

Ākongā U: TAU 8

He kupu āwhina: Te mōhio ki te tamaiti

- Rā Whānau 12/2/2002
- Mōhio ki te reo Māori Tino mōhio ki te reo Māori
- Reo i te kainga; Ngā reo e rua
- Tau i te kura; 8
- Ngā mea pai ki a ia; Pāngarau, Pūtaiao, Hakinakina

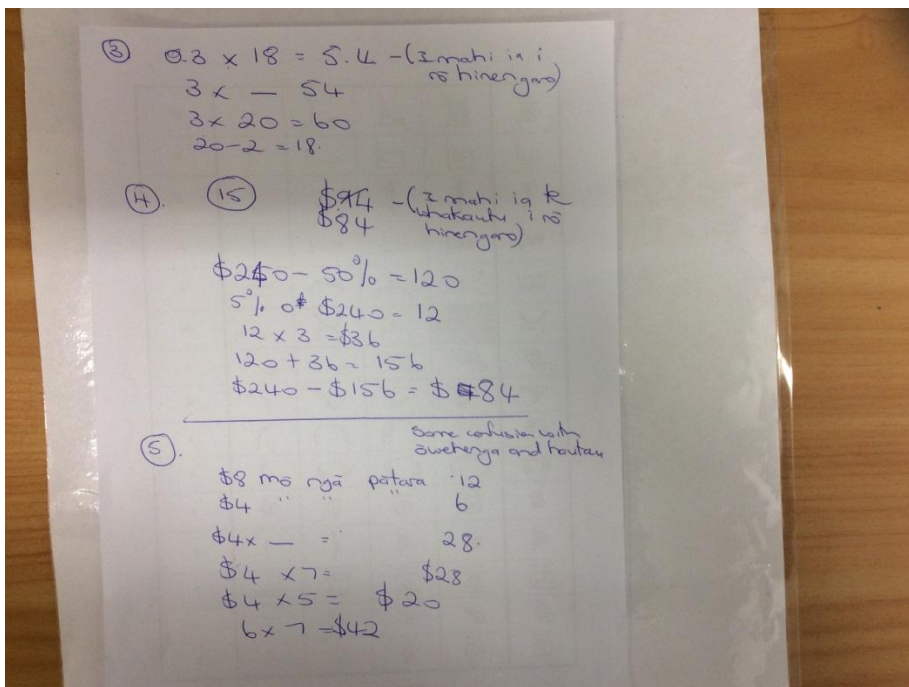
He aha ngā tūmomo mahi whakaatu i te ekenga panuku o te tamaiti

Tau:

- Tauria mai i Te Pūkete Aromatawai
- Tauria mahi - mai i te pukapuka tauria (modeling book)
- GLOSS- Rautaki Kaupae 8
- He Tau Anō Te Tau

Ine:

- Tauria whanaketanga
- Tauria mai i te pukapuka "Ine" (Tūhuratanga)
- Tauria mai i te pukapuka tauria (modeling book)
- Tauria mai i Te Pūkete Aromatawai



04/01/14 Rautaki Kaupae 8 - Tau 8
 Right column - whāwhāwhā - 5:1 - 5

① $6x \text{ — } = 108$

$6 \times 10 = 60$
 $6 \times 5 = 30$
 $6 \times 3 = 18$
 $= 108$

Pakāwhiri

$18 \times 5 = 90$

$18 \times 10 = 180 \div 2 = 90$

② $\frac{1}{4} = 25\%$

$\frac{1}{3} = 33.3\%$

$25\% + 33.3\%$

$72 \div 4 =$ (Sepad Audio)

$80 \div 4 = 20$

$20 - 2 = 18$

$72 \div 3 = 24$

$60 \div 3 = 20$

$12 \div 3 = 4$

$24 + 18 = 42$

$42 + \square = 72$

$42 + 30 = 72$

- Ngā piro 9
 Meremā

He hiatia nāna te tuhi i ōna
 whakaae i ngā wā katoa.

-- Nāi i te pukapuka tauira a kōkaiako
 Aromatawai Poto (Ke tehea te tauira kōkai ake)

wai arani : wai māori

$2 : 5 \quad / \quad 3 : 4$

3:4 i te mea he

75% ki te 40:

$7 : 15 \quad / \quad 3 : 6$ rānei?

3:6 i te mea

50%

$2:6$ ōwhenga māma no reira $1:3$

$\frac{2}{6} = \frac{1}{3}$ haitau māma

5.08 X ÷ Haitau. 1 Te Whakaae i te haitau ki te Tauira

Aromatawai Poto

1. Tokerimā ngā tāngata, he $\frac{3}{4}$ pihopita kua kōwhiri e tenā, e tenā o rātau. E hua ngā pareke kōwhiri kua kōwhiri?

