

NGĀ PUKA RAPANGA PĀNGARAU TAUNAKI



Ine

TAU 2

Pukapuka Kaiako

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Tūmahi 1

Kai a Amaya ētahi tūpare putiputi mala mo te mārena o tōna tuahine. E hiahia ana a ia ki te pupuri i te mea roa rawa mō tōna tua



Whakamahia ngā wae inenga hei whakatau ko tēhea te tūpare putiputi roa rawa.

Whakapūketetia te wae inenga me te tatau inenga.

Hei āwhina i te kaiako

I mua i tō whakarewatanga i te tūmahi, pātai atu ki ngā ākonga kia mōhio ko wai te hīkoi roa rawa ki te kāinga i waenganui i a Paige me Leith (tirohia te Tūmahi 1 tārua-matua mahana). Me whai huinga ahanoa ka taea e ngā ākonga te whakamahi hei ine (hei tauira, paraka, mataono, rakau, mati) me te whakarite he nui ngā ahanoa i roto i te huinga kia taea ai e rātou te taupoki i te roanga katoa hei ine.



Hei whakarewa i te tūmahi, werohia ngā ākonga kia kite mēnā ka taea e rātou te whakamahi i tētahi, e rua rānei o ngā wae inenga hei ine i te roanga o te aho.

Kia toru te roa o te aho (i waenga i te 30 - 40 henimita te roa mēnā ka whakamahi i ngā kupiki, 40 - 50 henimita rānei mēnā ka whakamahi i ngā tokotoko roa ake) hei ine mā ia ākonga, kātahi ko ngā paraka, mataono, rakau, mati rānei hei whakamahi hei wae ine.

Tonoa ngā ākonga kia ine mā te whakamahi i tētahi wae kotahi, e rua rānei ngā wae. Tirohia ngā ākonga e ine ana, ā, mēnā kāore e taea e ētahi ākonga te ine mā te whakamahi i ngā wae kotahi/rua, hoatu he huinga hei taupoki i te roanga katoa hei ine.

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā īhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

E hiahiatia ana e te māramatanga ariā o te inenga te māramatanga o te atawhai me te whakawhitiwhiti. E hiahiatia ana e te atawhai te māramatanga ina nekehia, ka weheweheha rānei, ka mau tonu te rahi o tētahi ahanoa. Ko te mōhiotanga ka taea te whakataurite i ngā ine o ngā ahanoa e rua ki tētahi ahanoa tuatoru. Hei tauira, mēnā he nui ake te taumaha o te ahanoa A i te ahanoa B, ā, he nui ake te taumaha o te ahanoa B i te ahanoa C, kātahi ka nui ake te taumaha o te ahanoa A i te ahanoa C.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he īputa, he īnaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hei āwhina i te kaiako

Whakamahia māramatia te kupu roa hei whakaahua i te inenga paerangi. Tautoko hoki i ngā ākonga ki te hoatu i te wae ine i roto i tā rātou whakamārama (hei tauira, "e 32 hēniti-kupiki te roa").

Whakangāwari i ngā ākonga kia kite me pēhea e taea ai e rātou te aroturuki i te wāhi i mutu ai te kupiki (mā te whakamahi i te matimati, i te tohu pene rānei) kia mōhio ai rātou ki hea nuku ai i muri mai.

Tautokona ngā ākonga ki te whakamahi i te whakarōpū hei hopu i ā rātou tatau inenga.

Mō te tū mahi takitahi, me whai ahanoa ka taea e ngā ākonga te whakamahi hei whakatau tata me te ine ki ngā kupiki.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai ka taea te ine mā te whakamahi i tētahi wae inenga me te whakarite kāore he āputa (mā te whakamahi i te matimati, i te tohu pene rānei i ia wā) me te whakamahi tika i te whitiauau.

Hono

Tonoa ngā ākonga ki te ine i tētahi o ngā roa o te aho mā te whakamahi i tētahi wae inenga rerekē me te hopu i te tatau inenga. Tonoa ngā ākonga ki te matapaki he aha i rerekē ai te tatau inenga ina whakamahi i tētahi wae inenga rerekē, me te miramira i te whanaungatanga i waenga i te rahi o te wae inenga me te tatau inenga.

Whainga ako Ka ako ngā mokopuna ki te:

Whakamahia ngā wae paerewa-kore hei ine i te roanga.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Whakatauritea te roanga mā te whakamahi i ngā wae paerewa-kore.

Whakamahia te reo inenga hei whakaahua i te whakataurite o te roanga.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruaruā i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Te roa, te wae ine, te tatau inenga, te roa, te poto rawa, te ōrite.

Tūmahi Motuhake

Ine ana me ngā kupiki honomaha. Whakatau tata te roa o ia ahanoa, tuhia tō whakatau tata. Inea mā te whakamahi i ngā kupiki me te pūkete.

Ki taku whakaaro he _____ paraka te roa o te _____.
E _____ paraka tērā.

Ki taku whakaaro he _____ paraka te roa o te _____.
E _____ paraka tērā.

Ki taku whakaaro he _____ paraka te roa o te _____.
E _____ paraka tērā.

Ki taku whakaaro he _____ paraka te roa o te _____.
E _____ paraka tērā.

Ki taku whakaaro he _____ paraka te roa o te _____.
E _____ paraka tērā.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 2

- 1) Whakamahia tētahi rākau hei ine i te tīhore kāri. Whakapūketetia te wae inenga me te tatau inenga. Tāngia ki runga i te tīhore kāri hei whakaatu i tō inenga.
- 2) Titiro ki te tauine. He aha te ūrite? He aha te rerekē?
- 3) Whakamahia he tīhore kāri hei hanga i tētahi tauine me ngā wae rākau.
- 4) Tirohia tō tauine tīhore kāri me tētahi tauine. He aha tāu e kite nei? He aha te ūrite? He aha te rerekē?
- 5) Tāngia tētahi atu tauine tīhore kāri kua whakapai ake koe.

