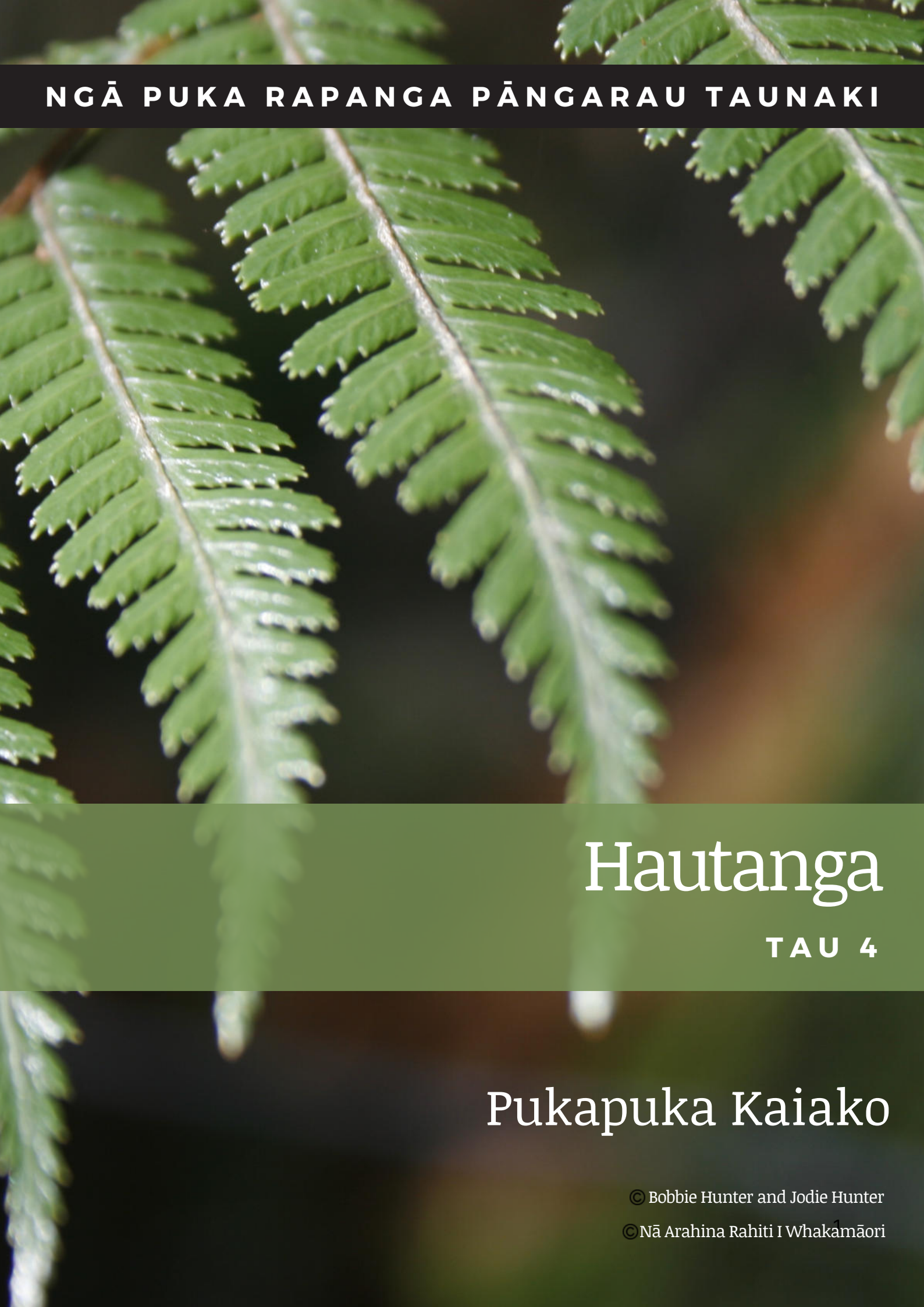


A close-up photograph of several green fern fronds, likely from a tree fern, showing the intricate, feathery structure of the leaves. The fronds are vibrant green and have a slightly glossy texture. They are set against a dark, blurred background, which makes the green leaves stand out. The lighting is soft, highlighting the edges and veins of the fronds.

