed-interactives-in-English/Hangi>

6. Whakamāramatia te tukanga mō te tunu hāngi kia whāiti mai, kia wāwāhi i roto i ngā wāhanga iti kia mārama ai rātou ki tēnei mea te whakamatariki.

Te Whakahaere Mahere Ako

1. Hoatu ngā pepa ngohe ki ngā ākonga, arā ko ēnei: 'Tīpakohia āu kinaki, Kohia ngā kai, Kua tae te wā kia patu iro.
2. Tonoa ki ngā ākonga te whakakī i ngā pepa ngohe kua tohaina atu e te kaiako. (Mā te tuhi rārangi mai i ngā kinaki ki ngā whakaahua e tika ana)
3. Ka mutu ana ngā ākonga i ngā mahi, whakautu pātai hei akomanga katoa, kia kitea mehemea e tino āhukahuka ana rātou ki ngā ingoa Māori mā ngā kai mo te hāngi.
4. Pātahia anōtia ki ngā ākonga kia whakaoti i te pepa ngohe Kohia ngā kai. I roto i tēnei ngohe me tuhi ngā ākonga i tētahi hātepe kia tohutohu ai tā rātou tangata i te māra kia kahi kai hei kinaki mō te hāngi. Ka āhei ngā ākonga te whakamahi kia whā ngā tohutohu. "Haere whakamua" "Haere whakamuri" "Huri whakamauī" "Huri whakamataū".

Whakamahia ngā tohutohu e pēnei ana:



Anei te otinga:

5x (Haere whakamua) 1x (huri whakamataū) 2x (Haere whakamua) 1x (Huri whakamataū)
2x (Haere whakamua) 1x (Huri whakamauī) 1x (Haere whakamua) 1x (Huri whakamataū) 3x (Haere whakamua) 1x (Huri whakamauī) 2x (Haere whakamua) 1 (Huri whakamauī) 5x (Haere whakamua)

5. Ka mutu ana ngā mahi ā ngā ākonga, tukuna rātou kia māwhiti i ō rātou tūmahi ki tētahi atu ākonga kia whakamātau hoki i tā rātou mōhiotanga ki te ngohe. Hei tā ia ākonga he whai i te pūnaha hātepe e kitea ana, ōtira, he whakataū hoki i te ara e whakamārama ana i te hātepe. Ka awahina pea inā ka tāngia te ara ki te pepa ngohe i a rātou e whāia ana te hātepe. Me matua mōhio rātou ki ngā tūmomo whakaraupapatanga kia tae pai ai rātou ki te wāhi e whāia ana.
6. Ki te kore te hātepe e tae ki te tapawhā mutunga ō te pepa ngohe, mā reira e kitea ai te ākonga i te iro! Hēoi, mā ngā ākonga e whai rautaki kia patuiro, kia whakatika i te hātepe, me te whakamahi i te pepa ngohe 'Kua tae te wā kia patu iro !

Ko te tukanga mō te patuiro:

- a) Tīmatahia mai i te tīmatanga o te hātepe.
- b) Whai atu i ngā tohutohu kia puta ake he raru mai i te hātepe.
- c) Whakatikahia i tērā raru.
- d) Ka tīmata mai anō i te hātepe kia puta ake ai te hua tika.

Te Whakamutunga:

1. Pātaihia ki ngā ākonga he aha tā rātou i kitea ai i te putanga mai o tētahi iro i te hātepe.
2. Pātaihia ki ngā ākonga inā i whai hua te whakawhiti pepa ki ā rātou hoa, ki te whakaae mai, he aha pea taua take? Wherawherahia te hirahiratanga o te mahi tahi me te hua o taua mahi e puta ai te tiketike o ēnei mahi.

