

Tau 4 Ngā Rauemi mā te Kaiako



Māpura Matihiko
Digital Ignition

Waihanga Hātepe

He Whakamārama

Mā te hanga hātepe te ākonga e ako ki te tuhi hātepe i tēnei ao kikokiko – i tēnei wā, he kanikani te mahi!

Te Tiaroaro Marau - Ngā Whainga Paetae

Te Marau o Nga Toi

Ngā Mahi a Rēhia:

Taumata 1

Taumata 2

Ka tūhura, ka whakamahi, ka whai māramatanga, ka whakanui:

- i ngā hua o te whakaari mā te tinana, mā te oro, me te kupu;
- i ngā momo mokowā, me te whakauru atu ki te mahi tāwhai mā te tuku noa;
- i te whakamahi tahi i te tinana me te reo i roto i ngā horopaki huhua;
- i āna mahi whakaari me ētahi atu.

Ka tūhura, ka hanga noa, ka whakakaupapa, ka whakaputa:

- i te hononga o te mahi ā –tinana ki te reo ā –waha;
- i ētahi mahi ā –tinana mai i ōna whēako whaiaro me te pōhewatanga;
- i ngā kupu āhua o te tū ki te kōrero;
- i ētahi whakaaturanga kua kitea e ia.

Te Marau Hangarau: Hangarau Matihiko

Te Tupuranga Whakaaro Rorohiko

Whakatupuranga 1

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.

Ngā Taipitopito Awheawhe

Ngā Putanga Ako

Ka taea e ngā ākonga te:

- Wāwāhi i tētahi rapanga (wāwahitanga).
- Waihanga hātepe (he ara tohutohu, māmā te whai atu, hei whakaoti i tētahi rapanga)
- Tohu inā ka puta ake he hua rerekē (he pītara).
- Whai māramatanga ahakoa ka puta he pītara i tētahi hātepe.
- Mārama he wāhanga te patuiro o te whai, me te whakatika i tētahi pītara kei roto i tētahi hātepe.
- Whakaoti i tētahi tukanga patuiro:
 - a. Tīmata i te tīmatanga o te hātepe.
 - b. Whai atu i te hātepe kia hāngai tonu ki ngā tohutohu, kia tae atu ki tētahi wāhanga ka puta he hua rerekē.
 - c. Whakatika i ngā tohutohu.
 - d. Tīmata anō tae noa ki te wā ka puta ka hua mai ngā mea i whakamātauhia e ia.

Ngā Taputapu

- ☐ Papa Mā
- ☐ Pene Papa Mā
- ☐ Rorohiko (kei a koe te tikanga)
- ☐ Tukuoro (kei a koe te tikanga)
- ☐ Pepa me te pene

Ngā whakaritenga

- Me nui te wāhi e tāea ai e rima ngā rōpū ākonga te whakaatu i ōna kanikani, kia kore e tutuki ki te tepu, tūrū, me rātou ano.
- Me whai māramatanga ki ngā momo kupu hou (tirohia te kupu taka kua tapirihia)

Te roanga

- 60 mīniti

Mahere Ako

He whakatakinga

1. Mahia i tētahi kanikani / tirohia i tētahi rīpene kanikani rānei pērā ki a Ka Panapana. E āhei ana hoki te ākonga ki te tū ā-rōpū ki te mahi i te kanikani. E āhei ana a ia te kōwhiri i tētahi kanikani taketake mai i tētahi atu ahurea ki te whakawhānui i te mahi.
Anei he tauira mo Ka Panapana: https://www.youtube.com/watch?v=an_4rfU8y8k
2. Matapakihia te tino hiranga o tēnei mea te kanikani, me ō rātou whakaaro e pā ana ki te ako i te kanikani ki tangata kē atu.
3. Whakamōhio atu ki ngā ākonga, e ako ana tātou ki te waihanga tohutohu (he hātepe) kia whakaako ai ki ētahi atu tangata i ētahi momo kanikani.

Te Whakahaere Mahere Ako

1. Whakamaumahara atu ki ngā ākonga i te tikanga o ngā kupu hātepe, whakamatariki, me te patuiro.
2. Hangaia kia rima ngā rōpū ākonga
3. Mā rātou e kōwhiri i tētahi kanikani kua wāea kē ki ngā nekehanga, kātahi, me waihanga hātepe whakaatu i tērā kanikani. (Kua tāpirihia te hātepe me tētahi hononga ki te kanikani Macarena hei tauira)
4. Kōrero atu ki ngā ākonga, me wāwāhitia te kanikani i mua i te waihanga hātepe
5. 5Mā ia rōpū e tuhi hātepe (me mārāma, me iti hoki ngā tohutohu) e whakaatu ana i tā rātou kanikani
6. Inā oti ā rātou hātepe, me whakamaumahara atu te tukanga patuiro mo te whakatika hātepe

Me whakamātauria ngā ākonga i ā rātou tukanga patuiro mo ā rātou hātepe kanikani
Te tukanga patuiro:

- a. Tīmatahia ki te tīmatanga o te hātepe, ā, me whai atu i ngā tohutohu katoa.
- b. Whai atu i te hātepe me ōna tohutohu kia puta ake he hua rereke
- c. Whakatikahia te pītara
- d. Tīmatahia anō i te hātepe kia puta te hua tika

Inā kua oti te whakatika ā ngā ākonga i ā rātou hātepe, me tīnīhia rātou i te hātepe ki tērā o tētahi atu roopū.

