

## He Whare Hou\*

Ko ngā kaupapa pāngarau e whai wāhi atu ana ki tēnei ngohe:

- Ko te hoahoa āwhata
- Ko ngā momo tirohanga ki tētahi āhua ahu-3
- Ko te horahanga me te paenga o te tapawhā hāngai
- Ko te ine i te roa
- Ko te tūponotanga māmā
- Ko te whakaatu whiringa ki te hoahoa rākau
- Ko te tautohu pūwāhi ki te mahere
- Ko te tautohu ahunga ki te mahere
- Ko te whakamārama ara

Ko ngā kupu pāngarau matua:

hoahoa, āwhata, paenga, horahanga, tirohanga, tirohanga mua, tirohanga mauī, tirohanga runga, papariki, tapawhā rite, tapawhā hāngai, matapōkere, tīpako, tūponotanga, hoahoa rākau, mahere, ahunga, raki, rāwhiti, tonga, uru

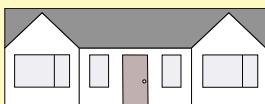
E whakaaro ana te whānau o Waitohu ki te hanga whare hou mō rātou.

E tirotiro ana rātou ki ngā hoahoa o ēnei whare e toru:



### Hei Mahi 1

a) Ko te tirohanga mua tēnei o tētahi o ngā whare. Ko tēhea?



e) Ko te tirohanga mauī tēnei o tētahi o ngā whare. Ko tēhea?

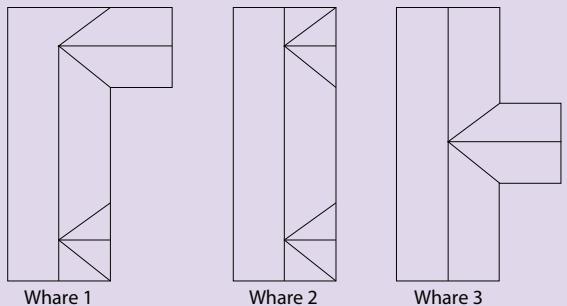


E mōhio ana te ākonga ki te tautohu tirohanga, arā, ko te tirohanga mua tēnei o te Whare 2.

E mōhio ana te ākonga ki te tautohu tirohanga, arā, ko te tirohanga mauī tēnei o te Whare 1.

- h)** Māu e tuhi ngā tirohangā runga (tirohangā ā-manu) o ngā whare e toru nei (tuhi ā-ringa noa iho, hei aha te ine).

E mōhio ana te ākonga ki te tuhi tirohangā, arā:



## Hei Mahi 2

Koia nei te hoahoa ā-papa o te whare e hangaia ana e rātou.



Kei te whakatakotoria he papariki ki te papa o te kīhini, te wāhi kai me te wāhi noho.

- a)** He aha te āhua o ēnei wāhi e toru?

E mōhio ana te ākonga ki te tautohu i te tapawhā hāngai. Ākene pea ka inea ngā tapa kia kitea ai ehara i te tapawhā rite.

- e)** Inea te roa me te whānui o tēnei wāhi i te hoahoa.

E mōhio ana te ākonga ki te whakamahi rūri hei whakatutuki i te inenga roa. Arā, e 6cm te whānui, e 7cm te roa.

- h)** Ko te āwhata o te hoahoa e kī ana '1cm = 1m'. Arā, e rite ana te 1cm i te hoahoa ki te 1m i te whare tūturu. Tuhia te roa me te whānui o tēnei wāhi o te whare tūturu.

E mōhio ana te ākonga ki te huri i ngā inenga o te hoahoa ki ngā inenga o te whare tūturu. Arā, e 6m te whānui, e 7m te roa.

- i) Whiriwhiria te horahanga o tēnei wāhi o te whare tūturu.
- k) E 20cm mā te 20cm ngā papariki e whakatakotoria ana ki te papa o tēnei wāhi o te whare.



Whiriwhiria te maha o ngā papariki e hiahiatia ana.