Ngā Kupu Hou

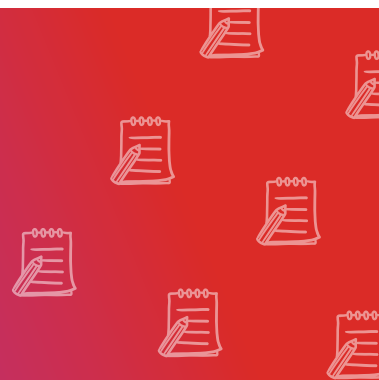
Whakamatariki	He mahi wāwāhi i tētahi raru ki ētahi wāhanga ririki.
Hātepe	He ara tohutohu ki te whakatika i tētahi rapanga. He ngāwari, ka mārama hoki te whai atu
Iro	Kua rerekē te hua o te hātepe ki tāu i whakaaro ai.
Patuiro	He tukanga hei kimi i te rongoa kia whakatikangia i tētahi raru kei roto i tētahi hātepe. Te tukanga patuiro: a) Tīmatahia mai i te tīmatanga o te hātepe. b) Whai atu i ngā tohutohu kia puta ake he raru mai i te hātepe. c) Whakatikahia i tērā raru. d) Ka tīmata mai anō i te hātepe kia puta ake ai te hua tika.

Ētahi atu rauemi mā te kaiako

Ngā hononga tautoko

He pitopito kōrero mō te hāngi:	<ul style="list-style-type: none">• https://www.newzealand.com/au/feature/maori-hangi/• http://assessment.tki.org.nz/Assessment-tools-resources/Assessment-tool-selector/• http://www.maori.cl/Hangi.htm• http://www.genuinemaoricuisine.com/Folders/Hangi.html
He whakaahua o te hāngi:	<ul style="list-style-type: none">• https://www.newzealand.com/au/feature/maori-hangi/• http://assessment.tki.org.nz/Assessment-tools-resources/Assessment-tool-selector/• http://www.maori.cl/Hangi.htm• http://www.nzhistory.net.nz/media/photo/the-hangi
Me pēhea te whakarite hāngi:	<ul style="list-style-type: none">• http://www.nzmaths.co.nz/node/474
Me whakarite hāngi tātou: He kēmu hei whakarite i te hāngi:	<ul style="list-style-type: none">• http://wicked.org.nz/Interactives/Maori-themed-interactives-in-English/Hangi

Ētahi atu rauemi mā te kaiako



Rauemi	Whakamāramatanga
Karetāo Kikorangi & Karetāo Pi taupānga:	<p>Ko te Karetāo Kikorangi & Karetāo Pi taupānga ētahi o ngā pūmanawa tautono (Application Software) i runga i ngā pākihi Android me te Apple. Ka whakamahia ēnei taputapu Hangarau hei whakakipakipa i te hunga ākonga e kaha whakaū ana i ā ia anō ki te ao hiko. E āhei hoki te kite i ngā pūkenga whakamahi kōrero hei raupapatanga anga mua, anga muri, huri ki ngā taha e rua me ngā huringa 90 pūtu.</p> <p>Kua whakaritea te pūmanawa tautono ki ngā raupapatanga e tekau mā rua e āki nui ana i te haere o ngā mahi. Ko ia o ngā kaupae ka whakawāngia kia kite atu ko wai mā te hunga tere ki te oti. Kua whakaritea ngā kaupae nei hei tairite māra, ā, mo te hunga whā ngā tau te pakeke koni atu rānei.</p>
CS Unplugged: Mahi Whakarauora https://www.csunplugged.org/en/topics/kidbots/unit-plan/rescue-mission/	<p>He akoranga tīmatanga tēnei e kitea ai te motuhaketanga o ngā mahi hirahira e tino eke ai tēnei o ngā mahi. Ka tuhi te tauira i te hātepe hei rautaki whai mā te tokorua, ā, mā te hononga tukutuku mā ngā Hoa Kaipapatono e whakamātauhia.</p>
Hōtaka Karetāo Pi https://www.csunplugged.org/en/topics/kidbots/programming/program-bee-bot	<p>Mā tēnei akoranga tutuki ai ngā tauira i ngā whakaharatau mā te whakamahi i ngā hiko Hangarau ā-kēmu, ā-ipurangi e tino muramura ai ngā pūkenga a taua tauira mā Bee Bot.</p>
Rauemi āpitihanga https://www.csunplugged.org/en/	<p>He whārangi ipurangi tēnei me te huhua o ngā rauemi (Huhua ake i ngā rauemi i kōrerotia mai) hei wherawhera mā o tauira. He paetukutuku tēnei.</p>
Tauira mahi marau: Pūnaha whakaaro rorohiko http://technology.tki.org.nz/Technology-in-the-NZC/CT-Progress-outcomes-exemplars-and-snapshots hakaniko, whakawhanake matihiko whakaaro. Designing and developing digital outcomes http://technology.tki.org.nz/Technology-in-the-NZC/DDDO-Progress-outcomes-exemplars-and-snapshots	<p>He nui ngā rauemi hangarau, rorohiko, hoahoa me te aha atu nā Te Tāhūhū o te Matauranga hei koha, hei whakapakari anō i ngā tauira.</p>