Haitau nui ake i te kōwhiri $5 \frac{3}{4}$

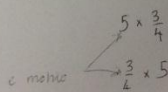
Haitau hōhōmi

Tau 8.

$\frac{3}{4} \times 5 = \frac{3}{4} + \frac{6}{4} + \frac{9}{4} + \frac{12}{4}$

$\frac{18}{4} = 4.5$

$\frac{15}{4}$

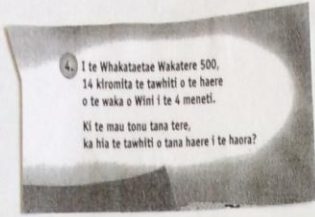


Hautau Pātata

Hei Mahi:

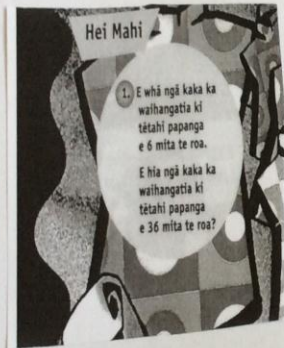
1. Tuhia tētahi hautau he paku nui ake i te kotahi. Whakamāramahia tō hautau me tōna paku nui ake i te kotahi. $\frac{21}{20}$
2. Tuhia kia tekau ngā hautau kei waenganui i te tahi me te hautau i tuhia e koe i te pātai tuatahi. $1.075 = 1\frac{1}{40}$ $0.25 = \frac{1}{4}$ $0.25 = \frac{1}{4}$ *Ke nui i te 1/4 he tahi eka*
3. Kua 11 ināipnei ngā hautau. Raupapahia ēnei hautau mai i te iti ki te rahi. $\frac{1}{4}, \frac{3}{16} = \frac{15}{64}, \frac{8}{16} = \frac{1}{2}, \frac{3}{8} = \frac{6}{16}, \frac{21}{20}, \frac{19}{5}, \frac{150}{75}$ *Whakamāramahia*
4. Tipakona te hautau kei waenganui o te raupapa. Mēnā koirā te taumaha manokaramu (kg) o tētahi poro fihī, e hia manokaramu te taumaha o ētahi o aua poro fihī tekau? $75 \times 10 = 750$
5. Tipakona tētahi atu o ngā hautau. Whiriwhiria te hautau hei tāpiri atu ki te hautau i tipakona e koe, kia eke ai te taapeke ki te 2. $\frac{3}{4} + \frac{6}{8} + \frac{1}{2} = 2$
 $0.75 + 0.75 = 1.5 + 0.5 = 2$

Tau 8 25/9/14



$$\begin{array}{l} \times 5 \downarrow 14 \text{ km} \\ \downarrow 70 \text{ km} \\ \times 2 \downarrow 140 \text{ km} \\ \times \frac{1}{2} \downarrow 210 \text{ km} \end{array}$$

$$\begin{array}{l} 4 \text{ meneti} \downarrow \times 5 \\ 20 \text{ meneti} \downarrow \times 2 \\ 40 \text{ meneti} \downarrow \times 2 \\ 60 \text{ meneti} \downarrow \times \frac{1}{2} \left(\frac{1}{2} \right) \end{array}$$



Kakahu

$$\begin{array}{l} \times 6 \left(\begin{array}{l} 4 \\ 24 \end{array} \right) \\ \downarrow 12 \end{array}$$

Roa o te papanga.

$$\begin{array}{l} 6 \text{ mita} \downarrow \times 6 \\ 36 \text{ mita} \downarrow \times 6 \\ 18 \text{ mita} \downarrow \div 2 \end{array}$$

Tau 8

$$1. 1L \div 3 = 33.\overline{3}$$

$$1L \div 3 = 33.\overline{3}$$

$$2L \div 3 = 6.\overline{6}L$$

$$2125mL \times 16 = 2L$$

$$125mL \times 8 = 1L$$

$$125mL \times 8 = 1L$$

3.