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

E hiahia ana e te māramatanga ariā o te inenga te māramatanga o te atawhai me te whakawhitiwhiti. E hiahia ana e te atawhai te māramatanga ina nekehia, ka weheweheia rānei, ka mau tonu te rahi o tētahi ahanoa. Ko te mōhiotanga ka taea te whakataurite i ngā ine o ngā ahanoa e rua ki tētahi ahanoa tuatoru. Hei tauira, mēnā he nui ake te taumaha o te ahanoa A i te ahanoa B, ā, he nui ake te taumaha o te ahanoa B i te ahanoa C, kātahi ka nui ake te taumaha o te ahanoa A i te ahanoa C.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hei āwhina i te kaiako

Kia 3 henimita te roa o ngā rākau māti, paraka hukapapa rānei, me ngā tīhore kāri e ūrite ana te roa, engari he ūrite hoki te roa o ngā wā (hei tauira, mēnā he 3cm te rākau māti, ka 18cm, 21cm rānei te tīhore kāri). Whai tauine henimita.

Whakarewahia takitahi ia pātai me te tiritiri anō i muri i ia pātai. Whāia ngā huatau whakahoki tiri.

Tirohia he pēhea te ine a ngā ākonga i te tīhore kāri, ā, me mātua whakarite kia ūrite te tatau inenga o ngā ākonga.

Kia mōhio he pēhea te tohu a ngā ākonga i tā rātou inenga, ka taea e rātou te tuhi motuhake i ia rākau, ka taea rānei e rātou te tohu i te mutunga o te rākau inenga i ia wā, he pai ake, ā, kāore he āputa.

Tautokona ngā ākonga kia mōhio mēnā kāore ū tau i runga i te tauine, ko te tikanga me tatau tonu koe i te maha o ngā wae inenga. Mā te tapa i ngā tohu i runga i te tauine ki ngā tau, kāore koe e hiahia ki te tatau i te maha o ngā wae inenga.

Tirohia he pēhea te ine a ngā ākonga mā te whakamahi i ngā tauine rākau, ā, me mātua whakarite kia ūrite te tatau inenga ina ine ki te rākau.

Mō te tūmahi takitahi, homai te tauine rākau me tētahi huinga ahanoa hei ine, he iti iho i te roa katoa o te tauine rākau.

Wā toha

Mō te pātai tuatahi, tonoa ngā ākonga ki te tiritiri i ā rātou tātuhi me pēhea rātou ine me te whakataurite i ēnei. Pātai atu ki a rātou kia kōrerorero he pēhea rātou? He rerekē? He aha te huarahi pai rawa atu, he aha hoki? Tīpakohia tētahi ākonga hei tiritiri kātahi anō ka tohu i te mutunga o te rākau inenga i ia wā:



Mēnā kāore anō kia mahia tēnei e ngā ākonga, whakaurua hei huarahi i whakamahia e ngā ākonga o mua.

Mō te pātai tuarua, tīpakohia ngā ākonga hei tiritiri ko wai e kite ana he roa ake te tauine, ā, he nui ake ngā tohu me ngā tau, engari he ūrite te mokowā o te tātuhi inenga me te tauine. Ki te kore ngā ākonga e kite i tēnei, whakamahia te pātai hei miramira.

Mō te pātai tuawhā, tīpakohia ngā ākonga hei tiritiri e kite ana he tohu tā ngā tauine e tīmata ana i te tapa o te tīhore me ngā tau kei runga. Tonoa ngā ākonga katoa kia kōrerorero he aha te tikanga o ngā tau. Tonoa ngā ākonga kia tuhi anō i ō rātou tauine me te whakapai ake.



Ka mutu, tīpakohia ngā ākonga hei tiritiri nā wai i puru ngā tohu ki te tapa me te tuhi i ngā tau. Mēnā kāore anō ngā ākonga kia mahi i tēnei, me tautoko i ngā ākonga katoa ki te tuhi anō i te tauine me ngā tohu i te tapa me ngā tau

Hono

Whakaritea he huinga ahanoa he poto ake i te roanga o te tauine rākau. Tonoa ngā ākonga ki te ine i tētahi ahanoa mā te whakamahi i tō rātou tauine, kātahi ka ine i taua ahanoa mā te rākau.

Pātai, he ūrite, he rerekē rānei tō tatau inenga?

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruaruā i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Roa, wae ine, tatau inenga, tauine

Whainga ako Ka ako ngā mokopuna ki te

Whakamahia ngā wae paerewa-kore hei ine i te roanga.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Whakatauritea te inenga paerewa-kore ki te tauine.

Waihangatia he tauine me ngā wae paerewa-kore.

Whakamahia tētahi tauine me ngā wae paerewa-kore hei ine ahanoa.

Tūmahi Motuhake

Kōwhiria tētahi ahanoa hei ine mā tō tauine rākau. Whakapūketetia te tatau inenga.

Inea te ahanoa ūrite mā te rākau kotahi. Whakapūketetia te tatau inenga.

He ūrite, he rerekē rānei te tatau inenga?

Inea ngā ahanoa rerekē ki tō tauine rākau, kātahi ka taki mēnā ka whiwhi koe i te tatau inenga ūrite ina ine koe ki te rākau kotahi.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 3

Kei te whakarākai a Padma i tētahi tāpare pikitia ki ngā anga mo te rā whānau o tōna Amma (tirohia ngā Tārua Matua).

Whakamahia tō tauine rākau hei kimi i te paenga o te tāpare pikitia. Whakapūketetia tō wae inenga me te tatau inenga.

Kimihia ngā anga e tika ana kia whakamahia e Padma kia tino uru ki te tāpare pikitia mā te ine. Whakapūketetia tō wae inenga me te kaute inenga mō ia anga.

Hei āwhina i te kaiako

I mua i te whakarewatanga, tangohia ngā tauine me ngā tātuhi, ka hoatu ki ngā ākonga he tīhore kāri hōu me te tono kia tāngia he tauine ka taea te whakamahi hei ine i ngā ahanoa i roto i ngā wae rākau mai i te pūmahara. Tonoa ngā ākonga kia whakataurite i tā rātou tātuhi ki ētahi atu ākonga e tuhi ana.

I te wā o te whakarewatanga, whakamōhiotia ngā ākonga ki te kupu paenga me te whakamārama ko te tawhiti huri noa i te tapa o tētahi ahanoa papatahi e kīia ana ko tōna paenga. Me whai ahanoa papatahi (pikitia, pukapuka, kāri) me te whakataki i tō matimati huri noa i te paenga, ka tono i ngā ākonga kia mahi anō.