NGĀ PUKA RAPANGA PĀNGARAU TAUNAKI

Hautanga

TAU 4

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 ōrite ki te katoa kotahi?  
I a koe e mahi ana i ēnei, tuhia ēnei, ā, kia rite ki te whakamārama me te whakatika me pēhea te whakaoti.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga kia ōrite ki tētahi hautanga iti iho i te kotahi katoa?  
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 te katoa.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga kia ōrite ki tētahi hautanga neke atu i te kotahi katoa?  
I a koe e mahi ana i ēnei tāhopu me te whakarite ki te whakamārama me te whakatika he aha i nui ake ai i te kotahi te katoa.

## Hei āwhina i te kaiako

Me whai hautanga mō te katoa, ngā hauwhā, ngā haurua me te whakauru i ngā tuawaru i te tūmahi tuarua.

Aroturuki mō ngā ākonga mā te whakamahi i ngā kupu tau hautanga (ehara i te wāhanga, i te moka rānei).

Kia mōhio ki ngā ākonga e whakawhānui ana (hei tauira, ko te iti ake o te tautau, ko te nui ake o te hautanga ina kotahi te tau). Tuhiā ēnei hei whakaaro akomanga, ā, tonoa ngā ākonga kia tūhura me te whakamatau ā muri ake nei hei ngohe whakamahana.

Tūmanako kia tohu ngā ākonga i ngā rauemi me te whakamahi i te tuhipoka tika me te tohu ōrite ( $\frac{2}{2} = 1$ ).

Mō te tūmahi takitahi, me whiwhi koe i ngā huinga tāpa hautanga.

## 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 (haurua, hauwhā, waru) me te tuhi i ngā pahekotanga hei tau, whārite, kupu rānei. Kātahi, tīpakohia ngā ākonga ki te tiritiri nā wai i mahi pahekotanga o te katoa mā te whakamahi i ngā wāhanga hautanga rerekē (hei tauira,  $\frac{1}{2} + \frac{1}{4} + \frac{1}{4} = 1$ ) me te whakapūkete i ngā pahekotanga hei tau, whārite, kupu rānei. Mēnā kāore he ākonga i mahi i tēnei, whakaurua hei rongoa whirinoa i tiria e ngā 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.*

*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.*

## Hono

He ōrite te  $\frac{2}{2}$  ki?

He ōrite te  $\frac{6}{6}$  ki?

He ōrite te  $\frac{4}{4}$  ki?

He ōrite te  $\frac{8}{8}$  ki?

He aha ngā tauira me ngā pātahitanga e kitea ana e koe?

He aha ētahi atu tau hautanga e ōrite ana ki te katoa kotahi?

[Whakahaua ngā ākonga kia hopu mā te tohu ōrite  $\frac{2}{2} = \frac{5}{5} = \frac{100}{100}$  ]

He aha te ture mō ngā hautanga e ōrite ana ki te katoa kotahi?

[Tuhia ngā whakaaro me te tohu hei  $\frac{n}{n}$  ]

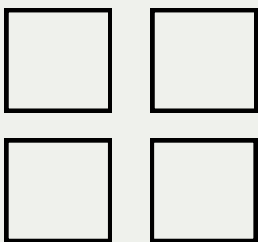
## Whainga Ako: Ka ako mokopuna ki te:

Whakakotahitia me te whakakotahi anō i ngā wae hautanga rerekē kia kotahi te katoa.

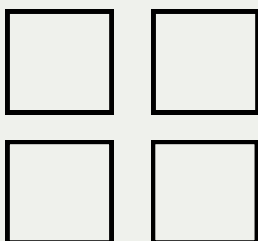
Tautohu me te āhukahuka i ngā hautanga ōrite.

## Ngā Tūmahi Takitahi

E hia ngā huarahi rerekē e taea ai e koe te wehe i ēnei tapawhā ki ngā haurua?



E hia ngā huarahi rerekē e taea ai e koe te wehe i ēnei tapawhā ki ngā hauwhā?



## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

## Reo Pāngarau

Katoa, haurua, hauwhā, hauono, hautanga, tau hautanga, tau oti, hauwaru, ōrite.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 2

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga kia ōrite ki tētahi hautanga iti iho i te haurua?  
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 kia ōrite ki tētahi hautanga neke atu i te haurua engari iti iho i te kotahi katoa?  
I a koe e mahi ana i ēnei, tuhia ēnei, ā, kia rite ki te whakamārama me te whakatika he aha i neke atu ai i te haurua me te iti iho i te kotahi katoa.

He aha ngā huarahi rerekē e taea ai e koe te whakamahi i ngā tāpa hautanga kia ōrite ki tētahi hautanga neke atu i te kotahi katoa engari iti iho i te rua?  
I a koe e mahi ana i ēnei, tuhia aua mea, kia rite ki te whakamārama me te whakatika he aha i nui ake ai i te kotahi te katoa, iti iho i te rua.