Rauemi	Whakamāramatanga
Code.org: Unplugged https://code.org/curriculum/unplugged	Kua whakaritea a Code.org i tētahi pūnaha ako e whakaako ana i ngā ākonga ngā tūmomo mahi o te rorohiko pūtaiao. Ka āhei ēnei māhere ako ki te whakamahi hei hōtaka motuhake, hei mahere ako ngātahi mā ngā hōtaka Pūtaiao Rorohiko.
Kohi https://studio.code.org/courses?view=teacher	E tuku ana a Code.org i ētahi waeheere mō ngā ākonga i roto i te K-12, ka riro hoki hei mahi whakangūngū mō ngā kaiako. Ka āhei koe te rēhita mō te kore utu kia ea ai ō mahi waeheere i tōu ake hiahia. Kei reira hoki he hāpori-ā-ipurangi mā ngā kaiako, kia hīkoi tahi me ētahi atu kaiako.
Mo ngā ākonga https://studio.code.org/projects/public	Kei te wāhanga 'kaupapa o te whārangi ipurangi a Code.org e āhei ai ngā ākonga kia waihanganga kēmu kia takarohia e ētahi atu, ā, kia takaro rānei i ngā kēmu kua waihangatia e ngā ākonga hurinoa i te ao.
He Haora Waeheere https://code.org/learn	Ko te Hāora Waeheere o Code.org he homai i ngā tūmomo akoranga pāhekoheko ki ngā tauira taiohi mai, pakeke mai anō hoki. Mā ēnei rūma akoako e taunekeneke ai te hiahia ō te ākonga ki te ako, pēnei i ngā kēmu (Minecraft, Star Wars, Moana me te Frozen.) Ēnei katoa ka heke mai i raro iho i ngā reo katoa, ā, ko Te Reo Māori tētahi me te huhua atu anō (Pēnei i te Gamefroot's Mihi Maker).
Disney: Mona Tuhuratanga mā te Tohu Waeheere https://partners.disney.com/hour-of-code/wayfinding-with-code	Kua whakaputaina a Disney i tētahi kēmu Moana hei akoako i ngā tauira e kite hoki ai i te hangareka a te kēmu rorohiko nei. Ka taea ēnei akoako te whakamahi hei whakaara i te Hāora Waeheere i roto i ngā reo e 180, i te reo Hāmoa anō hoki.
Gasmefroot's Te Hanga Mihi https://hourofcode.com/gfmihi	Hei āpiti atu ki te Hāora Waeheere kua whakatakotoria e Gamefroot i tētahi paepae hei āta honohono i te tauira ki ngā mahi hangareka o te "waeheere" hēoi, kei reira hoki he kōrero mō te pepehā. Mā tēnei wāhanga e kite ai Te Reo Māori e horapa haere ana.
BBC Bitesize Computing https://www.bbc.com/education/subjects/z34k7ty	Kei tēnei whārangi ipurangi ētahi pitopito kōrero, paku kiriata hoki, e hāngai ana ki ngā āhuatanga o ngā rorohiko i tēnei ao, ngā tahurua me te māwe raraunga, ngā taputapu rorohiko, tūhononga, pūmanawa rorohiko, putu raraunga me te mahi papatono.
ScratchJr App	Ko ScratchJr App tētahi o ngā taupānga kore utu kei runga i ngā waea Android me Apple. He nui ngā kaupapa kei runga i taua taupānga e whakaako ana i ngā tamariki te hōtaka e taunekeneke ai i ō rātou kēmu. Mā te momotu i ngā here o te hōtaka e whakanikoniko ai i ngā puninga, ā, ka āhei ngā tamariki te whakaneke, whakapeke, kanikani i roto i tēnei tukanga e ako ai ngā tamariki ki te whakaoti rapanga, ngā mahi whakaahua me te whakaputa i ō ratou ake kare-ā-roto mā runga i te rorohiko. Ka whakamahia hoki te rautaki Pangarau me te reo kōrero hei āki i te horopaki, hei tautoko i te kunenga mai ō ngā tamariki ki roto ki te ao mātau reo. Ki te kore he āheitanga ki ngā ipapa, rorohiko rānei, ka āhei tonu te whakamahi i ngā rauemi kei runga i ngā here ipurangi (link) kei raro iho nei.