Tonoa ngā ākonga kia 'whakapiri i ngā tauine' hei ine i te paenga me ngā anga. Ka taea e ngā ākonga te kōwhiri i ngā anga hei whakarākai i te taitapa, ā, ko te arotahi ki te tukanga inenga mā te tauine rākau.

Whakangāwari i ngā ākonga kia kite me whakanoho e rātou te pito mauī o te tauine ki te pito o te wāhanga o te paenga e ine ana rātou.

Tūmanako kia whakamahi ngā ākonga i te reo inenga tae atu ki te paenga. Mō te tūmahi takitahi, me whai pikitia tapawhā, tapawhā rānei o ngā rahi rerekē hei ine i te paenga. Me mātua whakarite he iti iho ngā taha i te tauine rākau.

Wā toha

Tīpакohia ngā ākonga hei tiritiri ko wai e āhei ana ki te ine tika i te paenga mā te whakamahi i tō rātou tauine me te tīpako i ngā anga tika e uru ana ki roto i te inenga

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Whakaaturia ki ngā ākonga he rākau poto ake i tērā e whakamahia ana mō ā rātou tauine rākau. Mēnā i hangaia e koe he tauine mā te rākau poto ake, me pēhea tērā e huri ai i te tauine? Me pēhea te huri i tō inenga o te paenga?

Whainga ako Ka ako ngā mokopuna ki te:

Whakamahia tētahi tauine me ngā wae paerewa-kore hei ine ahanoa.

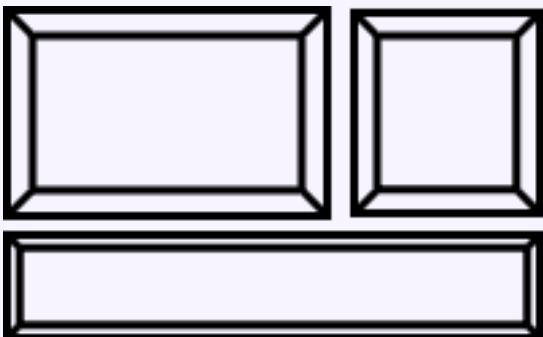
Kimihia te paenga o tētahi ahanoa papatahi.

Whakamahia te reo inenga hei whakaahua me pēhea te ine horahanga.

Tūmahi Motuhake

E hiahia ana a Padma ki te tiki tāpare pikitia mo ngā pikitia o te rā whānau o tōna rā whānau o Amma.

Whakamahia tō tauine rākau hei kimi i te paenga o ia pikitia.



Whakapūketetia tō wae inenga me te tatau inenga.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Kitea, whakatau tata, me te ine i te paenga me te horahanga o ngā hanga Ahu-2, mā te whakamahi i ngā wae ūpaki.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 4

Ko tēhea tēpu i roto i te akomanga te wāhi nui rawa atu?

Whakatau tata e hia ngā tapawhā e hiahiatia ana e koe hei taupoki i te ripanga. Inea te ripanga.

Whakapūketetia tō wae inenga me te tatau inenga.

Hei āwhina i te kaiako

I mua i te whakarewatanga, kōrerorero ūpaki ki ngā ākonga i te wāhi o ngā mokowā rerekē huri noa i te kura. Hei tauira, ko tēhea te nui ake o te mokowā, te papa tākaro, ngā kōti rānei? Ko tēhea rūma te nui rawa o te mokowā papa?

I te wā o te whakarewatanga, whakamōhiotia ngā ākonga ki te horahanga kupu me te whakamārama ko te horahanga te nui o te mokowā i roto i te hanga Ahu-2 (te mata). Tīmata mā te tono i ngā ākonga kia rongo i te horahanga o tētahi tēpu kotahi (mā te whakahae i ūrātou ringa ki runga). Tonoa ngā ākonga kia kōrerorero me pēhea te whakataurite o te horahanga o te ripanga kotahi ki ngā ripanga e rua e honoa ana.

Kia nui ngā ine tapawhā hei ine i te horahanga o te ripanga (tātauira i roto i ngā matua tārua). Me nui ngā tapawhā o ia ākonga takirua hei taupoki i te katoa o te ripanga kia inetia.

Kia mōhio mai, ka tata te tatau inenga nā te mea kāore e taea e ngā tapawhā te taupoki tika i te ripanga.

Whakangāwari i ngā ākonga kia kite me āta whakanoho ngā tapawhā kāore he āputa, he īnaki rānei, ā, ka tīmata ki tētahi tapa o te tēpu.

Tūmanako kia whakamahi ngā ākonga i te reo inenga tae atu ki te horahanga.

Mō te tūmahi takitahi, me whai huinga tapawhā nui hei ine mā ngā ākonga. Tērā pea ka āwhina koe i ngā ākonga ki te tuhi i ngā wāhi hei ine i mua i te tīmatanga o te tūmahi takitahi.

Wā toha

Tīpakohia ngā ākonga hei tiritiri e āhei ana ki te ine tika i te horahanga mā te whakamahi i ngā tapawhā inenga mā te taupoki i te ripanga me te whakarite kāore he āputa, he īnaki rānei. Ki te kore ngā ākonga e mahi i tēnei, whakatauira hei rongoā i whakamahia e tētahi ākonga o mua.

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

E hiahiatia ana e te māramatanga ariā o te inenga te māramatanga o te atawhai me te whakawhitiwhiti. E hiahiatia ana e te atawhai te māramatanga ina nekehia, ka weheweheia rānei, ka mau tonu te rahi o tētahi ahanoa. Ko te mōhiotanga ka taea te whakataurite i ngā ine o ngā ahanoa e rua ki tētahi ahanoa tuatoru. Hei tauira, mēnā he nui ake te taumaha o te ahanoa A i te ahanoa B, ā, he nui ake te taumaha o te ahanoa B i te ahanoa C, kātahi ka nui ake te taumaha o te ahanoa A i te ahanoa C.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Whakangāwari i tētahi matapakinga e pātai ana ki ngā ākonga: Me pēhea tō ine i te horahanga o te akomanga katoa?