## Hei āwhina i te kaiako

Me whai hautanga mō te katoa, ngā hauwhā, ngā haurua, te waru me te tuatoru.

Whakangāwari i ngā ākonga kia kite e whakaingoatia ana e te tau ngā tau o te katoa, ā, ka whakaingoatia e te tautau te maha o ngā wāhanga kua wehea te katoa.

Aroturuki mō ngā ākonga mā te whakamahi i ngā kupu tau hautanga (ehara i ngā wāhanga, i ngā moka rānei) me te whakatika i ā rātou tauākī mā te whakamahi i ngā wāhanga hautanga me te tuhipoka.

Mō te ngohe takitahi, me wātea ngā tāpa hautanga mō te katoa, ngā haurua, ngā hauwhā, me ngā tuatoru.

## Wā toha

Tīpakohia ngā ākonga ki te tiritiri nā wai i mahi pahekotanga hautanga mā te whakamahi i ngā wāhanga rahi ōrite (haurua, tuatoru, hauwhā, waru) me te whakapūkete i ngā pahekotanga hei tau, whārite, kupu rānei. Kātahi ka tīpako i ngā ākonga ki te tiritiri nā wai i mahi pahekotanga mā te whakamahi i ngā wāhanga hautanga rerekē (hei tauira, he nui ake te  $\frac{1}{2}$  me te  $\frac{1}{3}$  i te  $\frac{1}{2}$  engari he iti iho i te kotahi katoa) me te tuhi i ngā pahekotanga hei tau, whārite, kupu rānei. Mēnā kāore he ākonga i mahi i tēnei, whakaurua hei rongoā whirinoa i tiria e ngā ākonga i mua.

## 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.*

*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.*

## Hono

Whakamahia ō tāpa hautanga hei kimi, hei tāhopu hoki i ngā hautanga e ōrite ana ki te haurua kotahi.

He aha ētahi atu hautanga e mōhio ana koe e ōrite ana ki te haurua kotahi? He aha ngā tauira me ngā pātahitanga e kitea ana e koe?

He aha te ture mō ngā hautanga e ōrite ana ki te haurua?

[hei tauira, me haurua te tauraro o te taurunga]

## Whainga Ako: Ka ako mokopuna ki te:

Whakakotahitia me te whakakotahi anō i ngā wae hautanga rerekē kia kotahi te katoa.

## Ngā Tūmahi Takitahi

Whakamahia ngā tāpa hautanga hei hanga i ngā pahekotanga rerekē e ōrite ana ki te iti iho i te kotahi katoa. Whakapūketetia ēnei mā te whakamahi i ngā whārite hautanga me ngā tātuhi.

Whakamahia ngā tāpa hautanga hei hanga i ngā pahekotanga rerekē e ōrite ana ki te iti iho i te haurua. Whakapūketetia ēnei mā te whakamahi i ngā whakaaturanga rerekē e toru neke atu rānei (ngā tātuhi, ngā whārite).

Whakamahia ngā tāpa hautanga hei hanga i ngā pahekotanga rerekē kei waenga i te hauwhā kotahi me te toru hauwhā. Whakapūketetia ēnei mā te whakamahi i ngā whārite hautanga me ngā tātuhi.

Whakamahia ngā tāpa hautanga hei hanga i ngā pahekotanga rerekē kei waenga i te kotahi katoa me te kotahi me te toru hauwhā. Whakapūketetia ēnei mā te whakamahi i ngā whārite hautanga me ngā tātuhi.

Whakamahia ngā tāpa hautanga hei hanga i ngā pahekotanga rerekē iti iho i te toru hauwhā. Whakapūketetia ēnei mā te whakamahi i ngā whārite hautanga me ngā tātuhi.

## Marautanga

### **Tau 4**

*Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.*

*Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.*

*Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.*

## Reo Pāngarau

*Katoa, haurua, hauwhā, hatoru, hauono, hautanga, tau hautanga, tau oti, hauwaru, ōrite, taurunga, tauraro*

# Ngā Tumanako

---

Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 3

He aha ngā tau kei waenga i te 0 me te 1? Kia rite ki te hoatu i tētahi tautohu ki te raina-tau me te whakamārama he aha te tau hautanga e whakaaturia ana.

Tāngia tō ake raina-tau ka tuhi ai i te tau e whakaaturia ana e koe ki te tautohu.