Rauemi	Whakamāramatanga
Scratch Jr: Te Akoako https://www.scratchjr.org/teach	Mā tēnei whārangi ipurangi e here ai ngā tūmomo mahi kia māmā ai te ako mōu me to tauira anō hoki. Mā te whakamahi i ā ScratchJr.
Rauemi Kaiako https://www.scratchjr.org/teach/curricula/animated-genres	He nui te āwhina a te whārangi o ScratchJr, e tino kite ai te tauira mō ngā tamariki. Kia whai māramatanga ai rātou e kite hoki te kaiako i ā rātou e whakaaro rautaki ana, e kimi tīwhiri hoki ana. Ko ngā akoranga kua akonatia ka uhi i ngā kaupapa pērā i ngā mahi Hangarau mā te whakaputa i te whakaahua mō tēnei kaupapa.
Taupānga me te Whārangi ipurangi. https://scratch.mit.edu/	Ko te painga o te taupānga The Scratch App me tōna whārangi ipurangi he whakaako ki ngā tauira me pēhea te whakaputa i ngā kōrero matihiko. Me te whakaputa whakaaro ki tangata kē atu.
Te Akoako Ataata https://scratch.mit.edu/help/videos/	He kiriata kei te whārangi ipurangi o The Scratch App kia ako koe i ngā tūmomo akoranga rerekē. Kia mātau ake tō whakahaere i te taupānga.
Tutorials https://scratch.mit.edu/studios/1817151/	He kiriata i hangāia e ngā kaituitui i tēnei kaupapa taupānga hei tiroiro mā te iwi.

He Rauemi mā ngā ākonga:






Ngā Kupu Hou

Ngā Kupu Hou	
Whakamatariki Hātepe	<p>He tūmomo mahi wāwāhi me te whakaemi i ngā take kia whāiti mai.</p> <p>Ko te ia o tēnei kupu hei whakaraupapa i ngā nekehanga, i ngā poutama rānei. E kitea ai ngā whakaritenga o ia hātepe kia ea ai ōna hua.</p>
Iro	<p>E kitea ai i te hē o te hātepe.</p>
Patuiro	<p>Rautaki Whakatika Hātepe</p> <p>Te rautaki hei rapu i te ngāngara o roto i te hātepe:</p> <ul style="list-style-type: none">a) Tīmata i te tīmatatanga o te hātepe.b) Whaiā te hātepe, tae rawa atu ki te hātepe e kore e taea te whakaoti.c) Whakatikaina taua hātepe.d) Hoki atu ki te tīmatanga, mahia tāu i mahi i mua mai tae atu ki te wā e kite ai te hua tika.



Pepa ngohe mō ngā tauira: Tīpakohia āu kinaki

Honoa ngā kai ki ō rātou pikitia tika.

