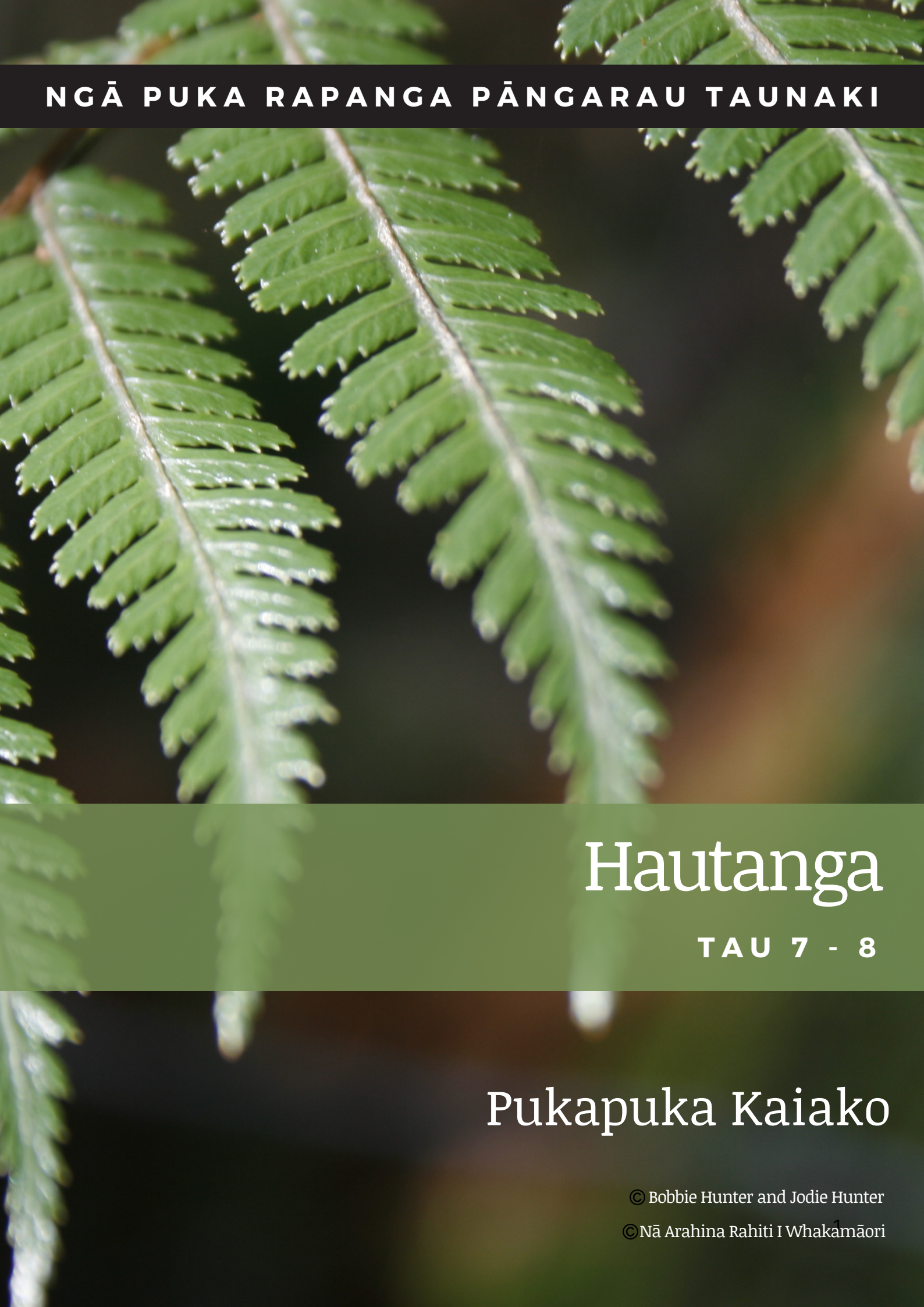




NGĀ PUKA RAPANGA PĀNGARAU TAUNAKI

Hautanga

TAU 7 - 8

Pukapuka Kaiako

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Tūmahi 1

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga kia nui ake i te kotahi hauwhā engari iti iho i te whitu huiwa? I a koe e mahi ana i ēnei tāhopu me te whakarite ki te whakamārama me te whakatika he aha i iti iho ai i te kotahi i te katoa.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga hei hanga i tētahi tau hautanga iti iho i te whā hauwaru engari neke atu i te kotahi hauwhitu? I a koe e mahi ana i ēnei tāhopu me te whakarite ki te whakamārama me te whakatika he aha i iti iho ai i te haurua.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga hei hanga i tētahi tau hautanga neke atu i te kotahi engari iti iho i te kotahi me te rua haurua? I a koe e mahi ana i ēnei tāhopu me te rite ki te whakamārama me te whakatika he aha i nui ake ai i te kotahi te katoa.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga hei hanga i tētahi tau hautanga e ōrite ana ki ngā rima hauwhā? I a koe e mahi ana i ēnei, tuhia ēnei, ā, kia rite ki te whakamārama me te whakatika he aha i ōrite ai.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga hei hanga i tētahi tau hautanga e ōrite ana ki hauwhitu e rua? I a koe e mahi ana i ēnei, tuhia ēnei, ā, kia rite ki te whakamārama me te whakatika he aha i ōrite ai.

Hei āwhina i te kaiako

I mua i te whakarewatanga, me tūhura ngā ākonga me te kōrero tahi mō te wā i whakamahia ai e rātou ngā hautanga i waho o te kura.

Me whakawātea ngā tāpa hautanga hei whakamahi mā ngā ākonga hei whakamatau me te whakatika.

Aroturuki mō ngā ākonga mā te whakamahi i ngā kupu tau hautanga (ehara i te wāhanga, i te moka rānei) me te nui ake i te, iti iho i te, ōrite ki te.

Tūmanako kia tohu ngā ākonga i ngā rauemi me te whakamahi i te tuhipoka tika me te tohu ōrite ($\frac{3}{4} = \frac{6}{8}$).

Ngā Whakaaro Matua o te Ao

He maha ngā āhuetanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Wā toha

Tīpakohia ngā ākonga ki te tiritiri nā wai i hanga ngā pahekotanga o te katoa, o ētahi atu hautanga rānei mā te whakamahi i ngā wāhanga rahi ōrite (hei tauira, haurua, hauwhā, hauwaru) me te tuhi i ngā pahekotanga hei tau, whārite, kupu rānei. Kātahi ka tīpako i ngā ākonga ki te tiritiri nā wai i hanga ngā pahekotanga o te katoa mā te whakamahi i ngā wāhanga hautanga rerekē (hei tauira, $\frac{1}{4} + \frac{2}{9}$ he nui ake i te hauwhā, he iti iho i te $\frac{7}{9}$) me te hopu i ngā pahekotanga hei tau, whārite, kupu rānei.