Ka taea e koe te whakaatu ki tō raina-tau kia whā ngā tau i waenga i te 1 me te 2? Tuhia ki te taha o te tohu he aha te tau e tohu ana rātou.

## Hei āwhina i te kaiako

I te wā o te whakarewatanga, pātai atu ki ngā ākonga mēnā he tau kei waenga i ngā tau katoa? Arataki ki tētahi matapakinga o ngā āhuatanga i tūtaki ai rātou ki te hawhe (hei tauira, he pēpi i mua i te kotahitanga, i waenganui i ō rātou ake rā whānau, i te hāwhe haora i te karaka, i te hawhe āporo). Whakawhānuitia te matapakinga ki ētahi atu āhuatanga mā te whakamahi i ētahi atu hautanga.

Me whai raina tau kāore i tohua ki te papamā hei whakamahi i te wā o te akoranga. Whakamahia tēnei i te wā o te whakarewatanga hei whakatau tata kei hea te hautanga e whakaahuatia ana e rātou.

Me whai rīpene pepa kāore i tohua puta noa i te papa, me ngā kāri hautanga nui kua tohua me ngā kupu tau oti me ngā kupu hautanga me ngā tohu.

Whakangāwari i ngā ākonga kia kite i te tīmatanga o te tau, kei roto anake i ngā rārangi tau i whakamahia e rātou ngā tau katoa (ngā tau i hua mai i te tataunga). Ka taea te whakaatu i ngā hautanga e kōrerotia ana e rātou ināianei (ngā tau i hua mai i te ritua ōrite, te wātaki rānei) ki te raina tau. E whakaatu ana tēnei ka whakaarohia hoki ngā hautanga hei tau. I roto i te hononga, whakapā atu ki ngā hautanga (hei tauira,  $3\frac{1}{2}$ ) hei tau whakaranu.

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...)

Mō te tūmahi takitahi, me whai i te A3 he rangatū o ngā raina-tau kua tohua ki ngā tau oti mai i te 0 ki te 10.

## 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ ,  $a \neq 0$ ), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div 3$  hei wāhanga e  $2$  e  $\frac{1}{3}$  o te 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.*

## Wā toha

Tīpakohia ngā ākonga hei tiritiri e āhei ana ki te whakaatu i ngā wāhanga ōrite maha e tohu ana i te awhe o ngā tau hautanga rerekē i runga i te raina-tau nui, kātahi ko ngā ākonga e āhei ana ki te kite me te tā i ngā raina-tau me te tohu i ngā tūnga hautanga i waenga i te 0 me te 1 me te 1 me te 2.

## Hono

He aha ngā tauākī pāngarau mā te whakamahi i ngā tau whakaranu ka taea e koe te whakamahi i te raina-tau mō ngā tau i waenga i te 3 me te 4?

Whakamahia te tohu ōrite (=), nui ake, iti iho rānei i ngā tohu (> me te <). Ka hoatu e au he tauira ki a koe hei tīmata:  $3\frac{1}{2}$  he iti iho i te  $3\frac{3}{4}$  [pūkete hei  $3\frac{1}{2} < 3\frac{3}{4}$ ]

## Whainga Ako: Ka ako mokopuna ki te:

Whakaaturia ngā hautanga ki tētahi raina-tau.

## Ngā Tūmahi Takitahi

Tohua ki te raina tau ki te wāhi e whakaaro ana koe ko ngā tau whāranu e whai ake nei.

|                |                |                |
|----------------|----------------|----------------|
| $1\frac{1}{2}$ | $1\frac{3}{4}$ | $9\frac{1}{8}$ |
| $5\frac{2}{4}$ | $4\frac{1}{2}$ | $4\frac{3}{4}$ |
| $7\frac{2}{4}$ | $8\frac{1}{2}$ | $\frac{6}{8}$  |
| $3\frac{4}{8}$ | $9\frac{1}{2}$ | $\frac{1}{4}$  |

Ka taea e koe te tohu ētahi atu tau i te raina-tau?

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga: h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe: h.t.,  $\frac{1}{4}$  o te 40.

## Reo Pangarau

Katoa, haurua, hauwhā, hauroru, hauono, hauwaru, tataua nama, tau whakaranu

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 4

I te māketē pō o tētahi rohe, ka hoko koe he pouaka kirihou tapawhā o te panana poke. He ōrite te rahi o ngā paepae poke katoa.

Tokotoru ngā tamariki a te whānau o Nooroa hei tiritiri i tētahi paepae poke.