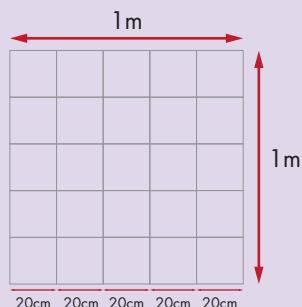
### Hei Mahi 3

Titiro anō ki te hoahoahā papa o te whare kei runga ake nei he āwhina i a koe i ēnei pātai:

- a) E hia mita te paenga o te whare?
- e) Whiriwhiria te horahanga o te whare.
- h) E whakaaro ana te whānau o Waitohu ki te whakatū whare motukā. He tapawhā hāngai te āhua o te whare, e 3m te whānui, e 5.5m te roa. Tuhia te tirohanga runga o te whare motukā hei hoahoahā āwhata o tēnei whare.

E mōhio ana te ākonga ki te tātai horahanga o te tapawhā hāngai. Arā,  $6 \times 7 = 42\text{m}^2$ . E mōhio ana hoki ki te waeine e tika ana mō te horahanga, arā, te mita pūrua.

Ka whai rautaki te ākonga ki te whiriwhiri i te maha o ngā papariki. Hei tauira:



E 25 ngā papariki ki ia mita pūrua o te papa. Nō reira  $25 \times 42 = 1,050$  katoa ngā papariki hei whakakapi i te  $42\text{m}^2$  o te papa.

E mōhio ana te ākonga ki te whakamahi rūri hei whakatutuki i te inenga roa. Arā, 12cm te whānui o te whare, e 7cm te roa.

E mōhio ana te ākonga ki te tikanga o te paenga, ki te whiriwhiri hoki i te paenga o te tapawhā hāngai. Arā,  $12 + 7 + 12 + 7 = 38\text{m}$ .

E mōhio ana te ākonga ki te whiriwhiri i te horahanga o te tapawhā hāngai. Arā,  $12 \times 7 = 84\text{m}^2$ .

E mōhio ana te ākonga ki te whiriwhiri i te āwhata e pai ana, ki te tuhi hoki i te tapawhā hāngai hei tirohanga runga o te whare. Hei tauira:



āwhata:  $1\text{cm} = 1\text{m}$

i) E hia mita te paenga o te whare motukā?

k) Whiriwhiria te horahanga o te whare motukā.

E mōhio ana te ākonga ki te tikanga o te paenga, ki te whiriwhiri hoki i te paenga o te tapawhā hāngai. Arā,  $5.5 + 3 + 5.5 + 3 = 17\text{m}$ .

E mōhio ana te ākonga ki te whiriwhiri i te horahanga o te tapawhā hāngai. Arā,  $3 \times 5.5 = 16.5\text{m}^2$ .

E whai rautaki ana te ākonga ki te whakaotī i te whakareatanga  $3 \times 5.5$  i tōna hinengaro.

## Hei Mahi 4

E whakaaro ana rātou ki te tae o te tuanui o te whare me te tae o ngā perekī i ngā pātū.

Koia nei ngā whiriwhiringa mō te tuanui:



Koia nei ngā whiriwhiringa mō ngā perekī i ngā pātū:



a) E tautohetohē ana rātou i te tae o te tuanui. Mēnā he matapōkere te tīpako i te tae, e hia te tūponotanga ka tīpakona te kura?

E mōhio ana te ākonga ki te tikanga o tēnei mea te tūponotanga me te matapōkere o tētahi tīpakonga. I konei he ūrite te tūponotanga o ia tae, nō reira ko te  $\frac{1}{3}$  te tūponotanga o te kura.

e) Mēnā he matapōkere te tīpako i te tae o te tuanui, e hia te tūponotanga kāore e tīpakona te kura?

E mōhio ana te ākonga ki te tikanga o tēnei mea te tūponotanga me te matapōkere o tētahi tīpakonga. I konei he ūrite te tūponotanga o ia tae, nō reira ko te  $\frac{2}{3}$  te tūponotanga kāore e tīpakona te kura.

- h)** Tuhia he hoahoa rākau hei whakaatu i ngā kōwhiringa e taea ana mō te tae o te tuanui me te tae o ngā perekī i ngā pātū.