Hono

Hangaia ngā huinga hautanga e ōrite ana ki te $\frac{1}{4}$.

Ka kite koe i ētahi tauira, ture rānei he aha i ōrite ai ngā hautanga ki te $\frac{1}{4}$?
Hangaia ngā huinga hautanga e ōrite ana ki te $\frac{4}{5}$.

Ka kite koe i ētahi tauira, ture rānei me pēhea e kitea ai e koe ngā hautanga e ōrite ana ki te $\frac{4}{5}$?
Hangaia ngā huinga hautanga e ōrite ana ki te $\frac{2}{3}$.
Ka kite koe i ētahi tauira, ture rānei me pēhea e kitea ai e koe ngā hautanga e ōrite ana ki te $\frac{2}{3}$?

Whaingā Ako: Ka ako ngā mokopuna ki te:

Whakakotahitia me te whakakotahi anō i ngā wae hautanga rerekē kia kotahi te katoa.
Tautohu me te hanga hautanga ōrite.
Āhukahuka me te whakamahi i ngā hautanga hē hei tohu neke atu i te kotahi katoa.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau:
h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, haurua, hauwhā, hauru, hauono, huiwa, tau oti, ōrite, nui ake, iti iho i te, tauraro, taurunga

Ngā Tūmahi Takitahi

1. $\frac{1}{6}$ of 36 =

2. $\frac{5}{6}$ of 36 =

3. $\frac{1}{2}$ of 200 =

4. $\frac{2}{5}$ of 100 =

5. $\frac{3}{5}$ of 200 =

6. $\frac{1}{4}$ of 280 =

7. $\frac{2}{9}$ of 540 =

8. $\frac{3}{4}$ of 1 000 =

9. $\frac{1}{3}$ of ? = 24

10. $\frac{3}{9}$ of ? = 27

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 2

He tau kei waenga i ngā tau?

He aha tāu e whakautu ai, he aha hoki? Whakamātauria tō whakautu mā te tāhopu i ēnei e whai ake nei:

E 5 ngā tau ka puta mai pea i mua i te 1
15 ngā tau tērā pea ka haere mai i waenganui i te 5 me te 6

Kia rite ki te whakamahi i tētahi whakaaturanga me tētahi raina tau hei whakamātau kei reira ngā tau kua tuhia e koe, me ētahi atu mea

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga ki te kite i ngā hautanga ka taea te whakaatu mā te tauira pae (karo porowhita) me ngā raina tau. E whakaatu ana tēnei ka whakaarohia hoki ngā hautanga hei tau. I roto i te tūhononga tohua ngā hautanga (hei tauira, $\frac{1}{2}$) hei tau whkaranu me te tau oti hei tau tatau.

Aroturuki mō ngā ākonga mā te whakamahi i ngā kupu e whakawhāiti ana i te wehewehe, i te wehe rānei i te wehenga ōrite ki ngā wāhanga ōrite.

Kia mōhio ki ngā ākonga e kite ana i te ariā o ngā hautanga hei tau i waenga i ngā tau e tautohe ana. Tukua rātou ki te uaua me te hanga whakaaro mā te kōrero pāngarau me te whakamahi i te whakaae pāngarau me te whakahē pāngarau (hei tauira, e whakaae ana ahau nā te mea...).

Wā toha

Tīpakohia ngā ākonga hei tiritiri nā wai i whakawhanake i tētahi whakaaturanga me te tohu i te hautanga ki tētahi raina-tau. Tāngia tētahi raina-tau ki te papa, ka pātai atu ki ngā ākonga katoa e tiritiri ana kia tohu i te hautanga ki runga mā te whakawehe i te raina-tau.

Ngā Whakaaro Matua o te Ao

He maha ngā āhukatanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te pāhono ia hautanga ki tētahi ira ahurei i runga i te raina tau.

Kāore he hautanga iti rawa, nui rawa rānei i te raina tau.

He maha ngā hautanga mutunga kore i waenga i ngā hautanga e rua i te raina tau.

Hono

He aha ngā tau whāranu kei waenganui i te 5 me te 10?

Tohua ia ki tētahi raina-tau hei whakaatu kei hea rātou.

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakapūketetia ngā hautanga ki tētahi raina-tau.

Kimihia me te pāhono i ngā hautanga ki tētahi ira ahurei i te raina tau.

Kia mōhio koe he maha mutunga kore o ngā hautanga i waenga i ngā tau oti e rua, i ngā hautanga rānei e rua i runga i te raina tau.

Ngā Tūmahi Takitahi

Tuhia he huinga pātai 10 mā te whakamahi i ngā mōhiotanga hautanga katoa kei a koe. Me mātua tuhi koe i te whakautu ki muri o ia pātai.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, haurua, hauwhā, hatoru, hauono, hautekau mā rua, hauwaru, hautanga, tau oti, ōrite, tau whakaranu, nui ake, iti iho i te, tauraro, taurunga

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 3

Kei te tautohetohe a Hoani rāua ko Hēnare mo a rāua mahi kāinga. I tonoa rāua kia tonu i tētahi huinga hautanga mai i te iti rawa ki te nui rawa.

Kua whakahaua e Hoani ngā hautanga i runga i tēnei raupapa:

$$\frac{3}{4} \quad \frac{4}{5} \quad \frac{7}{10} \quad \frac{10}{12} \quad \frac{12}{15}$$

E whakahē ana a Hēnare ki a Hoani. Hei whakamatau i tana kīanga, ka whakamārama a Henry ki a Hoani i tētahi huarahi rerekē ki te raupapa i ngā hautau. Whakamahia ngā whakaaturanga tae atu ki tētahi raina tau hei whakaatu me pēhea te raupapa i ngā hautanga mai i te iti rawa ki te nui rawa.

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga ki te kite ko te tautapa e tohu ana i te maha o ngā wāhanga kua wehea te katoa, ā, ko te tau e tohu ana i te maha o ngā wāhanga.

Tūmanako kia tohu ngā ākonga mā te whakamahi i ngā whakaaturanga maha tae atu ki te whakamahi i tētahi raina tau, i ngā paraka tapawhā rānei e ōrite ana te rahi.

I roto i te hononga, ka taea e ngā ākonga te whakawhānui ko te nui ake o te tautapa, ko te iti ake o te wāhanga hautanga e toe ana, engari, me whakangāwari rātou ki te mōhio e pā ana tēnei ki ngā hautanga wae anake, ā, ehara i te ture mō ngā hautanga katoa.

Wā toha

Tīpakohia ngā ākonga ki te tiritiri nā wai i tahuri hautanga ki ngā hautanga ōrite mā te whakamahi i ngā tikanga ōpaki me ngā whakaaturanga i mua i te whakataurite i ngā hautau. Mēnā i hurihia e ētahi ākonga ngā hautanga katoa ki tētahi tautapa noa i te tīpako kia tiritiri whakamutunga.