E 8 ngā tamariki a te whānau o Hoani hei tiritiri i tētahi paepae poke.

E 6 ngā tamariki a te whānau o Tereapii hei tiritiri i tētahi paepae poke.

Tokowhā ngā tamariki o te whānau Teokotai e toha ana i tētahi paepae poke

E 5 ngā tamariki a te whānau o William hei tiritiri i tētahi paepae.

Ko ēhea ngā tamariki ka nui ake te poke? Whakamātauria tō whakautu mā te whakamahi i ngā whakaaturanga rerekē e toru neke atu rānei (ngā tau, ngā tātuhi, me te raina-tau).

## Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakatauiria i te paepae poke hei whakaaturanga tapawhā.

Whakangāwari i ngā ākonga kia kite ko te tautapa e tohu ana i te maha o ngā wāhanga kua wehea te katoa, ā, ka whakaaturia e te tau te maha o ngā wāhanga kei a koe o te tapeke.

Kia mōhio ki ngā ākonga e whakaaro ana "ko te nui ake o te tautapa, ko te iti ake o te wāhanga hautanga mēnā kotahi te tau". Tuhia me te whakamahi mō te matapakinga ā muri ake me te whakamātautau i roto i ngā whakamahanatanga.

Tūmanako kia tohu ngā ākonga mā te whakamahi i ngā raina tau me ngā whakaaturanga tapawhā ōrite.

## Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakawhanake i ngā whakaaturanga maha tae atu ki ngā tau, raina-tau, me ngā tātuhi, ā, whakamahia ēnei hei whakaatu i ngā whakataurite i waenga i ngā hautanga rerekē.

## 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ , a & b he tau tōpū & b 0), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div 3$  hei wāhanga e 2 e  $\frac{1}{3}$  o te 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.*

# Hono

He aha ngā tauira me ngā pātahitanga e kitea ana e koe?

$1 \div 3 = \frac{1}{3}$        $1 \div 8 = \frac{1}{8}$

$1 \div 2 = \frac{1}{2}$        $1 \div 4 = \frac{1}{4}$

He aha ngā tauira me ngā whakahoahoa ka kitea?

Ki tōu whakaaro he aha te rongoā?

$1 \div 6 =$        $1 \div 20 =$        $1 \div 73 =$        $1 \div A =$

## Whainga Ako: Ka ako mokopuna ki te:

Wehea ngā katoa ki ngā wāhanga ōrite.

Wehea te tau oti ki ngā hautanga.

Whakataurite me te raupapa i ngā hautanga wae.

## Ngā Tūmahi Takitahi

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

1.       $\frac{1}{3}$        $\frac{1}{2}$        $\frac{1}{6}$

2.       $\frac{1}{10}$        $\frac{1}{5}$        $\frac{1}{2}$        $\frac{1}{20}$

3.       $\frac{1}{4}$        $\frac{1}{8}$        $\frac{1}{2}$        $\frac{1}{16}$

4.       $\frac{1}{4}$        $\frac{1}{10}$        $\frac{1}{3}$        $\frac{1}{2}$        $\frac{1}{8}$        $\frac{1}{20}$

Whakamahia ngā wāhanga hautanga ka tāngia he whakaaturanga me tētahi raina tau hei whakamatau i tō raupapa o ngā tau hautau.

# Marautanga

## Tau 4

Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6 me te 10.

## Reo Pāngarau

Katoa, haurua, hauwhā, hauroru, hauono, ōrite, tiritiri tika, taurunga, tauraro.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 5

I tunu te Māmā o Atamai I ētahi pani popo. Ka whakaaro a Atamai ko wai ka whiwhi te nuinga.

Tokowaru ngā tama e tiritiri ana i ngā pani popo 10 kia ōrite.

Tokorua ngā tama e tiritiri ana i ngā pani popo e 3 kia ōrite.

Tokowhā ngā tama e tiritiri ana i ngā pani popo e 5 kia ōrite.

Tokorima ngā tama e tiritiri ana i ngā pani popo e 4 kia ōrite.

Me mātua whakarite koe e whakaatu ana, e whakatika ana i tō whakautu i ngā huarahi rerekē.

## Hei āwhina i te kaiako

I te wā o te whakarewatanga, whakatauiria i te pani popo hei whakaaturanga tapawhā.

Whakangāwari i ngā ākonga ki te kite i te hiahia ki te taururuku i te wāwāhitanga o te tūemi tiritiri ki te maha o ngā kaitiritiri. Koinei te pūtake o ngā ākonga e whakawhanake ana i te māramatanga ki te pātahitanga whakarea o te tau me te tautapa i roto i te hautanga.