Tau 8

$$4.1.6L \times 4.5L$$

$$1.6L \times 0.5L = 0.8L$$

$$0.8L \times 9L = 7.2L$$

$$0.4L \times 4.5 =$$

$$0.4L \times 0.5L = 0.2L$$

$$0.2L \times 9 = 1.8L$$

$$1.6L \times 4.5L = 7.2L$$

$$0.4L \times 4.5L = 1.8L$$

$$1.8 + 7.2 = 9$$

Mai i te pukapuka tauira a te kaiako

Te Mahi Inenga

Hei Ārahi i te Aromatawai

Te Whakararu Wai Ārani: Taumata 4

Te pātai	Kaupae 6 (Whanaketanga 3a/3e)	Kaupae 7 (Whanaketanga 4a/4e)	Kaupae 8 (Whanaketanga 4e/5a)
1. He aha ētahi whiriwhiringa e toru mō te maha o ngā kapu me te rōrahi o te unu ki ia kapu?	<p>Ka whakamahia te tāpiri tāruaru hei whiriwhiri i ētahi tauwehe o te 2, o te 2,000 rānei. Hei tauira: 3a→</p> <ul style="list-style-type: none"> • $0.5 + 0.5 + 0.5 + 0.5 = 2$ (e 4 ngā kapu, 0.5L te rōrahi) • $400 + 400 + 400 + 400 = 2,000$ (e 5 ngā kapu, e 400mL te rōrahi) 	<p>Ka whakamahia ngā meka mōhio hei whiriwhiri i ētahi tauwehe o te 2, o te 2,000 rānei. Hei tauira: 4a→</p> <ul style="list-style-type: none"> • $4 \times 5 = 20$, nō reira, $0.4 \times 5 = 2$ (e 5 ngā kapu, 0.4L te rōrahi) • $2 \times 10 = 20$, nō reira, $200 \times 10 = 2,000$ (10 ngā kapu, e 200mL te rōrahi) 	<p>Ka whakamahia ngā meka mōhio me te whakaaro pānga riterite hei whiriwhiri i ētahi tauwehe o te 2, o te 2,000 rānei. Hei tauira: 4e→</p> <ul style="list-style-type: none"> • $5 \times 4 = 20$, nō reira, $2.5 \times 8 = 20$, nō reira, $250 \times 8 = 2,000$ (e 8 ngā kapu, e 250mL te rōrahi)
2. Mēnā 125mL te rōrahi ka tāhorongia ki ia ipu, e hia ngā kapu ka toea te whakaki?	<p>Ka whakamahia te tāpiri tāruaru, te rearua rānei. Hei tauira: 3a→</p> <ul style="list-style-type: none"> • $125 + 125 = 250$, $250 + 250 = 500$, $500 + 500 = 1,000$, $1,000 + 1,000 = 2,000$. • Nō reira, 16 ngā kapu, 125mL te rōrahi. 	<p>Ka whakamahia te rearua me ngā meka mōhio. Hei tauira: 4a→</p> <ul style="list-style-type: none"> • $125 + 125 = 250$, $250 + 250 = 500$, $500 \times 4 = 2,000$. • Nō reira, 16 ngā kapu, 125mL te rōrahi. 	<p>Ka whakamahia te rearua me ngā meka mōhio, me te whakaaro pānga riterite. Hei tauira: 4e→</p> <ul style="list-style-type: none"> • $2,000 \div 125 = 4,000 \div 250 = 8,000 \div 500 = 80 \div 5 = 16$
3. He aha te hautanga o te wai ārani me te wai māori ki ia ipu?	<p>Ka hurihia te 2L hei ritamono (2,000mL), ka hurihia rānei te 400mL hei rita (0.4L). Ka whakamahia te tāpiri tāruaru hei whiriwhiri i te hautanga. Hei tauira: 3a→</p> <ul style="list-style-type: none"> • $400 + 400 + 400 + 400 = 2,000$, nō reira, ko te 400mL he rite ki te $\frac{1}{5}$ o te 2L. Ko te $\frac{1}{5}$ te hautanga o te wai ārani. E mōhio ana ki te $\frac{4}{5} = 1$, nō reira, e $\frac{4}{5}$ te hautanga o te wai māori. 	<p>Ka hurihia te 2L hei ritamono (2,000mL), ka hurihia rānei te 400mL hei rita (0.4L). Ka whakamahia te whakaaro pānga riterite hei kimi hautanga ōrite. Hei tauira: 4a→</p> <ul style="list-style-type: none"> • $\frac{400}{2000} = \frac{200}{1000} = 0.2$, $\frac{1}{5}$ rānei • E mōhio ana ki te $\frac{4}{5} = 1$, te $0.2 + 0.8 = 1$ rānei, nō reira, e $\frac{4}{5}$ te hautanga o te wai māori, ko te 0.8 rānei. 	
4. Mēnā e hiahia ana a Niwa ki te whakararu i te 9L o te unu, he pēhea nei te rōrahi o te wai ārani me te rōrahi o te wai māori hei whakararu mānā? E whai ana ia kia pērā tonu te kaha o te ārani o te unu.		<p>Ka whakamahia te hautanga me te whakarea, te whakawehe rānei. Hei tauira: 4a→</p> <ul style="list-style-type: none"> • $\frac{1}{5}$ te hautanga o te wai ārani: • $\frac{1}{5}$ o te 9 = $9 \div 5 = 1\frac{4}{5}$ L • $\frac{1}{5} \times 9 = \frac{9}{5} = 1\frac{4}{5}$ L <p>Ka whakaoti tangohanga hei whiriwhiri i te rōrahi wai māori: $9 - 1\frac{4}{5} = 7\frac{1}{5}$ L</p>	<p>Ka whakamahia te whakaaro pānga riterite hei whiriwhiri i te ōwehenga ōrite. Hei tauira: 4e→</p> <ul style="list-style-type: none"> • $400\text{mL} \rightarrow 2\text{L}$, nō reira, $200\text{mL} \rightarrow 1\text{L}$, nō reira, $1,800\text{mL} \rightarrow 9\text{L}$ (wai ārani) <p>Ka whakaoti tangohanga hei whiriwhiri i te rōrahi wai māori:</p> <ul style="list-style-type: none"> • $9 - 1.8 = 7.2\text{L}$ • $9,000 - 1,800 = 7,200\text{mL}$
5. Mēnā ka whakararu te 300mL wai ārani me te 1.5L wai māori, he kaha ake, he ōrite, he ngoikore ake rānei te hā o te ārani?			<p>Ka whakamahia te whakaaro pānga riterite hei whakatarite ōwehenga. Hei tauira: 4e→</p> <ul style="list-style-type: none"> • $300:1,500 = 1:5$ $400:1,600 = 1:4$ • Nō reira, he ngoikore ake te hā o te ārani (nā te rahi ake o te wai māori) • $\frac{300}{1,800} = \frac{1}{6}$ te hautanga wai ārani • $\frac{400}{2,000} = \frac{2}{10} = \frac{1}{5}$ te hautanga wai ārani • He nui ake te $\frac{1}{5}$ i te $\frac{1}{6}$, nō reira, he ngoikore ake te hā o te ārani.