7. Me whakamātauria te rōpū i te hātepe nā ki te mahi i tērā kanikani. Me whakaarohia rātou i te hātepe, ā, me whakaarohia he aha te kanikani ka hua mai.
8. Kōwhiringa: Ma ia rōpū e ako me te whakaatu i te kanikani kua whiwhia e rātou
9. Kōwhiringa: Pātai atu ki ngā ākonga kia matapakihia ngā kanikani rerekē, he aha hoki te ngako o ēra kanikani.

Te Whakamutunga

1. Wānangahia i tēnei mea te hātepe, me te take me mārama, me ngāwari hoki ngā tohutohu. Ko ētahi pātai hei awahina:
 - He aha ka puta inā kua hē te whakaraupapatanga o ngā tohutohu?
 - He aha ka puta inā kāore i te tino mārama i ngā tohutohu?
 - He taumaha te whai atu i ētahi o ngā tohutohu?
 - Ka tāea e koe te whakaako kanikani rerekē mā te hātepe?
 - He aha te pai o te whakamahi hātepe i te whakaatu kanikani, me te ki atu 'e mahi'?
 - He aha ētahi atu wā e tāea ai te whakamahi i te tukanga patuiro? (Hei tauira, inā he raru i roto i āu mahi kainga, ka tāea e koe te whakamahi i te tukanga patuiro ki te whakatika i tērā raru)

He ngohe torohanga

- Ma ngā ākonga e rangahau i tētahi kanikani nō roto i ō rātou ake iwi taketake, Te Ao Māori rānei. Me waihanga hātepe rātou mo tērā kanikani, me wānangahia te hiranga me te hītori o tērā kanikani.
- Whakahaeretia he mahi kia hanga hātepe ai rātou mo te whakaraupapatanga whakamau kākahu. Ka tāea te whakamahi i ngā kākahu taketake, hei tauira, kākahu Māori, he kākahu rerekē rānei nō ahurea rerekē.
- Me waihanga hātepe ngā ākonga kia whakaatu tētahi kanikani ngāwari me te poi. Ānei he hongonga ki tētahi: <https://www.youtube.com/watch?v=PEcjtEJ3Si0>.

Ngā Kupu Hou

Hātepe	He ara tohutohu ki te whakatika i tētahi rapanga. He ngāwari, ka mārama hoki te whai atu.
Whakamatariki	He mahi wāwāhi i tētahi raru ki ētahi wāhanga ririki.
Patuiro	He tukanga hei kimi me te whakatika i tētahi raru kei roto i tētahi hātepe. He pēnei te tukanga: a) Tīmatahia mai i te tīmatanga o te hātepe b) Whai atu i nga tohutohu kia puta ake he raru mai i te hātepe c) Whakatikahia i tērā raru d) Ka tīmata mai ano i te hātepe kia puta ake ai te hua tika

He Tauira me ngā Hononga

Hei tauira

Hātepe Kanikani – Te Macarena:

1. Toro atu i tōu ringa matau ki mua, ko te kapu o tōu ringa ki raro
2. Toro atu i tōu ringa mauī ki mua, Ko te kapu o tōu ringa ki raro
3. Hurihia i tōu ringa matau
4. Hurihia i tōu ringa mauī
5. Whakapā i tōu ringa matau ki tōu pakahiwi mauī
6. Whakapā i tōu ringa mauī ki tōu pakahiwi matau
7. Whakapā i tōu ringa matau ki muri i tōu māhunga
8. Whakapā i tōu ringa mauī ki muri i tōu māhunga
9. Whakapā i tōu ringa matau ki tōu hope mauī
10. Whakapā i tōu ringa mauī ki tōu hope matau
11. Whakapā i tōu ringa matau ki tōu tou
12. Toro i tōu ringa mauī ki tōu tou
13. Waiatatia “Hey, Macarena”
14. Hurihia tou tinana ki te taha mauī