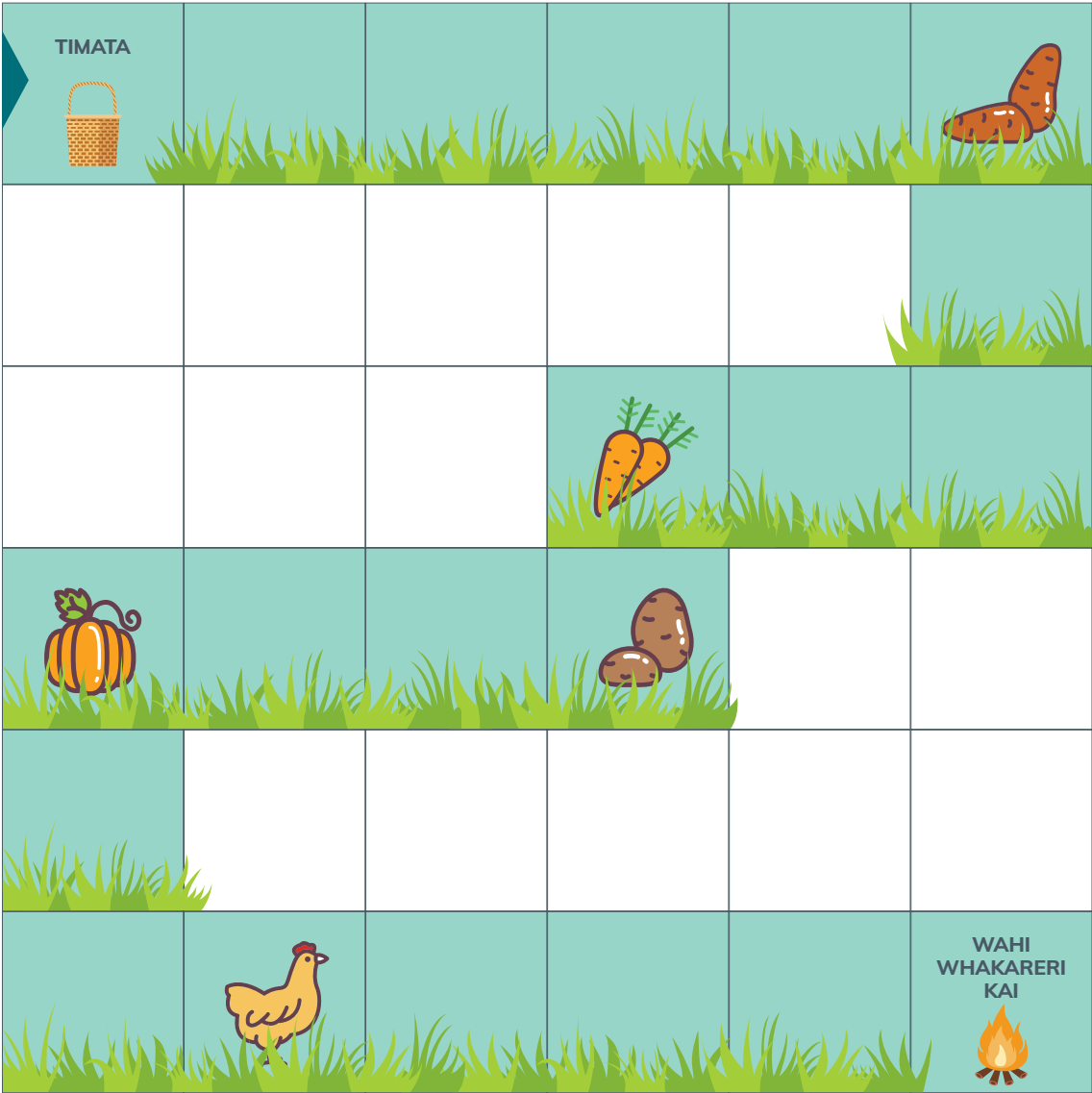
Te heihei	•	•	
Rīwai	•	•	
Paukena	•	•	
Kumara	•	•	
Kāreti	•	•	



Pepa Ngohe: Te Kohi Kai

Hangaia tētahi hātepe kia tae pai atu ki te wāhi whakariterite.

Whakamahia ngā tohu kei te taha matau



Ki mua

Forwards

Ki muri

Backwards

Huri whakamaui

Turn left

Huri whakakatau

Turn right

Tīwhiri: I ā koe e tuhi ana i tō hātepe , ki te huri mauī me te matau e kore koe e neke ki tētahi pouaka hou. Me tapirihia 'he tohu ahunga' kia āhei koe te neke.

Mahia te whārangi ki raro hei

Pepa ngohe mō ngā akonga: Kua tae te wā ki te patuiro

Tuhia mai te te hātepe kua patuiro ki raro iho nei:

