



NGĀ PUKA RAPANGA PĀNGARAU TAUNAKI

Ine

TAU 4

Pukapuka Kaiako

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Tūmahi 1

Whakataua tata te roa o tō ringa me te roa o tō ringaringa.

Mahi tahi me tētahi hoa ki te ine i ēnei mā tētahi wāhanga aho e tapahi ana i te aho kia roa.

Inea ngā aho e rua ki te rīpene ine.

Whakamahia ngā roanga rerekē o te aho (utauta inenga) hei whakataua tata me te ine i ngā tūemi huri noa i te akomanga. Whakaotia te ripanga i raro nei (tirohia ngā matua tārua).

Ināianei inea anōtia aua tūemi ki te rīpene ine ka kite i tō tika.

Hei āwhina i te kaiako

Me whai aho kia inea e ngā ākonga ō rātou ringa me ō rātou ringa ki te waihanganga i tā rātou utauta inenga. Whakaritea he tūemi huri noa i te akomanga hei ine mā ngā ākonga e poto ake, roa ake hoki i ā rātou utauta inenga.

Tirohia he pēhea te ine a ngā ākonga mā te utauta inenga me te tautoko i a rātou ki te whakamahi tika i tēnei, ki te aroturuki hoki i te tataua inenga ahakoa he roa ake te roa i te utauta.

Kia mōhio ki ngā ākonga e kerēme ana mō tā rātou mehua mā te whakamahi i ngā tohu - hei tauira, ko te pukapuka he haurua te roa o taku ringa, nā reira e whakaaro ana ahau ko... Miramiratia ēnei ki ngā ākonga.

Mō te tūmahi takitahi, me whai ahanoa ka taea e ngā ākonga te whakamahi hei ine (hei tauira, centi-cube, multilink, ones cube). Hoatu ki a rātou kia kotahi, kia rua rānei ngā ahanoa.

Wā toha

Tīpakohia ngā ākonga kua whakamahi i tā rātou utauta inenga hei ine tika i te roanga o ngā tūemi i roto i te akomanga.

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 wehewehea 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 ōrite tonu ana (tae atu ki ngā wae ōrite, wehenga roto rānei), ka tāruatia ngā wae kāore he āputa, he inaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tau katoa o ngā wae e whakamahia ana.

Hono

Pātai atu ki ngā ākonga kia matapaki he aha i rerekē ai te tatau inenga mō te wae inenga ōrite (mai i ngā ākonga rerekē). Miramirahia te pātahitanga i waenga i te rahi o te wae inenga me te tatau inenga, ā, tūhonoa tēnei ki te hiahia mō tētahi wae inenga paerewa.

Whainga Ako: Ka ako ngā mokopuna ki te:

Hoahoa i tētahi utauta inenga mā te whakamahi i ngā wae paerewa-kore.

Whakamahia tētahi utauta inenga me ngā wae paerewa-kore hei ine i te roanga.

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

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

Ngā Tūmahi Takitahi

Whakamahia tō utauta inenga aho hei ine i ngā ara e whai ake nei i tētahi pāka (tirohia ngā matua tārua).

Whakapūketetia ō hua ki te taha o ia raina.

Ināianei mā te whakamahi i tētahi rīpene ine, tauine rānei, inea ngā raina kia kite i tō tikanga.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

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

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 2

Whakataua tata te roa o te _____ i roto i ngā mita.
Whakataua tata -

Whakamahia te tīhore mita hei ine i te roanga me te tāhopu i te tataua inenga me te wae inenga.
Inenga -

Kimihia ētahi ahanoa i roto i te akomanga kotahi henimita te roa.

Pēhea te roa o tō tīhore mita i roto i ngā henimita?

Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakaaturia ki ngā ākonga he tauine mita me te whakataua me pēhea te hopu i te tataua inenga (hei tauira, 5 m). Tautoko i ngā ākonga ki te hopu i ā rātou whakataua tata mita hei 'tata ki te 3 m', 'i waenga rānei i te 2 m me te 3 m'. Hei whakarewa i te tūmahi tuarua, whakaurua ngā raina mātiti i runga i ngā tīhore henimita hei henimita, ka whakataua me pēhea te hopu i te tataua inenga (2 cm).

Kia kotahi mita te roa mai i te takai pepa, i te rīpene whānui rānei. Tapahia te pepa mātiti 1 cm (tirohia ngā matua tārua) kia 1 cm te whānui, 20 cm te roa.

Tautokona ngā ākonga ki te ine i ngā ahanoa e whakaaro ana rātou he 1 cm mā te whakamahi i te tīhore henimita.

Whakangāwari i ngā ākonga ki te whakamahi i te whakarōpū, i te tataua hanganga rānei kia kite e hia henimita i roto i te mita kotahi.

Mō te tūmahi takitahi, whakaritea he huinga ahanoa hei ine mā ngā ākonga mā te tīhore henimita.

Wā toha

Tīpakohia ngā ākonga hei tiritiri e āhei ana ki te ine tika i ngā ahanoa huri noa i te akomanga mā te whakamahi i ngā tīhore mita. Mō te wāhanga tuarua o te tūmahi, tīpakohia ngā ākonga hei tiritiri nā wai i whakamahi i te tataua hanganga, i te whakarōpū rānei hei tāutu he 100 henimita kei roto i te mita kotahi

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 inea e tātau, ka whakamahia e tātau te whakataurite, ko te tikanga, ka whakataurite i ngā āhuatanga 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 wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Tirohia te tauine mita me ngā tohu.

He aha te tohu o ngā tau? He aha ngā tohu tāpiri i waenganui i te henimita? Kīia ko ngā mirimita he henimita kua wehea ki ngā wāhanga tekau, ā, ka tuhia hei mm. E hia ngā mirimita i roto i te henimita? Ka aha mēnā ka inea e koe ki ngā mirimita, kaua ki ngā henimita?

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakatau tata te roa i roto i ngā mita.

Inea te roa ki ngā mita.

Inea te roa ki ngā henimita.

Tautuhia te pātahitanga i waenga i ngā henimita me te mita.

Ngā Tūmahi Takitahi

Whakatau tata te roanga o ia ahanoa ki ngā henimita. Tirohia tō whakatau tata ki tō tīhore henimita. Me mātua whakapūketete koe i te wae inenga.

Whakatau tata –
Inenga –

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

● *Mita, henimita, roa, wae inenga, kaute inenga, tauine, mirimita.*

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 3

Hangaia he rīpene ine mai i te rīpene, ka tohua ki ngā mita, e toru hauwhā mita, hāwhe mita, me te hauwhā mita.

He aha te roa me te whānui o te hōro o te kura?

Whakatau tata:

Inenga:

He aha te roa me te whānui o te kōti?

Whakatau tata:

Inenga:

Hei āwhina i te kaiako

te wā o te whakarewatanga, hoatu ki ngā ākonga he tihore mita, ā, tonoa rātou kia pōkai kia haurua mita, hauwhā mita, me te toru hauwhā mita. Pātai atu ki a rātou kia whakaahua e hia ngā henimita o ia roa.

Kia kotahi mita te roa mai i te takai pepa, rīpene whānui rānei, me te 10 m te roa o te rīpene whānui, te aho mātotoru rānei.

Mō te wāhanga tuatahi o te tūmahi, me tohu e ngā ākonga te roa 10 m ki ngā mita, haurua mita, hauwhā mita, me te toru hauwhā mita hei hanga i tētahi rīpene ine.

Whakangāwari i ngā ākonga ki te ine tika i roto i te hōro, i waho rānei mā te tīmata mai i te tapa me te pupuri i te inenga rīpene kia hāngai me te papatahi.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai e āhei ana ki te ine tika i te mokowā mā te whakamahi i te rīpene ine mita.

Hono

Tonoa ngā ākonga kia tū i ētahi wāhi i runga i te marae, i te hōro rānei, kātahi ka whakatau tata ngā ākonga i te tawhiti i waenganui i a rātou ki ngā mita, kātahi ka taki ki te rīpene ine mita. Kōrerorerotia ka taea te tapa i ngā tohu i waenga i ngā mita hei 1.5m, 1.8m rānei, ērā atu mea.

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 wehewehea 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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki 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:

Waihangatia he tauine me ngā wae henimita.

Whakamahia he tauine henimita hei ine ahanoa.

Ngā Tūmahi Takitahi

Kōwhiria ngā ahanoa huri noa i te akomanga hei ine mā te whakamahi i tō rīpene 10 m, tō tauine henimita, tō tauine mita rānei.

Mō ia ahanoa, whakapūketetia te whakatau tata inenga ki te wae tika.

Ināianeī inea te ahanoa ki tētahi o ngā utauta ine, ā, ka tāhopu i te inenga ki te wae tika.

Tahuri: 1m = ____ cm = _____ mm

Marautanga

Tau 4

Waihangatia paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru
- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei
- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

Henimita, roa, wae ine, kaute inenga, tauine.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 4

Me ine ēnei pukapuka kia kite ai mēnā ka uru ki roto i ngā pūhera. Heoi anō, kua pakaru ngā rangatira. Whakamahia ngā tauine pakaru kia mōhio ai mēnā ka uru te pukapuka ki roto i te pūhera.

Whakatau tata i te roanga o ia taha o te pukapuka i te tuatahi ki ngā henimita.

Whakatau tata –
Paenga –

Whakamahia te tauine pakaru hei kimi i te paenga o te pukapuka. Whakapūketetia te inenga mō ia taha ki ngā henimita.

Inenga –
Paenga –

Whakatau tata i te roanga o ia taha o te pūhera i te tuatahi ki ngā henimita.

Whakatau tata –
Paenga –

Whakamahia tō tauine pakaru ki te kimi i te paenga o te pūhera. Whakapūketetia te inenga mō ia taha ki ngā henimita.