Tūmanako kia whakaatu ngā ākonga ki ngā tātuhī, ā, me mātua whakarite kia ōrite te rahi katoa mō ia pani popo ina tātuhī.

## Wā toha

Tīpakohia ngā ākonga hei tiritiri e whakawhanake ana i ngā whakaaturanga hei whakatika i ā rātou whakaaro, ā, ka wehe i te pani popo katoa ki tētahi rahinga hautanga, tiritiri rānei hei rahinga hautanga me te hautanga.

Ki te kore e whakamahia te rongoā tuarua, whakatauiria hei huarahi anō kua kitea e te kaiako e whakamahia ana 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.*

*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.*

## Hono

Whakamahia ngā whakautu ākonga hei tono i ngā ākonga kia hopu i ēnei hei hautanga ōrite me ngā tau whāranu me ngā hautanga hē. Tonoa ngā ākonga kia tohu i te 10 waru i roto i tētahi tātahi, kātahi ka tuhi hei hautanga me te tau oti me te hautanga (hei tauira,  $\frac{10}{8} = \frac{2}{8}$ ). Tukuruatia mō ngā rahinga hautanga rerekē.

## Whainga Ako: Ka ako mokopuna ki te:

Tiria ngā wāhanga katoa kia ōrite.

Whakaotia ngā raru e pā ana ki te whakawehe i tētahi tau oti ki tētahi hautanga.

## Ngā Tūmahi Takitahi

I te whakataetae Super Striker Poiwhana, koinei ngā hua o te mahi tākaro whāinga.

I piro a Ruby i te 5 i roto i ngā whāinga e ono i whanaia e ia.  
I piro a Raniera i te 2 i roto i ngā whāinga e toru i whanaia e ia.  
I piro a Tasa i te 3 i roto i ngā whāinga e whā i whanaia e ia.  
I piro a Sesimani i te 7 i roto i ngā whāinga e waru i whanaia e ia.

Ka taea e koe te whakaraupapa i a rātou mai i te hunga tino tika ki te iti rawa i te tākaro i ngā whāinga?

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6 me te 10.

## Reo Pāngarau

Katoa, haurua, hauwhā, hautoru, hautanga, tau hautanga, tau oti, hauwaru, ōrite, wāhanga, tiritiri tika

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 6

E hiahia ana a Mahini ki te tiritiri i ana rare whero ki ōna hoa tokorima.  
He hauwhā tā ia hoa, ehia ngā rare whero i tiritiri a Mahini?

E hiahia ana a Mahini ki te tiritiri i ana rare whero ki ōna hoa tokwaru.  
He hautoru tā ia hoa, e hia ngā rare whero i tiritiri a Mahini?

E hiahia ana a Mahini ki te tiritiri i ana rare whero ki ōna hoa tokoiwa.  
E rua haurima tā ia hoa, ehia ngā rare whero i tiritiri a Mahini?

## 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.

Me tohu ngā ākonga mā te whakamahi i ngā tātuhī, raina-tau, hautanga rānei hei tohu i ngā wāhanga o te katoa, me te whakamahi i ngā wāhanga hautanga hei hanga i te katoa.

## Wā toha

Tīpakohia ngā ākonga e tāpiri ana i ngā hauwhā katoa, ā, ka whiwhi i ngā hauwhā e ono; tāpirihia rānei ngā hauwhā me te whiwhi i ngā hauwhā e ono, ā, ka kite i tēnei e ōrite ana ki te kotahi katoa me te rua hauwhā; whakatikaina rānei te raruraru hei

$$6 \times \frac{1}{4} = 1\frac{2}{4} \text{ me } 1\frac{1}{2} \text{ rānei}$$

Ki te kore e whakamahia tētahi o ngā rongoā, whakatauirā hei huarahi anō kua kitea e te kaiako e whakamahia ana 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ ,  $a$  &  $b$  he tau tōpū &  $b \neq 0$ ), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div$  te  $3$  hei wāhanga e  $2$  e  $\frac{1}{3}$  o te 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.*

## Hono

Tahopu i te rongoā mō ia tūmahi pēnei i raro nei, ka pātai atu ki ngā ākongā he aha tā rātou e kite nei:

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 6 \times \frac{1}{4} = \frac{6}{4}$$

Me pēhea te hopu i ngā āhuetanga e rua e whai ake nei:

Kei te tiritiri a Mahini ki ngā hoa tokotoru. Ka hoatu e ia ki ia hoa tana hurihanga  $\frac{1}{2}$  waipiro whero. E hia ōna hurihanga waipiro?