Ngā Whakaaro Matua o te Ao

He maha ngā āhuatanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & $b \neq 0$), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Hono

Whakaraupapatia ēnei mai i te iti rawa ki te nui rawa mā te kimi i te tauraro pūnoa iti rawa

$$\frac{9}{10} \quad \frac{1}{2} \quad \frac{5}{6} \quad \frac{14}{15} \quad \frac{2}{3} \quad \frac{4}{5}$$

Tautoko i ngā ākonga ki te tuhipoka:

4, 8, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56

7, 14, 21, 28, 35, 42, 49, 56

6, 32, 48, 56

Me mātua whakarite kia whakawhānuitia e ngā ākonga te tukanga kimi i te mea tiketike.

Whainga Ako: Ka ako ngā mokopuna ki te:

Raupapa me te whakataurite i ngā hautau.

Kimihia ngā hautanga ōrite.

Ngā Tūmahi Takitahi

Purua ēnei hautanga ki tētahi raina tau kia raupapa rahi.

1. $\frac{5}{6}, \frac{2}{3}, \frac{7}{9}$

2. $\frac{3}{4}, \frac{5}{8}, \frac{7}{12}$

3. $\frac{7}{8}, \frac{11}{12}, \frac{10}{11}$

4. $\frac{3}{8}, \frac{5}{7}, \frac{1}{2}$

5. $\frac{5}{6}, \frac{8}{12}, \frac{7}{9}$

6. $\frac{11}{16}, \frac{5}{8}, \frac{7}{12}$

7. $\frac{7}{8}, \frac{2}{3}, \frac{3}{4}$

8. $\frac{1}{4}, \frac{3}{8}, \frac{1}{3}$

Mō ia huinga hautau, he aha te ture, te tauira rānei i whakamahia e koe hei āwhina i a koe?

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, hauwhā, tuawhā, hauru, hauono, hautekau mā rua, hauwaru, huiwa, hautekau mā rima, hautanga, ōrite, tau whakaranu, nui ake, iti iho i te, tauraro, taurunga.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 4

Kei te hanga te whānau o Mele i tētahi le toga mo te whare karakia.
I tērā marama kua oti i a rātau e toru hauwaru.
I arokē tērā wiki nā reira i oti noa iho i a rātau tētahi atu hautoru. I tēnei wiki kua oti i a rātau tētahi atu hauwhā.
E hia ngā mea kua oti i a rātau, ā, e hia anō ngā mahi hei whakaoti?

Hei āwhina i te kaiako

He whāriki tāonga te le toga nō Hamoa.

I te wā o te whakarewatanga, me mātua mōhio ngā ākonga ki ēnei he hiranga ahurea nui (kaua rawa e whakamahia hei whāriki papa).
Whakatū i ngā tikanga pāngarau mā te whakamahi i te ariā me pēhea te mahi tahi a te rōpū tāngata hei whānau ki te hanga whāriki pai.

Whakangāwari i ngā ākonga kia mōhio kia ōrite ngā hautanga hei tāpiri hautau.

Aroturuki mō ngā ākonga e whakamahi ana i ngā kupu ōrite me te whakaaro whanaungatanga.

Tirohia ngā ākonga e whakaatu ana i te māramatanga whanaungatanga ($\frac{3}{8}$ hei $\frac{1}{8} + \frac{1}{4}$, hei $\frac{6}{16}$).

I roto i te tūhono whakawhanake i tētahi whaka- whānuitanga mō ngā ture ki te kimi i tētahi taumaha noa mā te kimi i tētahi taurea noa.

Wā toha

Tīpakohia ngā ākonga hei tiritiri nā wai i tahuri hautanga ki ngā hautanga ōrite mā te whakamahi i ngā tikanga ōpaki, ōkawa ake rānei (whakareatanga hei tauira) i mua i te tāpiritanga o ngā hautau.

Ngā Whakaaro Matua o te Ao

He maha ngā āhuatanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga hei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Hono

He aha ngā tautapa noa mō:

$$\frac{1}{4} \text{ me te } \frac{1}{8}$$

$$\frac{1}{5} \text{ me te } \frac{1}{10}$$

$$\frac{1}{2} \text{ me te } \frac{1}{6}, \frac{1}{8}$$

$$\frac{1}{9} \text{ me te } \frac{1}{4}, \frac{2}{3}$$

$$\frac{5}{7} \text{ me te } \frac{2}{6}, \frac{1}{3}$$

He aha tāu e kite ai mō te kimi i tētahi tautapa noa?

Ka taea e koe te whakaahua i tētahi ture hei whakamahi ina tāpiri hautanga me ngā tautapa rerekē?

Whainga Ako: Ka ako ngā mokopuna ki te:

Huriahia ngā hautanga ki ngā hautanga ōrite.

Whakaotia ngā raru e pā ana ki te tāpiri, ki te tango rānei i ngā hautanga.

Ngā Tūmahi Takitahi

Tāpirihia ēnei hautanga:

$$1. \frac{1}{10} + \frac{1}{2} + \frac{1}{6} =$$

$$2. \frac{1}{15} + \frac{1}{3} + \frac{1}{5} =$$

$$3. \frac{2}{12} + \frac{1}{2} + \frac{3}{4} =$$

$$4. \frac{2}{3} + \frac{5}{6} + \frac{6}{8} =$$

$$5. \frac{2}{5} + \frac{3}{8} + \frac{1}{10} =$$

$$6. \frac{3}{4} + \frac{1}{3} + \frac{4}{5} =$$

$$7. \frac{1}{8} + \frac{1}{7} + \frac{1}{3} =$$

He aha ngā tauira e kitea ana e koe?

Whakapūketetia te ture ka taea e koe te whakamahi hei kimi i te tautapa noa.

Ngā Whakaaro Matua o te Ao

He ōrite ngā pānga o ngā mahi mō te tāpiri me te tangohanga ki ngā hautanga me ngā ā-ira ki ērā me ngā tau oti.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoatia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau:
h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Reo Pāngarau

*Katoa, hauwhā, tuawhā,
hatoru, hauono,
hautekau mā rua,
hauwaru, huiwa,
hautekau mā rima,
hautanga, ōrite, nui ake,
iti iho i te, tau whakaranu,
tauraro, taurunga.*

Tūmahi 5

He pēhea te pai o ō pūkenga whakatau tata? Ko tēhea te whakautu e tata ana ki te?

1. $\frac{1}{12} + \frac{7}{8} =$

Ko te 20, $8\frac{1}{2}$, 1?

2. $\frac{8}{9} + \frac{11}{12} =$

Ko te 19, $1\frac{3}{4}$, 2, $1\frac{1}{2}$?