Whainga ako Kaako ngā mokopuna ki te:

Whakamahia ngā wae paerewa-kore (tapawhā) hei ine horahanga.

Whakatau tata i te horahanga o ngā mata mā te whakamahi i ngā wae paerewa-kore.

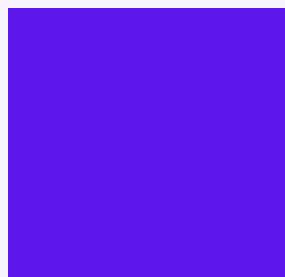
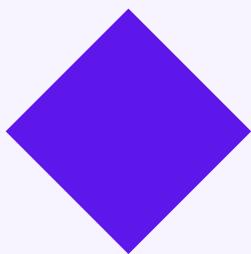
Kimihia te horahanga o tētahi mata.

Whakamahia te reo inenga hei whakaahua me pēhea te ine horahanga.

Tūmahi Motuhake

He aha te paenga o ēnei hanga?

Whakamahia tō tauine rākau hei kimi i te paenga o ia hanga.



Whakapūketetia tō wae inenga me te tatau inenga.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Horahanga, mata, tapawhā, wae ine, kaute inenga.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahī 5

Kei te āwhina a Mereana i ētahi kuia ki te hanga I te tivaevae.

Mā ngā tapawhā ka taea e koe te hanga tauira mō te tivaevae a Mereana.

Hangaia he tauira e 16 ngā tapawhā mā te tūhono i ngā wāhanga tapawhā.

Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakamaharatia ngā ākonga ki te horahanga kupu, ā, ko te horahanga te nui o te mokowā i roto i tētahi hanga Ahu-2 (te mata). Whakaaturia ki ngā ākonga ngā pikitia o te tivaevae ta'orei i hangaia mai i ngā tapawhā iti. Kī atu ki ngā ākonga, ina hanga rātou i tā rātou tauira, me pā ngā tapawhā, engari kāore e taea te īnakinaki.

Whakamahia he pepa tae rerekē mō ngā tapawhā me tētahi pepa pātea (tātauira i ngā matua tārua)

Hoatu he wā ki ngā ākonga ki te tūhura i te whakakotahi i ngā tapawhā i ngā huarahi rerekē me te hanga tauira rerekē. Whakangāwari i ngā ākonga kia kite me āta whakanoho ngā tapawhā kāore he āputa, he īnaki rānei.

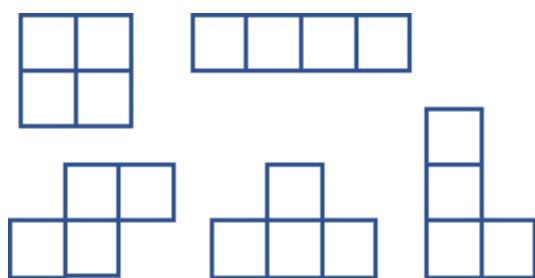
Ina koa te ākonga ki tana hoaho, ka taea e ia te whakapiri, te whakapiri rānei i ngā tapawhā ki te pepa

Wā toha

Tohua ngā ākonga hei whakaatu i ngā tauira rerekē kua waihangatia e rātou mā ngā tapawhā e 16. Pātaihia ngā ākonga he aha te rahinga o ia tauira, ā, āwhinatia rātou ki te kite ahakoa he rerekē te āhua o ngā tauira, he ūrite tonu te rahinga.

Hono

Whakangāwari i tētahi kōrero: He ūrite, he rerekē rānei te horahanga o ēnei hanga?



Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā īhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

E hiahiatia ana e te māramatanga ariā o te inenga te māramatanga o te atawhai me te whakawhitiwhiti. E hiahiatia ana e te atawhai te māramatanga ina nekehia, ka weheweheia rānei, ka mau tonu te rahi o tētahi ahanoa. Ko te mōhiotanga ka taea te whakataurite i ngā ine o ngā ahanoa e rua ki tētahi ahanoa tuatoru. Hei tauira, mēnā he nui ake te taumaha o te ahanoa A i te ahanoa B, ā, he nui ake te taumaha o te ahanoa B i te ahanoa C, kātahi ka nui ake te taumaha o te ahanoa A i te ahanoa C.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Whainga ako Ka ako ngā mokopuna ki te:

Whakamahia ngā wae paerewa-kore (tapawhā) hei ine horahanga.

Hangaia he horahanga ki tētahi rahinga kua tukuna.

Tautuhia me te whakamārama ka rerekē te whakaatu i te wāhi kotahi.

Whakamahia te reo inenga hei whakaahua me pēhea te ine horahanga.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

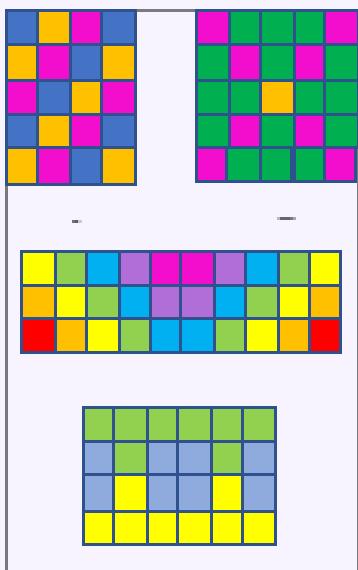
Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Tūmahi Motuhake

Koinei ētahi tauira i hangaia e Mereana mō tana tivaevae ta'orei.



He aha te horahanga o ia hoahoa?

Reo Pāngarau

Horahanga, mata, tapawhā, wae ine, kaute inenga.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahī 6

Kei te whakarite a Mereana i tētahi ipu matao poke panana mo te huinga nunui o Pasifika.. E hiahia ana a ia ki te mōhio ko tēhea ipu mātao e uru ana ki te nuinga o ngā ipu poke. E hia ka taea e ia te whakauru ki ia ipu mātao me te kati tonu i runga?

Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakamahia ngā pōkai kai rerekē te rahi. Tonoa ngā tamariki kia raupapa mai i te mea nui ki te iti rawa, me te kōrerorero ki ngā tamariki ko tēhea te wāhi nui rawa (rōrahi).