Ngā hononga tautoko

Whakaaturanga Macarena

- <https://www.youtube.com/watch?v=JRRUtp9QOU>

Ētahi atu rauemi mā te kaiako

Rauemi	Whakamāramatanga
CS Unplugged: Te rapu hātepe https://www.csunplugged.org/en/topics/searching-algorithms/	<p>Kei roto i tenei whārangi ipurangi ētahi tūmahi rapunga mo roto i te akomanga. Kāore he take mo te whakamahi rorohiko, pūrere matihiko rānei.</p>
He rauemi anō https://www.csunplugged.org/en/	<p>He whārangi ipurangi a CS Unplugged kīkī ana i ngā rauemi atu i ngā mea kua rārangihoa ake ki runga, hei tirohanga mā ngā ākonga.</p>
Code.org: Unplugged https://code.org/curriculum/unplugged	<p>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.</p>
Kōhī https://studio.code.org/courses?view=teacher	<p>E tuku ana a Code.org i ētahi waehe 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 waehe i tōu ake hiahia. Kei reira hoki he hāpori-ā-ipurangi mā ngā kaiako, kia hīkoi tahi me ētahi atu kaiako.</p>
Mo ngā ākonga https://studio.code.org/projects/public	<p>Kei te wāhanga 'kaupapa o te whārangi ipurangi a Code.org e āhei ai ngā ākonga kia waihangia kēmu kia takarohia e ētahi atu, ā, kia takaro rānei i ngā kēmu kua waihangatia e ngā ākonga hurinoa i te ao.</p>
He Haora Waehe https://code.org/learn	<p>Nā Code.org' i waihangia i te kaupapa e kiia nei ko te 'Hour of Code', ko te aronga o tēnei he atawhai i ngā akoranga-ā-hiko e pā ana ki ngā mahi waehe mo ngā tamariki ahakoa he aha te pakeke. Ko te hanganga o ēnei akoranga-ā-hiko he whakamahi i ngā atāmira, me kii, e whakamahia ai i ngā tūāhangata rongonui e mōhio whānuitia ai e ngā tamariki katoa o te ao, pēnei tonu i a Minecraft, Star Wars, Moana and Frozen.) Ko te nuinga o ēnei akoranga-a-hiko kua tuhia ki ngā reo maha, ko ētahi kua tuhia hoki ki te reo Māori. Ko tētahi hua anō ka puta i ēnei akoranga ko te whakaako i ngā momo tikanga-ā-iwi (pēnei tonu i te Gamefroot's Mihi Maker).</p>

Rauemi	Whakamāramatanga
<p>Disney</p> <p>Moana: Tuhuratanga mā te Tohu Waehere</p> <p>https://partners.disney.com/hour-of-code/wayfinding-with-code</p>	<p>I hangāia e Disney i tētahi akoranga-hiko e whakaatanga ana te kiriata 'Moana'. He momo kēmu akoranga tēnei e whakaako ana i ngā āhuetanga o ngā mahi waehere me ngā mahi pūmanawa rorohiko. He hononga tō te kēmu nei ki te kēmu 'Hour of Code', ā, kua tuhia katoatia ki ngā reo e 180, ki roto hoki i ngā reo nō te moana-nui-ā-kiwa pēra i a Hāmoa.</p>
<p>GameFroot</p> <p>Hanga Mihi</p> <p>http://make.gamefroot.com/#/activity/mihi-maker</p>	<p>Hei āpiti atu ki te Hāora Waehere kua whakatakotoria e Gamefroot i tētahi paepae hei āta honohono i te tauira ki ngā mahi hangareka o te "waehere" hēoi, kei reira hoki he kōrero mō te pepehā. Mā tēnei wāhanga e kite ai Te Reo Māori e horapa haere ana.</p>
<p>Nga Tauaro Mahi Hangarau Matihiko</p> <p>http://technology.tki.org.nz/Technology-in-the-NZC/CT-Progress-outcomes-exemplars-and-snapshots</p> <p>http://technology.tki.org.nz/Technology-in-the-NZC/DDDO-Progress-outcomes-exemplars-and-snapshots</p>	<p>Kei roto i Te Tāhūhū o te Mātauranga ētahi tauaromahi hāngarau mō te whakaaro hangarau me te hanga otinga matihiko.</p>
<p>Hangarau ā Ipuranga/Te Kete Ipurangi</p> <p>http://technology.tki.org.nz/Resources</p>	<p>Kei roto te whārangi ipurangi hangarau ā ipurangi ētahi rauemi ako mō te whakaako hangarau ki Aotearoa.</p>
<p>BBC</p> <p>Bitesize Computing</p> <p>https://www.bbc.com/education/subjects/z34k7ty</p>	<p>Kei tēnei whārangi ipurangi ētahi pitopito kōrero, paku kiriata hoki, e hāngai ana ki ngā āhuetanga o ngā rorohiko i tēnei ao, ngā taurua me te māwe raraunga, ngā taputapu rorohiko, tūhononga, pūmanawa rorohiko, putu raraunga me te mahi papatono.</p>
<p>Ngā Tauaro mahi Marau:</p> <p>http://hangaraumatihiko.tki.org.nz/</p> <p>http://assessment.tki.org.nz/</p> <p>Assessment-tools-resources/</p> <p>Assessment-tool-selector/Browse-assessment-tools/Technology/NZ-Curriculum-Exemplars-Technology</p>	<p>Kua whakaritea e Te Tāhūhū o te Mātauranga i ētahi tauaro mahi hangarau. He maha ngā rauemi, e whakaatu ana i ngā rautaki pai hei whakaako i ngā mahi Hangarau Matihiko.</p>