3. $\frac{6}{7} - \frac{1}{2} =$

Ko te $\frac{1}{2}$, 1, 5?

4. $9\frac{3}{4} - 5\frac{5}{6} =$

Ko te 4, $3\frac{1}{2}$, 3?

Kia rite ki te whakatika i tō whakaaro mā te whakamahi i ngā huarahi rerekē e rua.

Hei āwhina i te kaiako

Whakapakari ki ngā ākonga ko te whakatau tata he utauta whakaaro, ā, me whakamahi i ngā wā katoa kia mōhio ai ki te rahi o te tau.

Kia mōhio ki ngā ākonga e whakaaro ana i te rahi o ngā hautau, kaua e mahi i tētahi hātepe kia whiwhi ai i te whakautu tūturu.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai i whakatau tata i te rahi o ngā hautanga i roto i te whārite, kātahi ka whakatau tata i te rahi o te whakautu whānui, kaua e hoatu i te whakautu tūturu.

Ngā Whakaaro Matua o te Ao

He maha ngā āhuratanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Hono

Ko ēhea he nui ake i te kotahi, iti iho rānei i te kotahi?

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

$$\frac{2}{8} + \frac{2}{8} + \frac{2}{8} + \frac{2}{8} + \frac{2}{8}$$

$$\frac{1}{2} + \frac{3}{4}$$

$$\frac{19}{20} + \frac{1}{10}$$

$$\frac{1}{100} + \frac{1}{20}$$

He aha tāu e kite nei? Kia rite ki te whakamārama me te whakatika i tō whakaaro.

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakatau tata i te hua o tētahi mahi ki te katoa tata, ki tētahi wāhanga rānei o te tau oti.

Ngā Whakaaro Matua o te Ao

He ōrite ngā pānga o ngā mahi mō te tāpiri me te tangohanga ki ngā hautanga me ngā ā-ira ki ērā me ngā tau oti.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoatia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Ngā Tūmahi Takitahi

Whakaotia ēnei whārite mā te whakatau tata hei utauta whakaaro māu. Homai he whakatikatika mō ia whakautu me te kore e mahi i te whakautu tūturu.

Whakapūketetia mēnā he nui ake, he iti iho rānei i te $\frac{1}{2}$?

$$\frac{2}{5} + \frac{1}{10}$$

$$\frac{1}{4} + \frac{3}{8}$$

$$\frac{1}{3} + \frac{1}{6}$$

$$\frac{3}{7} + \frac{1}{4}$$

Whakapūketetia mēnā he nui ake, he iti iho rānei i te 2?

$$\frac{3}{4} + \frac{9}{12} + \frac{1}{2}$$

$$\frac{17}{20} + \frac{7}{8} + \frac{9}{10}$$

$$3\frac{1}{6} - 1$$

$$3\frac{3}{4} - 1\frac{1}{2}$$

Nā, ko tō wā ki te tuhi i tētahi huinga pātai tekau hei whakautu mā ō hoa akomanga e ōrite ana ki ērā o runga ake nei.

Ngā Whakaaro Matua o te Ao

He ōrite ngā pānga o ngā mahi mō te tāpiri me te tangohanga ki ngā hautanga me ngā ā-ira ki ērā me ngā tau oti.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoatia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Reo Pāngarau

*Katoa, hauwhā, tuawhā,
hatoru, hauono, ōrite,
tauraro, taurunga.*

Tūmahi 6

E haere ana te motokā i te $\frac{5}{6}$ kiromita i roto i te meneti kotahi. E hia kiromita ka haere te motokā i muri i te 11 meneti?

E hiahia ana e te tohuta hei hanga pihikete 12 te $\frac{2}{3}$ o te kapu huka. E hiahia ana a Litea ki te hanga pihikete mō tōna pokapū i te kura, e 84 ngā ākonga. E hia te huka e hiahia ana e Litea?

Kei te whakarite a Timo i ngā pēke arani paku hei hoko i te māketi o te rohe. Kei ia pēke te $\frac{3}{4}$ kirokaramu o tea rani. Me whakarite e Timo kia 15 ngā pēke hei hoko, e hia kirokaramu arani e hiahia ana e ia hei whakakī i ngā pēke?

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga kia kite i te hiahia ki te whakaaro i te hautanga hei wāhanga o te katoa kotahi.

Aroturuki mō ngā ākonga kua arotahi tonu ki te maha o ngā wāhanga wae i te katoa, ā, i mōhio hoki ko te rahi o ngā wāhanga e whakatau ana i te maha o ngā katoa.

Kia mōhio ki ngā ākonga e whakamahi ana i tētahi tauira hei whakaatu i ā rātou whakaaro. Mēnā ka whakamahi ngā ākonga i tētahi hātepe ōkawa, tūmanako kia taea e rātou te whakamārama i runga i ngā huarahi whai whakaaro.

Kimihia ngā ākonga me te miramira i te hunga e mōhio ana ki te āhuatanga whakawhitiwhiti.

Wā toha

Tīpakohia ngā ākonga e whakamahi ana i te tāpiritanga tukurua mō ngā tau hautanga (hei tauira, tāpiri $\frac{5}{6}$ 11 ngā wā), te whakatika rānei i te raru hei $= 11 \times \frac{55}{6}, \frac{91}{6}$ rānei. Ki te kore e whakamahia te rongoā whakarea tuarua, whakatauiria hei huarahi anō kua whakamahia e te ākonga i mua

Ngā Whakaaro Matua o te Ao

He maha ngā āhuatanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & $b \neq 0$), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Hono

$$\frac{55}{6} = ?$$

$$\frac{14}{3} = ?$$

$$\frac{45}{4} = ?$$

He aha ngā tauira ka kitea e koe ina huri i tētahi hautanga hē ki tētahi tau whakaranu?

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakareatia te hautanga ki te hautanga.

Tohu i te whakareatanga o ngā hautanga mā te tauira pouaka.

Ngā Tūmahi Takitahi

Kei te whakarite a Dion i ngā pēke āporo hei hoko i te māketē paetata. Kei ia pēke te 1 me te $\frac{1}{2}$ kirokaramu o ngā arani. Me whakarite e Dion kia 20 ngā pēke hei hoko, e hia ngā kirokaramu āporo e hiahiatia ana e ia hei whakakī i ngā pēke?

Ka haere te paihikara i te $\frac{2}{5}$ kiromita i roto i te meneti kotahi. E hia kiromita ka haere te paihikara i muri i te 23 meneti?

Ko te tohuta hei hanga i ngā wāhanga 20 o te tiakarete e hiahiatia ana kia $\frac{7}{8}$ o te kapu huka. E hiahia ana a Stella ki te hanga i te nui o te tiakarete mō tōna pokapū i te kura, e 120 ngā ākonga. E hia te nui o te huka e hiahiatia ana e Stella?