Kia toru ngā ipu (pouaka nui rānei) hei mahi mā ngā ākonga, me te whakamahi i ngā ipu koa, i ngā pouaka tina rānei e ūrite ana te rahi ki te wae inenga.

Whakangāwari i ngā ākonga ki te kite i te hiahia mō tētahi wae inenga noa hei whakataurite.

Aroturuki mō ngā ākonga e whakamahi ana i ngā kupu kei roto ko te mokowā, te rōrahi, me te nui ake i te, iti iho, ūrite hoki.

Tirohia ngā ākonga e whakamahi ana i te whakarōpū, i te tatau rānei ki te kimi i te maha o ngā wae inenga. Ki te kore ēnei e whakamahia, whakatauira me pēhea te whakamahi.

Tūmanako kia whakaatu ngā ākonga i ā rātou rongoā mā te tātuhi me ngā tau.

Mō te tūmahi takitahi, me whai ipu rahi rerekē me ngā huinga paraka, kupiki hononga-maha, me ngā hanga huka hei whakamahi hei wae inenga.

Wā toha

Tīpakohia ngā ākonga ki te tiritiri ko wai e ine ana i te rōrahi o ngā pouaka mā te whakaapa i raro i te tuatahi, kātahi ka whakakī i te toenga o te pouaka, me te whakarite kia iti noa iho ngā mokowā e taea ana

Me whakatauira te kaiako i te tuhi o ngā otinga mā te whakamahi i ngā whakaaturanga e whai wāhi ana ki ngā tau me te tuhi pikitia.

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Whakaaturia ki ngā ākonga ngā ipu nui ake, iti iho rānei, ka pātai atu ki a rātou kia kōrerorero e hia o ia pōkai ka uru ki roto i te ipu mātao me te whakataurite ki te maha o ngā wae inenga mō te wae tuatahi. Whakangāwari i ngā ākonga kia mōhio ko te nui ake o te wae inenga, ko te nui ake o te mokowā, nō reira he iti iho te uru ki te rahi ūrite o te ipu mātao, ā, ko te tuarua.

Whainga ako: Ka ako ngā mokopuna ki te

Whakatauritea te rōrahi o tētahi ipu mā te whakamahi i ngā wae paerewa-kore.

Whakamahia ngā wae paerewa-kore hei ine rōrahi.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Whakamāramatia te whanaungatanga i waenga i te rahi o te wae inenga me te tatau inenga.

Whakatau tata te rōrahi o tētahi ipu.

Tūmahi Motuhake

Whakamahia ngā rauemi rerekē hei ine i te rōrahi o ia ipu.

Whakapūketetia te tatau inenga mō ia wae inenga rerekē i whakamahia e koe. Tāngia tētahi pikitia hei whakaatu i tō inenga i ngā ipu rerekē, ka tuhi hoki i ngā tau kia ūrite.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruaruā i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Mokowā, rōrahi, nui ake i te, iti iho i, ūrite, wae inenga, kaute inenga, nui rawa.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 7

Kai te hangaia e Sione he pouaka taonga mo te ope kaihautū. Kei te miharo a ia ko tēhea pouaka te rōrahi nui rawa. Ka taea e koe te āwhina i a ia mā te ine i te rōrahi o ngā pouaka?

Hei āwhina i te kaiako

Mō te whakarewatanga, pātai atu ki te whakaatu i ngā pouaka ki ngā ākonga me te tono kia whakatau tata ko tēhea te inenga rōrahi nui rawa.

Mō te mahi, me whai kohinga pouaka iti (hei tauira, pouaka hū) me ngā kupiki centi-cubes (he pai ake ēnei i te mea he wae inenga kotahi cm paerewa) he kupiki hononga-maha rānei.

Whakangāwari i ngā ākonga kia kite ko te rōrahi o tētahi ahanoa ko te nui o te mokowā e pau ana, ā, ko te rōrahi o tētahi ahanoa e inetia ana e te maha o ngā rōrahi wae e uru ana ki roto.

Tūmanako kia hopu ngā ākonga me te whakamahi i ngā whakaaturanga hei whakaatu i ūrātou whakaaro.

Mō te mahi takitahi, me whai kohinga pouaka rerekē, ōrite rānei. Hoatu ki ngā ākonga ngā tapawhā heneti hei kimi i te rōrahi.

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Wā toha

Tīpakohia ngā ākonga ki te tiritiri ko wai e ine ana i te rōrahi o ngā pouaka mā te whakaapa i raro i te tuatahi, kātahi ka whakakī i te toenga o te pouaka, me te whakarite kia iti noa iho ngā mokowā e taea ana. Arotahi hoki ki ngā ākonga e whakamahi ana i te whakarōpū, i te tatau rānei i ngā rongoā hei kimi i te tatau wae inenga.

Hono

Tīpakohia tētahi o ngā inenga rōrahi i tiria ka pātai atu ki ngā ākonga kia whakaaro mō te rōrahi (te tapeke) mēnā i tapahia te pouaka kia rua ngā wāhangā me te rōrahi o ia wāhangā. Tautokona rātou kia mārama he ōrite te rōrahi (tiakitanga.)

Kātahi ka tīpako i tētahi pouaka kāore i tika te uru o te kupiki 1 cm, ka pātai atu ki ngā ākonga kia kōrerorero me pēhea e whiwhi ai koe i tētahi inenga rōrahi tika (hei tauira, mā te whakamahi hautau).

Whainga ako: Ka ako ngā mokopuna ki te

Whakatauritea me te raupapa i te rōrahi o ngā ahanoa.

Whakamāramatia te rōrahi hei mokowā i roto i tētahi ahanoa/ipu.

Whakamahia ngā wae hei ine rōrahi.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Whakamāramatia ina whakawehea tētahi ahanoa ka ūrite tonu te rōrahi.

Tū mahi Motuhake

Ko tēhea pouaka e tino rōrahi ana?

Ko tēhea pouaka te iti rawa o te rōrahi?

He ūrite te rōrahi o ēhea pouaka?