Inenga –
Paenga –

Hei āwhina i te kaiako

Hei tīmatanga ariā, pātai atu ki ngā ākonga: mēnā he 1.4m te papanga me tētahi atu 1.2m papanga. He aha te roa katoa o te papanga? $1.4 + 1.2 = 2.6\text{m}$. Me whakamahi tonu ēnei tīmatanga puta noa i te toenga o te wae.

Hei whakaharatau i ngā ā-ira ki te 1dp. I te wā o te whakarewatanga, whakamōhio 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.

Me whai kape o ngā tauine pakaru (i roto i ngā matua tārua), o ngā tīhore henimita rānei, o ngā pukapuka pikitia, me ngā pūhera nunui.

Kia mōhio mēnā ka mōhio ngā ākonga kāore te tauine pakaru e tīmata mai i te kore kia kore ai e taea te pānui mai i te tau whakamutunga mō te inenga, ā, ka whakamahi i tēnei hei tāpiri i ngā roanga mō te paenga.

Tirohia mēnā kei te tīmata ngā ākonga i te inenga mā te whakarārangi i tētahi raina ki te tapa o te pukapuka e inea ana e rātou, kātahi ka tataui i ngā āputa i waenga i ngā raina hei wae inenga henimita.

Tūmanako kia whakamahi ngā ākonga i te reo inenga tae atu ki te paenga, me te hopu i te whakatau tata me te inenga mā te whakamahi i te whakapotonga cm.

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 wehewehea 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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki 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 ko wai e āhei ana ki te ine tika i te paenga mā te whakamahi i te tauine pakaru me te whakamārama i te paenga hei tapeke o ngā taha katoa.

Hono

Tonoa ngā ākonga kia puta mai he roa o ngā kaupae, tohutohu rānei me whakamahi ina ine ki te tauine pakaru.

Whaingā Ako: Ka ako ngā mokopuna ki te:

Whakatau tata te roa ki ngā henimita.

Inea te roa ki ngā henimita.

Kimihia te paenga o tētahi ahanoa papatahi.

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

Ngā Tūmahi Takitahi

Inea ēnei tūemi ki ngā tauine pakaru.

Whakatau tata te roa o ia taha o te _____ i te tuatahi ki te henimita.

Whakatau tata –

Paenga –

Whakamahia tō tauine ki te kimi i te paenga o te _____.

Whakapūketetia te inenga mō ia taha ki ngā henimita. Inenga –

Paenga –

Whakatau tata te roa o ia taha o te _____ i te tuatahi i roto i ngā henimita.

Whakatau tata –

Paenga –

Whakamahia tō tauine ki te kimi i te paenga o te _____.

Whakapūketetia te inenga mō ia taha ki ngā henimita. Inenga –

Paenga –

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

Paenga, henimita, roa, wae ine, kaute inenga, tauine.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 5

Kei te āwhina a Ayaan i tōna pāpā ki te whakatakoto tāpa hou ki roto i te kaukau. Anei tētahi tauira o te papa e hiahia ana e rātou hei tāpa. (tirohia ngā matua tārua).

Me utu e rātou te \$1 mō ia tāpa iti me te \$2 mō ngā tāpa nui ake. Ko tēhea te mahi pai ake?

Hei āwhina i te kaiako

Mō te tūmahi, hoatu ki ngā ākonga tētahi tāpa nui me tētahi tāpa iti. Mēnā e hiahia ana ngā ākonga ki ētahi tāpa anō, hoatu kia rua ngā tāpa kia taea ai e rātou te whakatakoto tētahi, kātahi ko te mea panuku hei ine i te horahanga.

Whakangāwari i ngā ākonga kia kite me āta whakatakoto ngā tapawhā kāore he āputa, he īnaki rānei, ā, ka tīmata i te tīmatanga o ia haupae. Tautokona rātou kia mōhio ka taea e rātou te whakamahi matimati, tohu rānei hei aroturuki i te wāhi i whakatakotoria ai e rātou te tapawhā.

Kia mōhio mēnā ka inea e ngā ākonga te pepa katoa ki te tapawhā, mēnā rānei ka tīmata rātou ki te mōhio he ōrite te tatau inenga o ia haupae, tīwae rānei, ā, ka taea kē te whakapūkete.

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

Mō te tūmahi takitahi, hoatu ki ngā ākonga ngā tapawhā tae rerekē kua tapahia mai i te tātauira 1 cm² me tētahi pepa pātea.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i te tāpiritanga tukurua, te whakarōpū rānei hei kimi i te horahanga, kua ko te tatau takitahi i ia tapawhā.

Hono

I ahatia te inenga horahanga i te nui ake o te tāpa? He aha i pono ai? He aha te whanaungatanga i waenga i ngā tāpa iti me ngā tāpa nui?

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 wehewehea 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 ōrite ana (tae atu ki ngā wae ōrite, 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.

Kimihia te horahanga o tētahi mata mā te whakakī i te mokowā ki ngā ine tapawhā.

Kimihia te horahanga o tētahi mata mā te whakamahi i te whakarōpūtanga, te tāpiritanga tukurua rānei.

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

Ngā Tūmahi Takitahi

Kei te hanga a Marama i ngā urunga tiavaevae mo ōna urunga. Me ine e ia te horahanga o te urunga kia tika ai te nui o te papanga.

He pēhea te rahi o te urunga?

Whakamahia tētahi tapawhā hei kimi i te horahanga o te urunga.

He nui ake te urunga tuarua? Kimihia te rohe ka tirohia.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

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

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 6

He pēhea te rahi o o tātau hū?

Whakamahia te pepa mātiti 1 cm ka tātuhi huri noa i te hū mauī mō ia tangata o tō rōpū.

He aha te horahanga o ia hū? Whakapūketetia mā te whakamahi i te wae horahanga tika.

Ko wai te hū nui rawa atu?

Ko wai te hū iti rawa?

Hei āwhina i te kaiako

I te wā o te whakarewatanga, kī atu ki ngā ākonga kia tataua i ngā tapawhā katoa anake i roto i tō rātou whakahuahua hū.

Kia 1 cm te pepa mātiti mā ngā ākonga e tuhi i te whakahuahua o tō rātou hū.

Miramirahia ngā ākonga kua tuhi tapawhā ki tō rātou hū kia māmā ake ai te ine i te horahanga.

Tūmanako kia tohu ngā ākonga i tō rātou hua mā te whakamahi i te wae horahanga tika (cm²).

Mō te tūmahi takitahi, me whai huinga paraka hanga papatahi, me te pepa mātiti 1 cm.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i te tāpiritanga tukurua, te whakarea rānei hei kimi i te horahanga o te hū.

Hono

Whakaaturia ki ngā ākonga tētahi whakahuahua o te hū kei reira he tapawhā wāhanga kei roto i te whakahuahua. Tonoa ngā ākonga ki te kōrerorero me pēhea ēnei e taea ai te whakauru ki te whakahuahua inenga kia tika ake ai te inenga horahanga.

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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki 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:

Inea te horahanga ki ngā henimita tapawhā.

Kimihia te horahanga o tētahi mata mā te tāpiri tukurua.

Kimihia te horahanga o te mata mā te whakamahi i te whakareatanga.

Whakatauritea te horahanga ki ngā henimita tapawhā.

Ngā Tūmahi Takitahi

Tāngia ngā paraka hanga i runga i te pepa mātiti 1 cm ka mahi i te horahanga.

Whakapūketetia te inenga horahanga tae atu ki te wae horahanga.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru
- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei
- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

Henimita tapawhā, horahanga, wae ine.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 7

Tirohia te kupenga o te pouaka me te whakatau tata e hia ngā kupiki e hiahia ana e koe hei whakakī i te pouaka.

Tirohia tō whakatau tata mā te hanga i te pouaka me te whakakī ki ngā kupiki 1 cm³.

Tāngia tētahi whakaaturanga e whakaatu ana i te rōrahi o te pouaka.

Hei āwhina i te kaiako

Mō te mahi, he maha ngā kupenga mō ngā poro-tapawhā hāngai me ngā rōrahi rerekē me ngā kupiki centi.

Whakarewahia ngā tūmahi mā te whakaatu i ngā ākonga i ngā kupiki 1 cm³ engari kaua e tukua kia whakamahia e rātou i mua i te whakatau tata i te rōrahi o tō rātou kupoti.

Tūmanako kia whakamahi ngā ākonga i te whakarōpū me te whakarea hei kimi i te rōrahi me te whakaatu i te inenga rōrahi mā te cm³.

Mō te tūmahi takitahi, hoatu ki ngā ākonga he kupiki centi, he kupiki hononga-maha rānei.

Wā toha

Tīpakohia ngā ākonga ki te tiritiri ko wai i kite me te whakamahi i te whanaungatanga i waenga i te kimi i te horahanga (apa tuatahi) me te whakamahi i tēnei ki te kimi i te rōrahi. Mēnā kāore he ākonga i kite i tēnei, miramiratia te pātahitanga ki a rātou.

Hono

Tonoa ngā ākonga ki te hanga i ngā kupoid rerekē me ngā kupiki 20 x 1 cm³ me te hopu i te rōrahi. Kōrerorerotia me te tūhura ki ngā ākonga me pēhea te huri o te hanga, engari ka rite tonu te rōrahi.

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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Whaingā Ako: Ka ako ngā mokopuna ki te:

Whakamahia ngā wae paerewa hei ine rōrahi.

Kimihia te rōrahi o ngā pūkoro.

Whakatauritea me te raupapa i te rōrahi o ngā ahanoa.

Whakaahuatia te pātahitanga i waenga i te horahanga me te rōrahi.

Ngā Tūmahi Takitahi

Ko tēhea pouaka e tino rōrahi ana?

Ko tēhea pouaka te iti rawa o te rōrahi?

He ōrite 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 ōrite.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

● *Ngā kupenga, rōrahi, kupiki, horahanga, henimita pūtoru, poro-tapawhā hāngai, wae ine, tatau inenga.*

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Task 8

He aha te rōrahi o te akomanga e whakamahi ana i te ine wae mita pūtoru?

Tāngia he whakaaturanga hei whakamārama me te whakatika i tō rongoā.

Hei āwhina i te kaiako

Mō te whakarewatanga, me whai pikitia o ngā mokowā nunui (hei tauira, ipu kaupuke, whare putunga, hōro, nohoanga) me te tono i ngā ākonga kia tautohu i ngā wae ine ka whakamahia hei ine i ēnei wae nui ake. Tūhura he aha koe e hiahia ai ki tētahi wae ine nui ake, ōrite hoki.

Whakaritea he mita pūtoru me te whakamōhio atu ki ngā ākonga hei mita pūtoru me te whakapūkete hei 1 m³.

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

Tūmanako kia whakamahi ngā ākonga i te whakarōpūtanga, i te whakareatanga rānei, me te whakaatu mā te whakamahi i ngā whakaaturanga Ahu-3 hei whakamārama me te whakatika i te kimi i te rōrahi o tētahi mokowā ōrite.

Tautoko i ngā ākonga ki te whakawhanake i tētahi tohu oro o te rahi o te mita pūtoru.

Mō te tūmahi takitahi, he maha ngā pikitia o ngā mokowā tapawhā rerekē (hei tauira, ipu kaupuke, aquarium, lounge, whare putunga).

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai kua whakawhanake i tētahi whakaaturanga Ahu-3 hei whakatautika, ko ērā rānei kua whakamahi i te whakareatanga me te whanaungatanga i waenga i te horahanga me te rōrahi hei whakawhanake i tā rātou whakatau tata rōrahi.

Hono

Tonoa ngā ākonga kia matapae mō te rōrahi o tētahi atu mokowā kura (hei tauira, te kauhanga, te hōro) me te tā i tētahi whakaaturanga Ahu-3 o tēnei.

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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki 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:

Whakataua tata te inenga rōrahi mā te whakamahi i ngā wae paerewa.

Whakaaturia te inenga rōrahi mā te whakaaturanga Ahu-3.

Whakamahia te whakarōpū, te whakarea rānei hei kimi inenga rōrahi.

Tautuhia me te whakamārama i te whanaungatanga i waenga i te inenga horahanga me te rōrahi.

Ngā Tūmahi Takitahi

Whakataua tata te rōrahi o te mokowā mā te whakamahi i ngā mita pūtoru. Tāhopu i tō whakataua tata mā te m^3 ka tāngia he whakaaturanga Ahu-3 hei whakatika i tēnei.

Kōwhiria kia 5 ngā mokowā huri noa i tō kāinga me tō hapori ka tuhi i te wāhi. Whakataua tata te rōrahi o te mokowā mā te whakamahi i ngā mita pūtoru. Tāhopu i tō whakataua tata mā te m^3 ka tāngia he whakaaturanga Ahu-3 hei whakatika i tēnei.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakataua tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakataua tata me te tātai i te:

- *Paenga o ngā taparau mā te whakamahi waeine ngahuru*

● - *Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- *Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.*

Reo Pāngarau

● *Mita pūtoru, poraka tapa-ōrite, poraka, rōrahi, rahinga, wehenga ine, tatauranga ine.*

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 9

Kimihia ngā ipu e ōrite ana te kaha, engari he rerekē te hanga.

Whakamātauria he ōrite, he tata rānei te kaha o rātou.

Me mātua whakamārama koe me te whakatika i tō whakaaro mā te whakamahi i ngā whakaaturanga maha tae atu ki te raina-tau.

Hei āwhina i te kaiako

Hei whakarewa i te tūmahi, tonoa ngā ākonga kia kōrerorero i ngā mea e mōhio ana rātou mō ngā mirimita me ngā rīta, me te hoatu tohu āhea ka whakamahia.

Me whai awhe o ngā ipu ine me ngā ine kua tohua rerekē, ā, kia mātakitaki āta mātakitaki i ngā ākonga e kōwhiri ana i ngā mehua kāore i te tika.

Tūmanako kia whakamahi ngā ākonga i tētahi raina tau hei whakaatu anō i te inenga. Tautokona rātou kia mōhio ai me ōrite te mokowā o ngā tohu i te raina tau nā te mea ko ngā mokowā i waenganui i a rātou e tohu ana i ngā poro rōrahi ōrite. Miramiratia te ōritetanga e hiahiatia ana ki te ine rōrahi, ā, he ōrite tēnei ki te ine i te kaha.