E mōhio ana te ākonga ki te tuhi hoahoa āwhata ki te whakaatu i ngā kōwhiringa. Hei tauira:

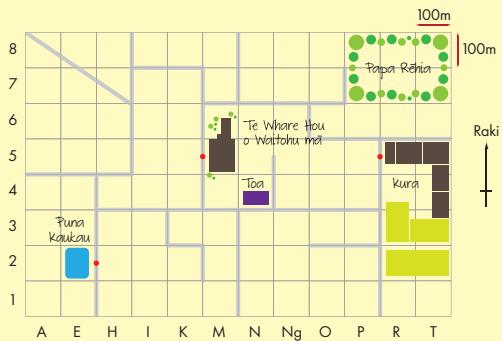
Tuanui	Pātū	Kōwhiringa
Kōkāriki	Rauwhero Kiwikiwi	Kākāriki/Rauwhero Kākariki/Kiwikiwi
Kura	Rauwhero Kiwikiwi	Kura/Rauwhero Kura/Kiwikiwi
Parauri	Rauwhero Kiwikiwi	Parauri/Rauwhero Parauri/Kiwikiwi

- i)** Mēnā he matapōkere te tīpako i ngā tae, e hia te tūponotanga he kākāriki te tuanui, he rauwhero ngā pātū?

E mōhio ana te ākonga ki te tikanga o tēnei mea te tūponotanga me te whiriwhiri i te tūponotanga o ngā putanga e whakaaturia ana ki tētahi hoahoa rākau. Arā, he ōrite te tūponotanga o ngā kōwhiringa e ono katoa, nō reira ko te  $\frac{1}{6}$  te tūponotanga he kākāriki te tuanui, he rauwhero ngā pātū.

## Hei Mahi 5

Ko te mahere tēnei o te wāhi e whakatūria ai te whare hou o te whānau o Waitohu.



- a)** He aha nei te ahunga mai i te whare hou o Waitohu mā ki te puna kaukau?
- e)** He aha kei te wāhi N4 o te mahere?

E mōhio ana te ākonga ki ngā ahunga o te kāpehu, ki te tautohu hoki i ngā ahunga i te mahere. Arā, ko te uru mā tonga te ahunga mai i te whare hou o Waitohu ki te puna kaukau.

E mōhio ana te ākonga ki te tautohu pūwāhi ki te mahere. Arā ko te toa kei te N4 o te mahere.

**h)** Tuhia te wāhi o te mahere e whakatūria ana te whare hou o Waitohu mā.

**i)** Koia nei te ara hīkoi a Waitohu ki te kura:

Ka puta au i taku whare, ka haere whakateraki.  
Ka huri matau i te kokonga tuatahi, ā, ka hīkoi whakaterāwhiti. Ka tae atu ki te kokonga tuatahi ki te taha matau, ka huri ki reira, ka haere whakatetonga mō te wā poto. Kātahi ka huri mauī, ka haere whakaterāwhiti anō kia tae atu au ki te kura.



He rerekē te ara hīkoi a te tungāne o Waitohu. Ka puta ia i tō rātou whare, ka haere whakatetonga. Māu e whakamārama te roanga atu o te ara hīkoi a te tungāne.

**k)** Whiriwhiria te tawhiti o te hīkoi a Waitohu me te tawhiti o te hīkoi a te tungāne.

**m)** Kāore te whare karakia e whakaaturia ana i te mahere nei. Ko te uru-mā-raki te ahunga mai i te whare o Waitohu ki te whare karakia, kei te takiwā o te 500m te tawhiti o te ara hīkoi ki reira. Tuhia te wāhi o te mahere kei reira te whare karakia.

E mōhio ana te ākonga ki te tautohu pūwāhi ki te mahere. Arā ko te M5 te wāhi i te mahere e whakatūria ai te whare hou o Waitohu mā.

E mōhio ana te ākonga ki te whakamārama ara hīkoi i te mahere. Hei tauira:

- Ka puta au i taku whare, ka haere whakatetonga ki te kokonga tuatahi. Ka huri mauī, ā, ka haere ki te mutunga o te huarahi. Ka huri mauī anō. Ka haere ki te mutunga o tēnei huarahi, ā, kei reira te kura.

E mōhio ana te ākonga ki te whakamahi i te āwhata hei whiriwhiri tawhiti i te mahere. Arā:

- Te hīkoi a Waitohu:  $150\text{m} + 300\text{m} + 100\text{m} + 200\text{m} = 750\text{m}$
- Te hīkoi a te tungāne:  $150\text{m} + 500\text{m} + 200\text{m} = 850\text{m}$

E mōhio ana te ākonga ki ngā ahunga o te kāpehu, ki te whakamahi hoki i te āwhata ki te whakatau tata i ngā tawhiti i te mahere. Arā, ko te C8 te wāhi tū o te whare karakia.