Whakaaturia he pēhea tō kitenga i te rōrahi mō ia pouaka, ā, tapaina ko tēhea te rōrahi nui rawa, te rōrahi iti rawa, me te rōrahi ūrite.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kītanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kītanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihangā āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kītanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Mokowā, rōrahi, nuinga, iti rawa, ūrite.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 8

E hia ngā tamariki ka uru ki roto i te kupiki kotahi mita?

Ka taea e koe te mahi i te rōrahi o ēnei pouaka nunui me te mahi ko tēhea te rōrahi nui rawa, te rōrahi iti rawa me te rōrahi ūrite?

Hei āwhina i te kaiako

Whakamahia ngā tauine mita me te kāri me te nūpepa hei hanga i te pūkoro. Whakamahia te kupu mita pūtoru me te pūkete hei 1 m^3 .

Mō te wāhanga tuarua o te tūmahi, me whai pouaka nui hei whakataurite me te whakatau tata i te rōrahi.

Aroturuki mō ngā ākonga e whakamahi ana i ngā kupu kei roto ko te mokowā, te rōrahi, me te nui ake i te, iti iho, ūrite hoki.
Whakahauhautia te whakamahinga mita pūtoru.

Whakangāwari i ngā ākonga kia mārama ko te rōrahi te mokowā i roto i tētahi wae.

Mō te mahi takitahi he maha ngā pikitia e whakaatu ana i ngā rōrahi rerekē (hei tauira, kura ika, ipu kaipuke, whare putunga).

Wā toha

Tīpакohia ngā ākonga hei tiritiri ko wai e ine ana i te rōrahi o ngā pouaka mā te kite me pēhea te whakakī i te mokowā, mā te whakataurite rānei ki te mita pūtoru.

Hono

Pātai atu ki ngā ākonga kia kite me te whakatau tata e hia ngā mita pūtoru ka whakakī i ngā mokowā huri noa i te kura (hei tauira, akomanga, kaukau, hōro, hōro). Whakatauira i ngā urupare a ngā ākonga hei m^3 .

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Whainga ako: Ka ako ngā mokopuna ki te

Whakamahia ngā wae paerewa-kore hei ine rōrahi.

Whakatauritea te rōrahi o tētahi ipu mā te whakamahi i ngā wae paerewa-kore.

Tatauria te tau o ngā wae hei whakaahua i te inenga.

Tūmahi Motuhake

Tirohia te mita pūtoru ka whakamahi i tēnei hei whakatau tata i te rōrahi o ngā mokowā i ngā pikitia. Whakapūketetia ū whakatau tata ki ngā mita pūtoru me te whakarite kei te whakamahi koe i te m³.

He aha te rōrahi nui rawa?

He aha te rōrahi iti rawa?

Ko ēhea ngā rōrahi ūrite?

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Mokowā, rōrahi, neke atu i te, iti iho i te, ūrite, wehewehe.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 9

Whakamahia ngā kupiki hei hanga i ngā kupoid rerekē. Tāngia he whakaaturanga o te pūtonga, ā, tāhopu i te rōrahi.

Hei āwhina i te kaiako

Mō te whakarewatanga, me hanga e ngā ākonga he mātiti 3 ki te 3 o ngā kupiki 1 cm. Tonoa rātou kia hanga tētahi atu apa 3 ki te 3 ki runga hei hanga i tētahi cuboid. Tonoa ngā ākonga kia kōrero mō ngā ahu o te pūtoru kua hangaia tahitia e koe, me te maha o ngā kupiki kei roto. Tonoa rātou kia whakatau he aha tōna rōrahi.

Whakatūpato me pēhea te rerekētanga o te hanga o ngā ahanoa, engari he ūrite te rōrahi.

Wā toha

Tīpakohia ngā ākonga hei tiri ko wai kua whakamahi i te whakarōpū hei kimi i te tatau wae inenga. Tonoa rātou kia whakaatu i ā rātou rongoā mā te tuhi me ngā rerenga tau, whakatauira rānei ki a rātou.

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Whakaaturia ki ngā ākonga ngā tauira rerekē o ngā kupoid i hangaia mai i ngā kupiki centi. Pātai atu ki a rātou he aha te rōrahi mō ia tangata. Whakaurua ētahi kupoid he rerekē te hanga engari he ūrite te maha o ngā kupiki hei miramira ka noho ūrite tonu te rōrahi ahakoa he rerekē te āhua.

Whainga ako: Ka ako ngā mokopuna ki te

Whakamahia ngā wae hei ine rōrahi.

Whakamahia te whakarōpū hei kimi i te rōrahi o ngā pūkoro.

Whakatauritea me te raupapa i te rōrahi o ngā ahanoa.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Tūmahi Motuhake

He ūrite te rōrahi o ngā poro tapawhā e toru, engari he rerekē ngā hanga. Hangaia ēnei poro tapawhā mai i ngā kupiki 1 cm, kātahi ka tuhi i ngā whakaaturanga o ūtauira e whakaatu ana i te āhua o te rōrahi ūrite o ngā cuboids āhua rerekē.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

He ūrite, he rerekē, he taumaha ake, he māmā ake, he iti iho te papatipu, he nui ake, he nui.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahī 10

Hangaia he rerekē ngā raina tau kia ūrite ki ngā tohu inenga o te ipu ine.

Hei āwhina i te kaiako

Mō te whakarewatanga, tonoa ngā ākonga kia tūhura i ngā ipu rerekē kua tohua ki te mirirīta (mL) me te tautohu i te wae ine e whakamahia ana. Kōrerorero tia me pēhea tēnei e whakamahia ai ina kāore i te tino kotahi rīta.

Whakamahia he ipu ine he porotakaroa te hanga, ā, he tohu mirimita (hei tauira, 500 mL, 740 mL, 1000 mL, 2000 mL).

Whakangāwari i ngā ākonga ki te whakarite i te mokowā ūrite i waenga i ūrātou tohu, kia mārama hoki ko te mokowā i waenganui i a rātou e tohu ana i ngā poro rōrahi ūrite.

Tautoko i ngā ākonga ki te whakamahi i te tatau tīpoka i roto i te 100 (ētahi atu pahekotanga rānei) kia mōhio ai ko te kotahi rīta he 1000 mL. Whakamahia ngā raina tau hei tohu i ēnei.