Ngā Whakaaro Matua o te Ao

He ōrite ngā pānga o ngā mahi mō te tāpiri me te tangohanga ki ngā hautanga me ngā ā-ira ki ērā me ngā tau oti.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoatia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Reo Pāngarau

*Katoa, haurua, hauwhā,
tuawhā, hauroru, ōrite,
tau whakaranu, tauraro,
taurunga.*

Tūmahi 7

Kei te whakarite a Ilapesi rāua ko Sela i te inu Otai mo ā rāua karaehe. Anei ngā kai o roto mo ngā tangata e whā:

- 1 $\frac{3}{4}$ kapu paina
- 3 $\frac{1}{2}$ kapu merengi
- $\frac{5}{6}$ kapu kokonati
- $\frac{4}{5}$ kapu miraka kokonati
- 1 rēmana
- $\frac{7}{8}$ kapu wai kokonati
- $\frac{2}{3}$ kapu raima
- 2 $\frac{2}{5}$ kapu poro hukapapa

E hiahia ana rāua kia whakarite he Otai mo ngā tangata 32. Tuhia he rārangi o te tapeke o ia mea e hiahiatia ana e rātou.

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga kia kite he taurea o te tau hautanga ka taea e rātou te tāpiri, te whakarea rānei.

Tirohia ngā ākonga e whakamahi ana i te whakaaro whakarea. Tirohia hoki, ā, tukua ngā ākonga kia uaua ki te mātāpono ātete o te whakarea i tētahi tau oti ki tētahi tau hautanga e iti ake ai te hua, kaua e nui ake.

Me wātea he rauemi raima mēnā e hiahiatia ana hei tīpako mā ngā ākonga (hei tauira, ngā tāpa hautanga).

Tūmanakohia kia whakaaturia e ngā ākonga mā te whakamahi i ngā tātuhī, i ngā raina-tau, i ngā wāhanga hautanga rānei hei tohu i ngā wāhanga o te katoa me te whakamārama mā te tuhipoka.

Wā toha

Tīpakohia ngā ākonga e whakamahi ana i te tāpiritanga tukurua mō ngā tau hautanga (whakaoti rānei i te raru hei whakareatanga. Ki te kore e whakamahia te rongoā whakarea tuarua, whakatauirā hei huarahi anō kua whakamahia e te ākonga i mua.

Ngā Whakaaro Matua o te Ao

He maha ngā āhukatanga rerekē e taea ai te whakaahua i ngā tau, tae atu ki ngā hautanga.

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & $b \neq 0$), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $\frac{2}{3} = 2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{2}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Hono

$$\frac{2}{5} \times 8 =$$

$$\frac{4}{9} \times 12 =$$

$$\frac{7}{10} \times 9 =$$

He aha ngā tauira ka kitea e koe ina whakarea ngā hautanga?

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakareatia te hautanga ki te hautanga.

Tohu i te whakareatanga o ngā hautanga mā te whakaaturanga

Ngā Tūmahi Takitahi

I whakakāia e Gabriella e 5 ngā karaehe ki te $\frac{2}{3}$ rīta sprite i roto i ia karaehe.

E hia te nui o te sprite i whakamahia e Gabriella?

He pehapeha $\frac{3}{4}$ e toe ana ki a koe. Ki te hoatu e koe te $\frac{1}{3}$ pehapeha ki tō whanaunga, e hia te nui o te pehapeha katoa ka riro i tō tuakana?

E $2\frac{1}{2}$ ngā ngongo peita i whakamahia e Louise. Kei ia ngongo $\frac{4}{5}$ te karamu peita. E hia karamu peita i whakamahia e Louise?

Ngā Whakaaro Matua o te Ao

Ka taea te whakaingoa i ngā kīanga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira,

$$\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4};$$

$$26 \times 4 = (20 + 6) \times 4).$$

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Reo Pāngarau

*Katoa, hautoru,
hautekau, ōrite, tauraro,
taurunga, tauraro pātahi*

Tūmahi 8

Kai te āwhina koe ki te hanga ula lone mo te hākari. He pēke hua rākau hei whakamahi hei hanga i ia ula lone.

Ka hoatu e tō Māmā ki a koe e 4 me $\frac{3}{4}$ ngā pēke hua rākau.

Ka kitea e koe i te toharite ka whakamahia e koe he $\frac{2}{3}$ pēke hua rākau hei hanga i ia ula lone.

Ka pau katoa i a koe nga paheketanga hua rākau kei a koe. E hia ngā ule lone i mahia katoatia e koe?

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga kia kite he maha ngā tau hautanga ka taea e rātou te tango auau.

Kia mōhio ki ngā ākonga e whakamahi ana i ngā whanaungatanga hei whakaoti i ēnei raruraru kupu. Hei tauira, ko te nuinga o ngā ākonga ka auau te tāpiri, te tango rānei, engari ka kite i ngā ākonga e kite ana i te pātahitanga hei rōpū o ngā huarahi whakarea.

Aroturuki mō ngā ākonga e whakaaro ana ina whakawehe mā te tau hautanga ka nui ake te moni hua, kaua e iti iho ina whakawehe ki te tau oti. Hopu me te tūhura me ngā ākonga.

I roto i te tūhono, pēhia ngā ākonga kia whakaarohia te wehenga hautanga e hia ngā wā ka taea e tētahi mea te haere ki roto... kia tangohia.

Wā toha

Tīpakohia ngā ākonga e whakamahi ana i te wehenga inenga (tangohanga tukurua hei wehenga, hei tauira, $4\frac{3}{4} - \frac{2}{3} - \frac{2}{3} - \frac{2}{3} \dots$) e whakamahi ana rānei i te pātahitanga kōaro o te whakareatanga me te wehenga ($\frac{2}{3} \times ? = 4$) rānei ($\frac{2}{3} + \frac{2}{3} + \frac{2}{3} \dots = 4$). Ki te kore e whakamahia tētahi o ngā rongoā, whakatauiria hei huarahi anō kua kitea e te kaiako e whakamahia ana i mua.

Ngā Whakaaro Matua o te Ao

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite. Ko te tau o raro i roto i te hautanga e whakaatu ana e hia ngā wāhanga ōrite e wehea ana te katoa, te wae rānei.

Ko te tau o runga e whakaatu ana e hia ngā wāhanga ōrite e tohua ana.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā $\frac{2}{3}$ wāhanga kei reira ia $\frac{2}{3}$ wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoaia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Ka taea te whakaingoa i ngā kianga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira, $\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4}$; $26 \times 4 = (20 + 6) \times 4$).