Kai te tiritiri a Mahini ki ngā hoa toko6. Ka hoatu e ia ki ia hoa he hurihanga  $\frac{1}{8}$  waipiro whero. E hia ōna hurihanga waipiro?

He aha ngā tauira e kitea ana e koe?

## Whaingā Ako: Ka ako mokopuna ki te:

Tāpirihia ngā hautanga wae.

Whakareatia te hautanga ki te tau oti.

## Ngā Tūmahi Takitahi

Ko tēhea te tau iti rawa? Ko tēhea tau te mea nui rawa?

$$\frac{1}{2}, \frac{1}{4} \text{ rānei}$$

$$\frac{1}{8}, \frac{1}{4} \text{ rānei}$$

$$\frac{1}{3}, \frac{1}{2} \text{ rānei}$$

$$\frac{1}{2}, \frac{3}{4} \text{ rānei}$$

$$\frac{3}{4}, \frac{2}{2} \text{ rānei}$$

$$\frac{4}{4}, \frac{4}{3} \text{ rānei}$$

$$\frac{2}{4}, \frac{3}{3} \text{ rānei}$$

$$\frac{3}{2}, \frac{3}{4} \text{ rānei}$$

$$1\frac{1}{2}, 1\frac{1}{4} \text{ rānei}$$

$$2\frac{3}{4}, 2\frac{7}{8} \text{ rānei}$$

Tuhia ngā whakaaturanga o ō whakaaro hei whakatika i ō whakaaro.

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6, me te 10.

## Reo Pāngarau

Katoa, hauwhā, hautorua, ōrite, taurunga, tauraro.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 7

E 2 aku poro mīti. Kotahi te hauwhā o te poro mīti hai hanga hanawiti.  
E hia ngā hanawiti ka taea e au te mahi?

E 3 aku poro mīti. Kotahi te tuatoru o te poro mīti hai hanga hanawiti.  
E hia ngā hanawiti ka taea e au te mahi?

E 5 aku poro mīti. E rua hauroru o te poro mīti hai hanga hanawiti.  
E hia ngā hanawiti ka taea e au te mahi?

## Hei āwhina i te kaiako

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

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.

Tūmanakohia kia whakaatu ngā ākonga mā te whakamahi i ngā tātuhī me te tuhipoka.

## Wā toha

Tīpakohia ngā ākonga e whakamahi ana i te wehenga inenga (tangohanga tukurua hei wehenga, hei tauira,

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

e whakamahi ana rānei i te pātahitanga kōaro o te whakareatanga me te wehenga ( $\frac{1}{4} \times ? = 2$ ) or  $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 2$

Ki te kore e whakamahia tētahi o ngā rongoā, whakatauirā hei huarahi anō kua kitea e te kaiako e whakamahia ana i mua.

## Hono

Tonoa ngā ākonga ki te whakaahua me pēhea e whakaoti ai koe i ngā raru e whai ake nei mā te wehewehe, te tangohanga, te whakarea rānei (tāpiritanga):

E 6 aku poro mīti. Kotahi te tuatoru o te poro mīti hai mahi paramanawa. E hia ngā paramanawa ka taea e au te mahi?

E 8 aku poro mīti. E rua hauwhā o te poro mīti hai mahi paramanawa. E hia ngā paramanawa ka taea e au te mahi?

## 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.*

*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.*

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

*Ka taea te pāhono i ngā whakamāramatanga rerekē o te ao tūturu ki ngā tatauranga whakawehenga e pā ana ki ngā hautanga (ā-ira).*

## Whaingā Ako: Ka ako mokopuna ki te:

Whakamahia te tangohanga tukurua hei wehenga.

Whakaotia ngā raru e pā ana ki te whakawehe i te tau oti ki te hautanga.

### Ngā Tūmahi Takitahi

E hia ngā haurua kei roto:

- Kotahi poro mīti
- E rua ngā poro mīti
- Tekau poro mīti

E hia ngā hauwhā kei roto:

- Kotahi poro mīti
- E rua ngā poro mīti
- E toru poro mīti
- Tekau poro mīti

E hia ngā tuatoru kei roto:

- Kotahi poro mīti
- E rua ngā poro mīti
- E toru poro mīti
- Tekau poro mīti

He aha ngā tauira me ngā pātahitanga e kitea ana e koe?