Hangaia he hononga ki ngā kupu, te mirimita, me te mirimita, ā, ko taua mirimita e tohu ana i te mano.

Mō te tūmahī takitahi, me tīpako ngā ipu porotakaroa me ngā tohu millilitre me ngā ipu kāore i tohua

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i ngā tohu mokowā ūrite i te raina tau, ā, e tohu ana i te rōrahi ūrite i waenga i ngā inenga. Whakahauhautia me te whakatauira i te whakamahinga o te reo inenga wae paerewa (hei tauira, mirimita, rīta, 500mL te haurua ki te 1L).

Hono

Whakaaturia ki ngā ākonga tētahi pikitia o tētahi raina tau mai i te 50 mL ki te 1000 mL kua tohua ki tētahi tauine kāore he tau. Pātai atu ki a rātou kia tautohu e hia ngā mirirīta e whakaaturia ana i ngā wāhi tauwhāiti.

Whainga ako Ka ako ngā mokopuna ki te

Whakamahia ngā wae paerewa hei whakaahua me te ine i te kaha.

Tatauria ngā tau oti o ngā wae hei whakaahua i te inenga.

Whakaaturia ngā tauine inenga mā ngā huarahi rerekē.

Tūmahi Motuhake

Whakatau tata e hia ngā mirimita ka uru ki ia ipu. Tuhia tō whakatau tata.

Whakamahia tētahi o ngā ipu ine hei whakaurite i te nui o te wai i roto i ngā mirirīta e pupuri ana i te ipu.

Hangaia he raina tau e whakaatu ana i te tauine mō ia ipu.

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Mokowā, kaha, rōrahi, neke atu i, iti iho i, ōrite, whakatau tata, wae inenga, tatau inenga, kī, haurua kī, haurua putu, toru hauwhā kī, mirimita, mL, rīta, L.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 11

Anei ētahi pāhi. Whakakīa ki ngā rauemi rerekē, ahanoa rānei.

Whakamahia te tauine toenga hei pauna i ngā huinga ahanoa ki te kirokaramu kotahi.

Ka kitea e koe ētahi ahanoa e ūrite ana te papatipu?

Ka kitea e koe ētahi ahanoa he iti iho te papatipu?

Ka kitea e koe ētahi ahanoa he nui ake te papatipu?

He aha te papatipu i roto i ngā kirokaramu o ngā huinga ahanoa rerekē?

Hei āwhina i te kaiako

Hei whakarewa i te tūmahi, pātai atu ki ngā ākonga mēnā kua rongo rātou i te kupu 'kirokaramu' me ū rātou whakaaro he aha te tikanga. Me whai pēke ahanoa e ūrite ana ki te 1 kiro. Tukuna ngā ākonga kia puritia.

Mō te tūmahi, me whai pēke me ngā huinga ahanoa ka taea e ngā ākonga te puru ki roto i ngā pēke me te whakataurite ki te kotahi kirokaramu. Me whakawātea ngā tauine toenga hei whakamahi mā ngā ākonga.

Whakangāwari i ngā ākonga kia kite ko te papatipu o te ahanoa e inetia ana e te mahā o ngā waeine e whārite ana.

Tūmanako kia whakamahi ngā ākonga i te reo inenga me te hopu i ā rātou inenga mā te kiro.

Mō te tūmahi takitahi, me whai momo ahanoa rerekē hei ine me te whakataurite i ngā tauine hei whakamahi mā ngā ākonga.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai e whakamahi ana i te reo inenga tae atu ki ngā ine wae hei whakaahua i ngā mea e kitea ana e rātou.

Hono

Me whai pikitia o ngā huinga ahanoa rerekē (hei tauira, huruhuru, māpere) ka pātai atu ki ngā ākonga kia matapae mēnā he ūrite te papatipu ki te kotahi kirokaramu, neke atu rānei, iti iho rānei, he aha hoki.

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Whainga ako Ka ako ngā mokopuna ki te

Whakataurite me te raupapa i te papatipu o ngā ahanoa.

Whakamahia te reo inenga hei whakaahua i te whakataurite o te papatipu.

Kimihia te papatipu o ngā ahanoa i roto i ngā kirokaramu.

Tūmahi Motuhake

Ka purua ēnei ahanoa ki roto i tētahi mōkihi hei tuku mai i te poutāpeta.

Ka taea e koe te whakamahi i ngā kupiki hei mahi i te papatipu o ia mōkihi?

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kītanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kītanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kītanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

Papatipu, ūrite, rerekē, taumaha ake, māmā ake, iti iho te papatipu, nui ake, nui, kirokaramu.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 12

Kei te āwhina a Sose i tōna whaea ki te hoko hua rākau i te hokomaha. Me mōhio a ia ki te nui o te hua rākau hai mahi i te utu.

Ka taea e koe te ine i te papatipu o te hua rākau me te hopu i tēnei ki tētahi raina tau me te whakamahi i ngā karamu?

Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakamahia ngā tauine kua tohua ki ngā karamu hei kimi i te tini o ngā hua rākau.

Miramirahia ko te g e tohu ana i ngā karamu. Me whai tauine tairitenga me ngā tohu inenga me ngā hua rākau rerekē (te paraoa rānei hei tohu hua)

Whakangāwari i ngā ākonga kia mārama ko te kirokaramu he wae whakaae ā-motu, ā-ao hoki (paerewa ngahuru) mō te ine papatipu, ā, ka whakapūketetia hei kirokaramu, ā, ko taua karamu tētahi atu wae papatipu kua whakapūketetia hei g.

Kia mahara ka kitea e ngā unahi te taumaha o tētahi ahanoa. Ko te tō-ā-papa tēnei e kawea ai ki te Ao (tō ā-papa). Heoi anō, nā te mea he tata ūrite te tō ā-papa i ngā wāhi katoa o te Ao, he pai te whakaaro o te taumaha o tētahi ahanoa.

Kōrero mō te kimi i te papatipu me te kore pauna. Whakamahia te kupu nui ake, iti iho rānei te nui, kaua te taumaha ake, te māmā ake, ērā atu mea rānei.