Hono

Tonoa ngā ākonga ki te whakamārama me pēhea e whakaoti ai koe i ngā raruraru e whai ake nei mā te wehewehenga (tangohanga tukurua), te whakarea rānei (tāpiritanga tukurua):

Ka tangohia he $\frac{1}{6}$ pēke mīhini mo te 1 ula lole.
E 1 aku pēke rare, e hia ngā ula lole ka taea e au te mahi?
E 2 aku pēke rare, e hia ngā ula lole ka taea e au te mahi?
E 10 aku pēke rare, e hia ngā ula lole ka taea e au te mahi?
He $\frac{1}{2}$ pēke rare tāku, e hia ngā ula lole ka taea e au te mahi?
He $2\frac{1}{2}$ aku pēke rare, e hia ngā ula lole ka taea e au te mahi?

He aha te tauira e kitea ana e koe?

Ka taea e koe te whakaahua he aha tāu e mahi ana ina wehe koe ki tētahi hautanga?

Whainga Ako: Ka ako ngā mokopuna ki te:

Wehea te tau whāranu ki te hautanga.

Whakamahia te tangohanga tukurua hei whakatika i ngā raru whakawehenga.

Ngā Tūmahi Takitahi

Kai te āwhina koe ki te hanga ula lole mo te hākari. He pēke hua rākau hei whakamahi hei hanga i ia ula lole.

Ka hoatu e tō Māmā ki a koe e 4 me $\frac{5}{6}$ ngā pēke hua rākau.
Ka kitea e koe i te toharite ka whakamahia e koe he $\frac{4}{5}$ pēke hua rākau hei hanga i ia ula lole.

Ka pau katoa i a koe nga paheketanga hua rākau kei a koe. E hia ngā ule lole i mahia katoatia e koe?

Tāhopu i tētahi whakamāramatanga hei kōrero ki tētahi atu he aha te mea nui o te wehe hautau.

Kai te āwhina koe ki te hanga ula lole mo te hākari. He pēke hua rākau hei whakamahi hei hanga i ia ula lole.
Ka hoatu e tō Māmā ki a koe e 8 me $\frac{3}{4}$ ngā pēke hua rākau.
Ka kitea e koe i te toharite ka whakamahia e koe he $\frac{7}{9}$ pēke hua rākau hei hanga i ia ula lole.

Ka pau i a koe te nuinga o ngā pahū hua rākau kei a koe. E hia ngā ule lola i mahia katoatia e koe?

Tāhopu i tētahi whakamāramatanga hei kōrero ki tētahi atu he aha te mea nui o te wehe hautau.

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau:
h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, haurua, hauwhā, tuawhā, tau oti, ōrite, tau whakaranu, tauraro, taurunga

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 9

Kōtahi hāora me te haurima tā Koro ki te whakaoti ētahi mahi e toru i te kāinga.

E hia te wā e mahia ana e ia mahi?

Whakatikaina tēnei raru mā te raina tau me ngā kaitatau.

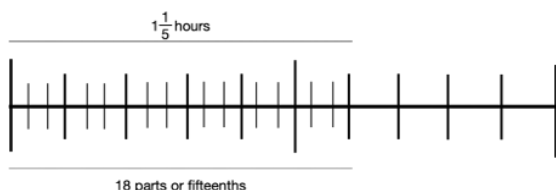
Ināianei whakamātauria tō whakautu ki te rongoā i roto i ngā meneti.

Hei āwhina i te kaiako

I te wā o te whakarewatanga, ka taea ngā ākonga te mahi i te rongoā mā te whakamahi i ngā meneti, engari me whakamahi hoki rātou i tētahi raina tau me ngā kaitatau hei whakaaturanga o ā rātou whakaaro.

Whakawātea i ngā kaitatau me ngā raina tau putua.

Whakangāwari i ngā ākonga kia kite ko tētahi huarahi ko te wehe i ia rima ki ngā wāhanga e 3. Ko te whakaaturanga raina tau e whai ake nei:



Hei tohu me ngā kaitatau, me wehe ia rima ki ngā wāhanga e toru. Ka whakamahia e rātou he huinga kaitatau 15 hei katoa i roto i te huānga o te 5 rota o te 3 me te huānga tuarua o te 3 mō te wāhanga o te haora e whai ake nei kia 1 haora te wā. E 18 ō rātou kaikaute katoa

Wā toha

Tīpakohia ngā ākonga hei tiritiri e āhei ana ki te whakatika i tā rātou whakamārama mā te whakamahi i ngā raina tau me ngā kaitatau hei tohu i tā rātou rongoā.

Ngā Whakaaro Matua o te Ao

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite. Ko te tau o raro i roto i te hautanga e whakaatu ana e hia ngā wāhanga ōrite e wehea ana te katoa, te wae rānei.

Ko te tau o runga e whakaatu ana e hia ngā wāhanga ōrite e tohua ana.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & $b \neq 0$), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā $\frac{2}{3}$ wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoaatia anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Ka taea te whakaingoa i ngā kianga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira, $\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4}$; $26 \times 4 = (20 + 6) \times 4$).

Hono

He aha te hautanga e hiahia ana koe ki te mahi mēnā kei a ia:

2 ngā mahi i roto i te 2 me $\frac{1}{7}$ o ngā haora?

E 4 ngā mahi i roto i te 3 me $\frac{1}{5}$ o ngā haora?

7 ngā mahi i roto i te 1 me te $\frac{1}{2}$ haora?

He aha te tauira ka kitea e koe?

Whainga Ako: Ka ako ngā mokopuna ki te:

Wehea te tau whāranu ki te hautanga.

Whakamahia te tangohanga tukurua hei whakatika i ngā raru whakawehenga.

Ngā Tūmahī Takitahi

Whakaotia ēnei whārite:

$$\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} = __ \times __ = __$$
$$4 \times __ = \frac{5}{6} + \frac{5}{6} + \frac{5}{6} + \frac{5}{6} =$$
$$\frac{4}{7} + ? = 2 \times \frac{4}{7} =$$
$$\frac{3}{8} \times __ = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$
$$3 \div \frac{1}{2} =$$

Tuhia tētahi raru pūrākau e ōrite ana ki ēnei whārite, ka whakaoti

$$\frac{4}{5} \times 6 =$$
$$\frac{2}{3} + \frac{7}{9} =$$
$$6 \div \frac{2}{7} =$$
$$5 \div \frac{5}{6} =$$

Marautanga

Tau 7
Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8
Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, hauwhā, tuawhā, ōrite, tauraro, taurunga, tauroro pātahi.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 10

Kai te whakakā a Māmā i te ipu penehīni.

Kua kī $\frac{1}{3}$ te ipu penehīni, ā, e mapu ana ia i te 35 rīta ki roto i te kura.

Ināiane kua kī $\frac{4}{5}$ te ipu.

E hia ngā rīta e hiahiatia ana hei whakakā katoa i te ipu?

Me mātua whakarite ka taea e koe te whakatika i tō whakamārama mā te whakamahi i ngā whakaaturanga me te tuhipoka.

Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakangāwari i ngā ākonga kia kite ka tīmata pea ngā raruraru tau oti me ngā raruraru tau hautanga i te tīmatanga tē mōhiotia, ka huri rānei i ngā raruraru tē mōhiotia, ā, kāore i te hua kāore i te mōhiotia anake.

Tūmanako kia whakaaturia e ngā ākonga ō rātou whakaaro mā te whakamahi i ngā hoahoa e rua (pouaka tapawhā mō ngā hautau), ngā raina-tau, me te tuhipoka.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai i tohu i te rapanga hei $\frac{1}{3} + \underline{\hspace{1cm}}$ [35] = $\frac{4}{5}$ ā, kua whakamahi i tētahi taumaha me te tautapa noa mō te tuatoru me te rima hei whakatika i te raruraru me te whakaaturanga.

Hono

Whakapuakina ngā kōrero o ngā mea e mōhio ana koe he pono i ngā wā katoa mō ngā hautanga. Tūhura, whakamātauria ēnei.

Whainga Ako: Ka ako ngā mokopuna ki te:

Kimihia me te whakataurite i ngā hautanga ōrite.

Tāpirihia me te tango hautau.

Kimihia ngā hautanga o tētahi huinga.

Ngā Whakaaro Matua o te Ao

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite. Ko te tau o raro i roto i te hautanga e whakaatu ana e hia ngā wāhanga ōrite e wehea ana te katoa, te wae rānei.

Ko te tau o runga e whakaatu ana e hia ngā wāhanga ōrite e tohua ana.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b ≠ 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā $\frac{2}{3}$ wāhanga kei reira ia wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā hohenga o te ao tūturu mō te tāpiritanga me te tangohanga o ngā tau oti, mō ngā mahi me ngā hautanga me ngā ā-ira.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoa anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Ka taea te whakaingoa i ngā kianga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira, $\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4}$; $26 \times 4 = (20 + 6) \times 4$).

Ngā Tūmahi Takitahi

Kua hoatu he keke ki a Marika hai whakapaipai. E 108 nga rekareka e hoatu ana ki a ia hai whakapaipai. Ka whakatau a ia ki te wehe i te keke kia toru ngā wāhanga me te whakarākau i ia wāhanga, engari he rerekē te wāhanga o ngā rekareka i ia wāhanga.

Ka purua e ia ana rekareka $\frac{4}{6}$ ki te wāhanga tuatahi.

Ka purua e ia nga rekareka $\frac{2}{9}$ ki te wāhanga tuarua.

Ka purua e ia nga rekareka $\frac{1}{12}$ ki te wāhanga tuatoru. E hia ngā mīhini e purua ana e ia ki ia wāhanga?

Kei te hanga otai a Marika. Mō ia pounamu otai e hiahiatia ana e ia:

1 me $\frac{1}{2}$ ngā kapu paina.

3 me $\frac{2}{3}$ ngā kapu merengi.

1 me te $\frac{3}{4}$ kapu miraka kokonati.

$\frac{5}{6}$ o te kapu wai kokonati.

$\frac{1}{4}$ o te kapu wai rēmana.

E hiahia ana a Marika ki te hanga i ngā pounamu otai e 6. E hia te nui o ia mea e hiahiatia ana e ia?

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, hautoru, hauiwa, hautekau, haurima, ōrite, tiritiri tika, wehewehe, tauraro, taurunga.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Tūmahi 11

Mēnā e $2\frac{1}{4}$ ngā huinga e 72 ngā wetewete. E hia te nui o te huinga whītiki 1?

Ki te oma tere koe, ka taea e koe te taupoki i te $3\frac{1}{2}$ km i roto i te haora $\frac{3}{4}$.

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga kia kite i te hiranga o te whakaaro i te katoa.

Tirohia ngā ākonga e whakamahi ana i te tuhipoka whakaaro hei whakaoti i ngā whārite.

Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai i whakaaro mā te whakamahi i te nui o te hauwhā (pātiki ōrite) kātahi ko te uara o te katoa kotahi (auauau)

Hono

I te whakaoti i ēnei raruraru e rua me whakaaro tonu koe: E hia te nui o te kotahi?

Ka taea e koe te whakamārama he aha tēnei i hira ai?

Whainga Ako: Ka ako ngā mokopuna ki te:

Wehea te hautanga ki te hautanga.

Ngā Tūmahi Takitahi

Ka taea e koe te tuhi i ngā rapanga whakarea hautanga e 3 kātahi ka whakaoti?

Ka taea e koe te tuhi i ngā rapanga wehenga hautanga e 3 kātahi ka whakaoti?

Ngā Whakaaro Matua o te Ao

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite. Ko te tau o raro i roto i te hautanga e whakaatu ana e hia ngā wāhanga ōrite e wehea ana te katoa, te wae rānei.

Ko te tau o runga e whakaatu ana e hia ngā wāhanga ōrite e tohua ana.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā $\frac{2}{3}$ wāhanga kei reira iā wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana iā ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

Ka taea te whakaingoa i ngā kianga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira, $\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4}$; $26 \times 4 = (20 + 6) \times 4$).

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Tāpiri me te tango hautanga, rerekē ana te tauraro ki ngā hautekau: h.t., $\frac{3}{4} + \frac{1}{3}$

Tau 8

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira me ngā ōrau.

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Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, haurima, hautoru, hautekau, hauono, ōrite, tauraro, taurunga, tauroro pātahi.

Tūmahi 12

Whakaotia ia whārite:

1. $a \times \frac{1}{4} = 2$

2. $3 \times \frac{1}{3} + 2 \times \frac{1}{3} = b$

3. $8 \times \frac{3}{8} = c$

4. $d \times \frac{3}{4} = 15$

5. $e \times 1\frac{2}{3} = 25$

6. $\frac{1}{3} = f \times \frac{1}{6}$

7. $\frac{2}{5} = g \times \frac{1}{10}$

8. $\frac{3}{8} + h = \frac{1}{2}$

9. $\frac{7}{20} = \frac{i}{15}$

10. $\frac{1}{10} = 2 \times j$

11. $\frac{8}{5} = k \times \frac{1}{10}$

12. $2 \times \frac{1}{3} = l \times \frac{1}{6}$

Kia rite ki te whakamārama me te whakatika i ō whakamāramatanga mā te whakamahi i ngā whakaaturanga me te tuhipoka rānei.

Hei āwhina i te kaiako

Whakangāwari i ngā ākonga ki te tuhi i ngā pātahitanga kua kitea e rātou hei tāpiritanga, tangohanga, whakareatanga me te wehewehenga.

Kia mōhio ki ngā ākonga e āhei ana ki te whakawhānui i ngā tauira puta noa i ngā tautapa.