Mā i te pukapuka Tau 8,
taurua a te kaitiaki

He Pūkete Aromatawai Pāngarau

Te Whārangī Aromatawai mā te Pouako

Te Whakararu Wai Ārani: Taumata 4

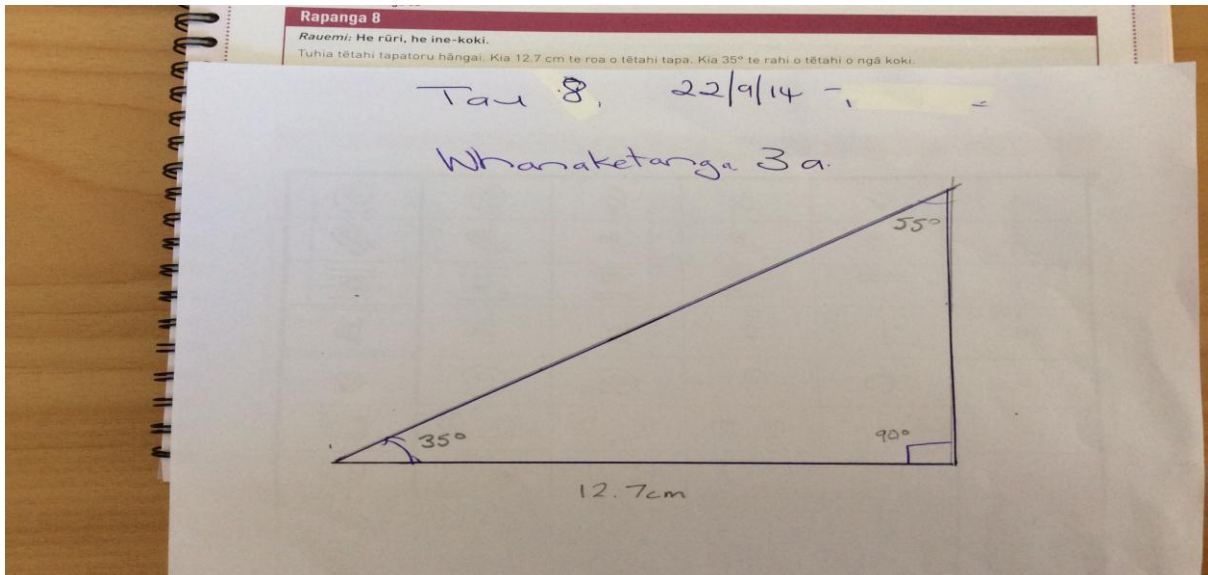
Te pātai	Ngā aromatawai a te pouako
1. He aha ētahi whiriwhiringa e tonu mā te maha o ngā kapu me te rōrahi o te unu ki ia kapu?	<p>E rua ngā whiringa 1/6 ^{33.3}</p> <p>nei. He pānga riterite 2/3 @ 6.6l</p> <p>te maha. ✓</p> <p>He aha te rōrahi? K7-8.</p> <p>$3/12 \div 4 = 0.25$</p> <p>$0.25 \times 2 = 0.5$</p> <p>500ml.</p>
2. Mēnā 125ml te rōrahi ka tāhorangia ki ia ipu, e hia ngā kapu ka toa te whakaki?	<p>He aha te maha?</p> <p>$125ml \times 4 = 500$ meke</p> <p>$500 \times 4 = 2000ml$ mērio</p> <p>nā reira 16 K7</p>
3. He aha te hautanga o te wai ārani me te wai māori ki ia ipu?	<p>Ka raru ia mā tēnei pātai.</p>
4. Mēnā e hiahia ana a Niwa ki te whakararu i te 9l o te unu, he pēhea nei te rōrahi o te wai ārani me te rōrahi o te wai māori hei whakararu māna? E whai ana ia kia pērā tonu te kaha o te ārani o te unu.	<p>1</p>