Whakangāwari i ngā ākonga ki te tataui i roto i te 100 (ētahi atu pahekotanga rānei) kia mōhio ai ko te kotahi rīta he 1000 mL. Tautokona rātou kia haere ki tua atu i te kotahi rīta me te whakamahi i te reo hautau.

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

Mō te tūmahi takitahi, me tīpako ngā ipu ine/kapu me ngā tohu mirimita i te taha me te tīpakonga o ngā ipu kāore i tohua.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i ngā momo whakaaturanga tae atu ki tētahi raina tau me ngā tohu mokowā ōrite hei tohu i te rōrahi ōrite i waenga i ngā inenga. Whakahauhautia me te whakatauiria i te whakamahinga o te reo inenga wae paerewa (hei tauira, mirimita, rīta, 500 mL te haurua ki te 1 L).

Hono

Me whai raina tau kua tohua mai i te 50 mL ki te 1000 mL ki tētahi tauine engari kāore he tau kē. Pātai atu ki ngā ākonga kia tautohu e hia ngā mirirīta ka whakaaturia i ētahi wā.

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 ōrite ana (tae atu ki ngā wae ōrite, ngā wehenga iti rānei), ka tāruatia ngā wae kāore he āputa, he inaki 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 (mirirīta me ngā rīta) hei whakaahua me te ine i te kaha.

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

He rerekē te tohu i ngā tauine inenga.

Ngā Tūmahi Takitahi

Kai te mahi wai a Tasi mo te hākari. E hiahia ana a ia ki te mōhio e hia te nui o te wai ka puritia e ia ipu.

Matapaetia ngā mirirīta me ngā rīta mō ia ipu.

Whakamātauria to matapae ki te ipu ine. Whakamahia he raina tau hei tohu i te inenga.

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

● *Te kaha, te mirimita, te rīta, te tauine, te wae, te tatau inenga.*

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 10

Kimihia te papatipu o ia pēke ahanoa.

Tuhia te papatipu ki ngā wetereo me te tohu i tēnei ki tētahi raina-tau.

Kimihia te rerekētanga o ngā karamu i waenga i ngā pēke ahanoa me te whakaraupapa mai i te tino nui ki te iti rawa.

Hei āwhina i te kaiako

Hei whakarewa i te tūmahi, pātai atu ki ngā ākonga mēnā kua rongorātou i te kupu 'karamu' me te 'kirokaramu' me ō rātou whakaaro. Me whai centi-cube (1gm) me ngā pēke ahanoa e ōrite ana ki te 1 kiro. Tukuna ngā tauira ki te hiki, ki te pupuri i a rātau. Kōrerorerotia te whakamahinga o te g mō ngā karamu me te kirokaramu hei tāhopu i ngā ine papatipu.

Me whai tauine mamati, tairitenga rānei e ine ana i ngā wetereo me ngā kirokaramu me ngā pēke ahanoa e rerekē ana ngā ine papatipu.

Ko te papatipu o tētahi ahanoa te nui o te matū i roto. Kaua e whakamahi i te kupu "pauna", engari e pā ana ki te kimi i te tini o ngā ahanoa. Waihoki, me whakangāwari ngā ākonga ki te whakamahi i ngā kupu nui ake, iti iho rānei, kaua e taumaha ake, māmā ake rānei.

Kia mōhio mai, ko te papatipu o te ahanoa e inetia ana e te maha o ngā waeine e whārite ana. 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 ōrite te tō ā-papa i ngā wāhi katoa o te Ao, he pai te whakaaro o te taumaha o tētahi ahanoa. Ko te kirokaramu he wae whakaae ā-motu, ā-ao hoki (paerewa ngahuru) mō te ine i te papatipu.

Tūmanako kia whakamahi ngā ākonga i tētahi raina-tau hei whakaaturanga me te whakangāwari i ngā ākonga ki te whakarite kia ōrite te mokowā o ngā tohu i te raina tau nā te mea ko ngā mokowā i waenganui i a rātau e tohu ana i ngā poro papatipu ōrite. Kia mōhio mēnā ka whakamahi ngā ākonga i te whakaaro whakarea ina tatau i roto i ngā rōpū tekau kia 100 g, 20 rānei, 50 rānei hei hanga i te 100 g, 1000 g rānei, 100 rānei hei hanga i te 1000 g.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i ngā momo whakaaturanga tae atu ki tētahi raina tau me ngā tohu mokowā ōrite hei tohu i te tauine. Whakahauhautia me te whakatauiria i te whakamahinga o te reo inenga wae paerewa (hei tauira, karamus, kilokaramus, 1000 karamus is the same to one kilokaramu).

Ngā Whakaaro Matua o te Ao

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 īnaki rānei (au), he wāhanga te wae o te katoa, ā, ka whakapuakina te inenga hei tapeke o ngā wae e whakamahia ana.

Hono

Tonoa ngā ākonga ki te tā i tētahi raina tau me te tohu i te rerekētanga i waenganui:

49 karamus me te 32 karamus
330 karamus me te 500 karamus
850 karamus me te 1 kilokaramu.