Wā toha

Tīpakohia ngā ākonga hei tiritiri e āhei ana ki te tuhi i ngā āhuatanga tau me ngā ture whakahaere tae atu ki te māramatanga o te tohu ōrite hei whakatika i ngā raruraru.

Ngā Whakaaro Matua o te Ao

He mea hira te katoa ki te whakaingoa hautau. E pātahi ana te hautanga ki te rahi o te katoa, o te wae rānei.

Ka taea te whakaatu i te whakataurite o tētahi wāhanga ki te katoa mā te hautanga.

Ko te hautanga e whakaahua ana i te wehenga o te katoa (rohe, huinga, wāhanga) ki ngā wāhanga ōrite. Ko te tau o raro i roto i te hautanga e whakaatu ana e hia ngā wāhanga ōrite e wehea ana te katoa, te wae rānei.

Ko te tau o runga e whakaatu ana e hia ngā wāhanga ōrite e tohua ana.

Ka whakaahuatia e te hautanga te wehenga ($\frac{a}{b} = a \div b$, a & b he tau tōpū & b ≠ 0), ā, e rua ngā huarahi ka taea te whakamārama i te raina tau. Hei tauira, $2 \div 3$.

I runga i te raina tau, ka taea te whakamārama i te $2 \div 3$ hei wāhanga e 2 ngā $\frac{2}{3}$ wāhanga kei reira ia $\frac{2}{3}$ wae ($2 \times \frac{1}{3}$), e 2 rānei ngā wae katoa ($\frac{1}{3} \times 2$); e pāhono ana ia ki te pūwāhi ōrite i te raina tau.

Ka taea te whakaatu i ia hautanga/ōwehenga e tētahi huinga mutunga kore o ngā hautanga/ōwehenga rerekē engari ōrite.

He ōrite ngā pānga o ngā mahi mō te tāpiri me te tangohanga ki ngā hautanga me ngā ā-ira ki ērā me ngā tau oti.

Ko ngā hautanga kāore i te rite ki ngā tautapa ka whakaingoa anōtia hei hautanga ōrite me ngā tautapa ōrite hei tāpiri me te tango.

Ka taea te whakaingoa i ngā kīanga tau i roto i te maha o ngā huarahi rerekē, engari ōrite (hei tauira, $\frac{4}{6} \div \frac{2}{8} = \frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{1}{4}$; $26 \times 4 = (20 + 6) \times 4$).

Hono

Tāngia ngā rautaki whakautu ākongā hei miramira i ngā ture whakahaere i whakamahia e ngā ākongā hei whakaoti i ngā raruraru (hei tauira, te whanaungatanga kōaro, te āhuatanga komu).

Tūhono anō ki te tau me te wae taurangi hei miramira e mahi ana ngā āhuatanga ki ngā tau oti, tae atu ki ngā hautanga.

Whainga Ako: Ka ako ngā mokopuna ki te:

Whakaotia ngā raru tau ngaro e pā ana ki ngā hautanga.

Whakaotia ngā raru tāpiri e pā ana ki ngā hautanga.

Whakaotia ngā raruraru tangohanga e pā ana ki ngā hautanga.

Whakaotia ngā raruraru whakarea e pā ana ki ngā hautanga.

Whakaoti i ngā raruraru wehewehenga e pā ana ki ngā hautanga.

Whakamahia ngā ture whakahaere hei whakatika i ngā raruraru tau ngaro e pā ana ki ngā hautanga.

Ngā Tūmahi Takitahi

Whakaotia tētahi tūmahi aromatawai i raro nei:

Aromatawai 1: Ngā Hautau/Ōwehenga, Ngā Ōwehenga me ngā Hautau

Aromatawai 2: Ngā Hautau/Ōwehenga, Ngā Ōwehenga me ngā Ā-Ira

Aromatawai 3: Ngā Hautau/Ōwehenga, Ngā Ōwehenga me ngā Ā-Ira

Marautanga

Tau 7

Whakatairite, te raupapa me te huri i ngā hautau, tau-a-ira (kia 3 ngā mati ā-ira) me ngā ōrau.

Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

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Tau 8

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Kimi hautau ōrite, te whakarūnā hautanga me te huri hautanga nui atu i te kotahi hei tau hanumi, tau hanumi hei hautanga nui atu i te kotahi rānei.

Whakarea hautanga me ngā ngā tau-a-ira ki ngā tauoti me te kimi ōrau o tētahi tauoti.

Tāpiri me te tango hautanga he rerekē te tauraro mā te whakamahi hautau ōrite.

Reo Pāngarau

Katoa, haurua, hauwaru, tau oti, ōrite, wahanga, tau whakaranu, tauraro, taurunga.

Ngā Tumanako

Ngā Rongoā, Ngā Pōhēhētanga

Aromatawai 1

Tuhia ētahi raruraru kupu mō tētahi hoa e pā ana ki tētahi o ngā mahi (tāpiritanga, tangohanga, whakareatanga, wehenga) mā te whakamahi i ngā hautau, ngā ā-ira, ngā ōrau rānei. Whakaaturia me pēhea e whakatika ai koe i ngā raru.

Aromatawai 2

Whakaraupapatia ēnei hautanga mai i te iti rawa ki te nui rawa.

$$\frac{9}{15}$$

$$\frac{7}{12}$$

$$\frac{8}{10}$$

$$\frac{2}{3}$$

$$\frac{14}{16}$$

$$\frac{5}{6}$$

Whakamārama, whakaatu hoki me pēhea koe e mōhio ai ki tēnei.

Aromatawai 3

Whakaotia ēnei raruraru me te whakamatau me te whakatautika i tō rongoā:
Ka whakakā e Māmā te kura penehīni. I roto i te wiki, ka whakamahia e ia te penehīni $\frac{1}{4}$ ki te whakataka i ngā tamariki ki te kura. Ka whakamahia e ia te penehīni $\frac{3}{8}$ e haere ana ki te mahi. Ka whakamahia e ia te penehīni $\frac{1}{6}$ e haere ana ki te hokomaha. He aha te hautanga o te kura penehīni kua kī ināianei?

Kei te hoko mandarin a Jodie i tana rākau. Kai te hokona rātau e ia i roto i nga pēke $\frac{2}{3}$ kiro. Mēnā ka kōwhiria e ia he pākete mandarin e 5 me te $\frac{5}{6}$ kiroki mōna – e hia ngā pēke ka taea e ia te whakakī?

Kei te mahi a Talia i tētahi mīhini hua rākau. Mō ia pounamu e hiahiatia ana e ia:

$\frac{3}{4}$ o te kapu purupere	$\frac{2}{3}$ o te kapu panana
$\frac{4}{5}$ o te kapu hukapapa	
E $2\frac{3}{4}$ kapu miraka	$\frac{1}{5}$ o te tēpu vanilla

E hiahia ana a Talia ki te hanga pounamu e 5. E hia te nui o ia mea e hiahiatia ana e ia?