Tūmanako kia whakataurite ngā ākonga i te papatipu o ngā hua rākau rerekē, kātahi ka whakaatu i tēnei hei wae inenga ki tētahi raina tau, ā, ka tāhopu mā te whakamahi i te inenga wae o ngā karamu.

Tautokona ngā ākonga ki te tatau i roto i ngā rōpū tekau kia 100 g, 20 rānei, 50 rānei kia 100 g, 1000 g rānei, 100 rānei hei 1000 g. He wā pai tēnei ki te titiro ki te uara wāhi o ēnei tau.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai kua whakawhanake i ngā raina tau e whakaatu ana i ngā wae inenga e noho ūrite ana, ā, ka tāruatia kāore he āputa. Me whakatauira anō tēnei ki ngā ākonga me te kōrerorero.

Ngā Whakaaro Matua o te Ao

He maha ngā huanga ka taea e mātou te ine tae atu ki te roa, te papatipu, te wā, te horahanga, te koki, me te rōrahi. Ina ine mātou, ka whakamahi mātou i te whakataurite, ka whakataurite mātou i ngā āhuatanga pēnei kia kite ko tēhea te mea nui ake. Ka taea e mātou te whakataurite mā te whakamahi i ngā wae ine paerewa, paerewa rānei, ā, ka whakamahi mātou i te reo pāngarau hei whakaahua i ēnei.

He mātāpono matua e pā ana ki te inenga tae atu ki te rahi o te wae inenga e noho ūrite ana (tae atu ki ngā wae ūrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he īnaki rānei (au), he wāhangā te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Tonoa ngā ākonga kia whakamahi i ngā ine papatipu o ū rātou hoa akomanga ki te tono i ngā mōkihi kua paunatia mai i te papatipu nui rawa atu ki te iti rawa. Arotahi ki te pēhea e taea ai te whakakotahi i ngā wae inenga hei tekau me te kotahi.

Whainga ako Ka ako ngā mokopuna ki te

Whakamahia ngā wae hei ine papatipu i runga i te tauine whārite.

Whakatauritea te papatipu o tētahi ahanoa mā te wetereo.

Tūmahi Motuhake

Tīpakohia tētahi, ētahi rānei o ngā tūmahi aromatawai e whai ake nei (kua āpitihia ki te mutunga o te tuhinga) hei tūmahi takitahi:

Tūmahi Aromatawai 1: Whakataurite Raina

Tūmahi Aromatawai 2: Ko tēhea pouaka te mea nui rawa?

Marautanga

Tau 2

Whakatau tata me te whakamahi tāruarua i te waeine aronga kē hei ine roa, papatipu, kitanga me te rōrahi rānei o tētahi taonga

Whakatairite me te whakamahi waeine aronga kē hei ine i te roa, te papatipu me te kitanga

Whai māramatanga ki te huatau o tētahi āwhata; wāwahi i tētahi waeine, ine hoki i tētahi haurua-waeine

Waihanga āwhata mō ngā waeine aronga kē me te whakamahi i ngā taputapu tika, waeine tika hoki ki te ine i te roa, te papatipu, te taumaha me te kitanga o tētahi taputapu

Whakamahi tau me ngā waeine aronga kē ki te whakatau i te inenga o tētahi āhuatanga.

Huri me te whakaahua i te rahi o te huringa, te tangata, te taonga mā te whakamahi huringa haurua, huringa hauwhā hei waeine.

Whakaahua ā-hinengaro, te whakatau tata me te ine i te paenga me te horahanga o ngā āhua ahu-2 ki ngā inenga aronga kē.

Reo Pāngarau

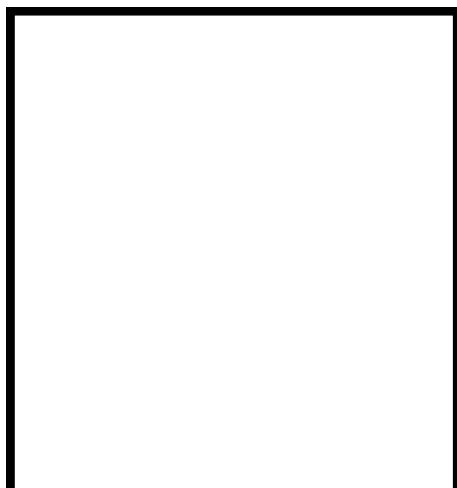
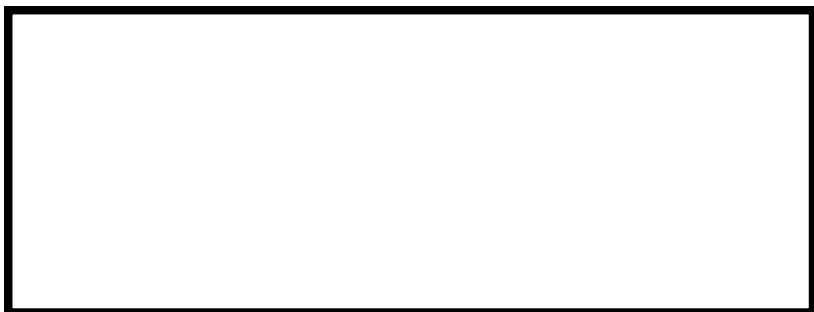
Papatipu, karamu, kirokaramu, ōrite, rerekē, taumaha ake, māmā ake, iti iho te papatipu, nui ake, nui.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Aromatawai 1

Kimihia te horahanga o ia kāri me ngā tapawhā. Whakaaturia he pēhea tō ine i ia kāri, ā, tuhia te tatau inenga.

A large, empty rectangular box with a black border, intended for students to draw or write their response to the question above.A medium-sized, empty rectangular box with a black border, intended for students to draw or write their response to the question above.A small, empty rectangular box with a black border, intended for students to draw or write their response to the question above.

Aromatawai 2

Ko tēhea o ēnei pouaka te mea nui rawa? Ko tēhea te mea iti rawa? Whakaahuatia he pēhea tō inenga, he pēhea hoki tō mōhiotanga.

(Tuhipoka kaiako: Hoatu ki ngā ākonga kia 3 ngā pouaka iti me ngā centi-cubes, hononga-maha rānei. Tangohia ngā whakaahua o te āhua ine a ngā ākonga).