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 karamu me ngā kirokaramu.

Ngā Tūmahi Takitahi

Kimihia te rerekētanga o te papatipu i waenga i ia takirua ine. Whakaaturia tō rongoā ki tētahi raina-tau wātea.

19 karamus me te 67 karamus
26 karamus me te 75 karamus
183 karamus me te 57 karamus
43 karamus me te 118 karamus
312 karamus me te 99 karamus
708 karamus me te 409 karamus
687 karamus me te 1 kg
1 kg me te 446 karamus

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru
- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei
- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

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

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 11

Kimihia e toru ngā mea e kotahi kirokaramu te tapeke.

Tāngia he raina tau hei tohu i te mehua papatipu o ia tūemi, ā, ka whakaatu he pēhea te katoa o te papatipu whakaaro kotahi kirokaramu.

Ināianeī whakamahia ngā tauine hei taki i te papatipu o ia ahanoa ki tō whakatau tata.

Tāngia tētahi atu raina tau hei tohu i te ine papatipu o ia tūemi mai i te tauine me te whakaatu i te papatipu takitahi me te paheko.

Pēhea te tata ki te kotahi kirokaramu i tō whakaaro?

Hei āwhina i te kaiako

Me whai awhe ahanoa rerekē te rahi me te papatipu me tētahi tauine mamati/tairitenga hei ine i te papatipu.

Whakangāwari i ngā ākonga kia kite he rerekē pea ngā tohu o ngā tauine rerekē, engari ko te mokowā i waenga i ngā tohu e tohu tonu ana i ngā karamu.

Tūmanako kia whakamahi ngā ākonga i te reo inenga tae atu ki te kimi i te papatipu, nui ake, iti iho te nui, karamus, kirokaramu.

Whakangāwari i ngā ākonga ki te kite me te whakamahi i ngā tohu pēnei i te 1000 karamus ko te kotahi kirokaramu (ngā wae hiato), ko te 500 karamus te haurua o te kirokaramu.

Kia mōhio ki ngā ākonga e mōhio ana ko te tapeke inenga i roto i ngā karamu e whakapūketetia ana hei tau nui ake i te inenga ki te kirokaramu ahakoa he ōrite ēnei. Ki te kore tēnei e puta, me kōrero mārama.

Mō te tūmahi takitahi, me whai tauine mamati/tairitenga me te tīpakonga ahanoa.

Wā toha

Tīpakohia ngā ākonga hei tiritiri kua tata tata ki te 1 kirokaramu (tae atu ki raro iho, ki runga ake hoki i te kiro). Whakangāwari i ngā ākonga ki te whakaahua he pēhea te ōrite o te 1000 karamu ki te kirokaramu kotahi.

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 ōrite ana (tae atu ki ngā wae ōrite, 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

Pātai atu ki ngā ākonga kia whakamārama, kia whakatika hoki ko tēhea mehua e tata ana ki te kotahi kirokaramu.

1k g me te 9 g , 990 g rānei
1 + hawhe kiro, 750g rānei
500g, 1 + hawhe kiroki rānei

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakatau tata te papatipu o ngā ahanoa i roto i ngā karamu me ngā kirokaramu.

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

Tahuri karamus ki te kirokaramu.

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

Ngā Tūmahi Takitahi

Whakakāia ngā uara ngaro:

1000 mL = ___l

1500 mL = ___l me ___mL

1340 mL = ___l me ___mL

1750 mL = ___l me ___mL

2 l = ___mL 1000 g = _____kg

1250 g = _____kg me _____g

1500 g = _____kg me _____g

2000 g = _____kg

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- Paenga o ngā taparau mā te whakamahi waeine ngahuru

● *- Horahanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.

Reo Pāngarau

● *Papatipu, iti iho te nui, nui ake, ōrite te papatipu, kirokaramu, karamu, unahi.*

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 12

E whakaatu ana te tapanga ipu miraka i te papatipu 125 g, engari kei te putu te ipu.

Me pēhea e taea ai e koe te ine mēnā ka 125 g te papatipu ina kī?

Kia rite ki te whakamārama me te whakatika me pēhea e taea ai e tētahi wae ine te whakamatau ko te papatipu o te ipu katoa ko te 125 g.

Whakamātauria tō rongoā me tō wae ine ki ētahi atu ipu putu rerekē te rahi, ā, ka whakatautika mēnā kua tika te whakapūketetanga o tō rātou papatipu ina kī.

Hei āwhina i te kaiako

Mō te whakarewatanga, me whai pikitia o ngā ahanoa rerekē te papatipu, ā, pātai atu ki ngā ākonga kia tautohu ko tēhea me ine mā te wetereo, kirokaramu rānei, he aha hoki. Me whai wai me ngā ipu ine hei whakamahi.