24/9/14 ^{IRE} Tau 8.

He Pūkete Aromatawai Pāngarau

Te Whārangi Aromatawai mā te Pouako Te Moutere: Taumata 3-4

Te pātai	Ngā aromatawai a te pouako
1. E tohu ana te rārangi kākāriki i te mahere i te aha?	Pari
2. Mēnā e tū ana te tangata ki te kea o te maunga, e titiro whakateuru ana, ka kite ia i te aha?	Toka
3. Mēnā e tū ana te tangata ki te kea o te maunga, pātēra nei te ahua o tana titiro, ka kite atu ia i te tāhuna?	Whakatearaki
4. Whakatao tatanga te ahunga mai i te maunga ki te repo, hei inenga pūtu.	0-5 km.
5. Whakamahia te ine-koki hei ine i te ahunga mai i te repo ki te toka.	He akonga poto - koki hāngai Whakamahia ine koki 30°
6. Whakatao tatanga te tawhiti o te haere tororika, mai i te tāhuna ki te ākua.	Ahua - 0.5km.
7. Tuhia tētahi ara hikoi ki waenganui i etahi o ngā wāhi e whakaaturia ana ki te moutere, kia pātato ki te 2km te tawhiti o te ara.	Imahi hē
8. Ka te ⁴³ (25) te takirua raupapa hei tohu i te wāhi e tū ana te maunga. He aha te takirua raupapa hei tohu i te wāhi e takoto ana te repo?	(22) - Kei te hē



Pitai		Hei Āwhina i te Aromatawai
3. Whakamahia tō rūri hei ine i ngā roa e hiahiaia ana hei whiriwhiri i te horahanga o ēnei tapatoru. Tuhia ngā horahanga ki te tūrohi:		E tika ana te whakamahi rūri hei ine rārangi ki te mitamano (mm) e pātata ana.
		E mohio ana ki te tātai horahanga o rētahi tapatoru, arā: <ul style="list-style-type: none"> • Ko te whakamahi tika i te ture tātai $H = \frac{1}{2}pt$. • Ko te tautohu i te pūtake me te tetēi o te tapatoru me te koki 90° i te pūtahitanga.
tapatoru	horahanga	
A		
E		
H		
I		

Tihei Pāngarau Aromatawai (Horahanga)

Tau 8

25/1/14

$$H = \frac{1}{2}pt$$

(I hoatu noa te ture)

$$\frac{1}{2} \times 2.5 \times 3$$

$$\frac{1}{2} \times 10 = 5$$

$$E. \frac{1}{2} \times 3 \times 3.5 = 5.25 \text{ cm}^2$$

$$H. \frac{1}{2} \times 3.5 \times 1.5 =$$

$$3.5 \times 1 = 3.5$$

$$3.5 \times 0.5 = 1.75$$

$$5.25 - 1.75 = 3.5$$

$$I. \frac{1}{2} \times 2 \times 4 = 4 \text{ cm}^2$$

Tapatoru	Horahanga
A	5 cm ²
E	5.25 cm ²
H	2.625 cm ²
I	4 cm ²