Whakangāwari i ngā ākonga ki te kite me te matapaki i te whanaungatanga i waenga i te papatipu me te rōrahi. Ko te pātahitanga i waenganui i te papatipu me te rōrahi e kiia ana ko te kiato. Ko te kiato he papatipu e wehea ana e te rōrahi, ā, i whakamahia te wai hei pūtake mō te whakatū i te wae ngahuru o te papatipu, arā, kotahi karamu (1 cm³) te pauna o te wai. Nā reira, 1 g/1 cm³ = 1 g/cm³, e māmā ai te maumahara i te wai.

Mō te tūmahi takitahi, me whai tauine tairitenga/mamati me tētahi tīpakonga ahanoa hei ine.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai e tūhono ana i waenga i ngā ine mō te papatipu me te kaha.

Hono

E 125 g te nui o te ipu miraka. He aha te kaha?

E 500 g te nui o te ipu miraka. He aha te kaha?

Kotahi kirokaramu te nui o te ipu miraka. He aha te kaha?

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 ōrite ana (tae atu ki ngā wae ōrite, 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:

Inea te rōrahi o tētahi ipu mā te whakamahi i ngā mirirīta (mL), karamu rānei.

Whakatauritea me te whakaahua i te whanaungatanga i waenga i te kaha me te papatipu me te milliliters me te karamus.

Ngā Tūmahi Takitahi

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: Horohanga

Tūmahi Aromatawai 2: Tūmahi Rōrahi

Marautanga

Tau 4

Waihanga paearu inenga ki te whakatau tata me te ine i te roa, te paenga, te taumaha, te kītanga, me te roa mā te whakamahi i ngā tohu ine tika.

● *Whakamahi i ngā waeine me ngā taputapu e tika ana ki te ine i te roa, te papatipu, te kītanga me te wā.*

Whakamahi i te pūnaha ngahuru ki te tūhura i te hononga o ngā waeine.

Whakatau tata me te tātai i te:

- *Paenga o ngā taparau mā te whakamahi waeine ngahuru*

● - *Horohanga o tētahi āhua kua kapi ki ngā tapawhā, ki ngā tapawhā haurua rānei*

- *Rōrahi o ngā āhua kua whakakiia ki te porowhā mā te whakamahi i ngā paparanga.*

Reo Pāngarau

● *Papatipu, papatipu rawa, ine, karamu, kirokaramu, nui ake, iti iho, ōrite*

Ngā Tumanako

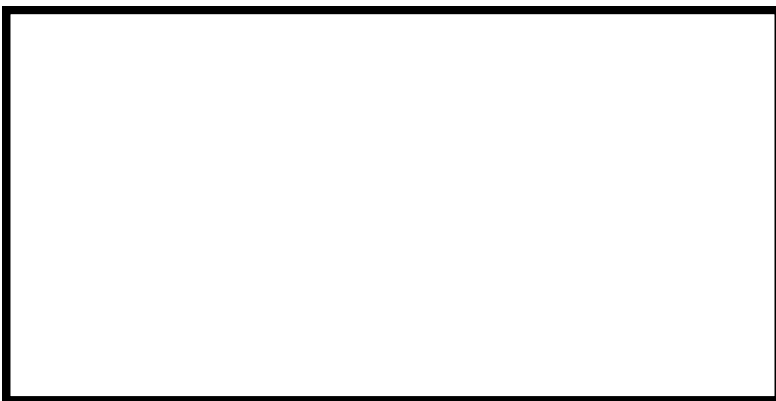
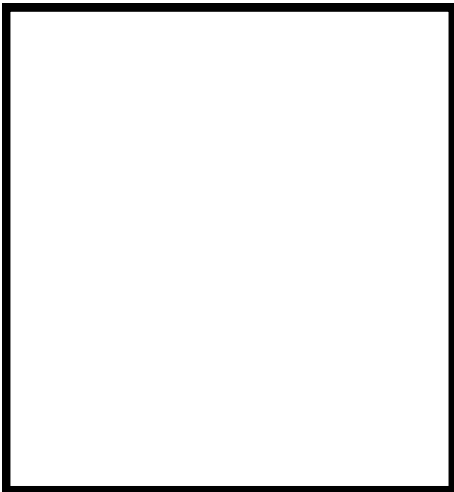
Ngā Rongoā, Ngā Pōhēhētanga

Aromatawai 1

Ko tēhea o ngā moenga kurī te wāhi nui rawa, iti rawa rānei?

Whakamahia ngā tapawhā 1 cm, te tauine rānei hei ine i ngā moenga kurī. Tuhia te inenga me te wae horahanga.

Whakamārama, whakatautika hoki i tō ine i ia moenga kurī mā te whakamahi i ngā tau, pikitia, kupu rānei.



Aromatawai 2

Kua whakamahia e Jodie ēnei kupiki (1cm³) hei mahi i te rōrahi o te ipu.



He aha te rōrahi o te ipu?

Whakaaturia me te whakamārama i ngā huarahi rerekē ka taea e ia te whakamahi hei mahi i tēnei.

He aha te huarahi tere rawa, he aha hoki?