Tuhia me te whakaoti i ō ake raruraru ināianei mā te whakamahi i tētahi hautanga me ētahi poro ham.

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihangā hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu, mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, haurua, hauwhā, hatoru, tau hautanga, tau oti, hauwaru, ōrite, wāhanga, tiritiri tika, tatau nama, taurunga, tauraro, tau whakaranu, wehewehe, wāwāhi

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 8

I te āwhina a Ayla rāua ko Jack i to rāua Māmā ki te peita i to rāua pakitara karāti. He tīni peita ārani tā rāua takitahi, he ōrite te rahi. I whakamahia e Tony te hawhe tīni o tana peita. I whakamahia e Jenny te toru hauwhā o tana tīni peita. E hiahia ana a Māmā ki te mōhio e hia ngā tīni peita karaka i whakamahia katoatia e Ayla rāua ko Jack.

I te āwhina a Ayla rāua ko Jack i to rāua Māmā ki te peita i to rāua pakitara karāti. He tīni peita ārani tā rāua takitahi, he ōrite te rahi. E toru waru o te tīni peita i whakamahia e Ayla. E toru hauwhā o te tīni peita i whakamahia e Jack. E hiahia ana a Māmā ki te mōhio e hia ngā tīni peita karaka i whakamahia katoatia e Ayla rāua ko Jack.

I te āwhina a Ayla rāua ko Jack i to rāua Māmā ki te peita i to rāua pakitara karāti. He tīni peita ārani tā rāua takitahi, he ōrite te rahi. I whakamahia e Ayla te hawhe o te tīni peita. E toru ngā rima o te tīni peita i whakamahia e Jack. E hiahia ana a Māmā ki te mōhio e hia ngā tīni peita karaka i whakamahia katoatia e Ayla rāua ko Jack.

## Hei āwhina i te kaiako

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

Whakangāwari i ngā ākonga kia mōhio kia ōrite ngā hautanga

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

Kia mōhio ki ngā ākonga e whakaatu ana i te māramatanga whanaungatanga  $\frac{3}{4}$  hei  $\frac{1}{2} + \frac{1}{4}$

## Wā toha

Tīpakohia ngā ākonga hei tiritiri nā wai i tahuri hautanga ki ngā hautanga ōrite mā te whakamahi i ngā tikanga ōpaki me ngā whakaaturanga 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.*

*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.*

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

*Ka taea te pāhono i ngā whakamāramatanga rerekē o te ao tūturu ki ngā tatauranga whakawehenga e pā ana ki ngā hautanga (ā-ira).*

## Hono

He aha ngā hautanga katoa e ōrite ana ki te  $\frac{1}{4}$ ?

He aha ngā hautanga katoa e ōrite ana ki te  $\frac{3}{4}$ ?

He aha ngā tauira me ngā pātahitanga ka taea e koe te whakamahi hei kimi hautanga ōrite?

Ka taea e koe te whakatakoto ture hei huri i ngā hautanga engari kia ōrite tonu.

## Whainga Ako: Ka ako mokopuna ki te:

Hurihia ngā hautanga ki ngā hautanga ōrite.

Whakaotia ngā raru e pā ana ki te tāpiri hautanga.

## Ngā Tūmahi Takitahi

I te āwhina a Ayla rāua ko Jack i to rāua Māmā ki te peita i to rāua pakitara karāti. He tīni peita ārani tā rāua takitahi, he ōrite te rahi. I whakamahia e Ayla te hauwhē o te tīni peita. I whakamahia e Kuki te hauwhā o te tīni peita. E hiahia ana a Māmā ki te mōhio e hia ngā tīni peita karaka i whakamahia katoatia e Ayla rāua ko Jack.

I te āwhina a Ayla rāua ko Jack i to rāua Māmā ki te peita i to rāua pakitara karāti. He tīni peita ārani tā rāua takitahi, he ōrite te rahi. I whakamahia e Ayla te hauwhā o te tīni peita. I whakamahia e Kuki te waru o te tīni peita. E hiahia ana a Māmā ki te mōhio e hia ngā tīni peita karaka i whakamahia katoatia e Ayla rāua ko Jack.

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanganga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu, mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, haurua, hauwhā, hauwaru, ōrite.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 9

Kei te whakarākau a Leilani i tētahi keke i mahia e ia hei whakamīharo mo te rā whānau o tōna whaea. E 20 ana reka. Ka whakatau a ia ki te wehe i te keke ki ngā hauwhā, ā, ka hoatu te maha o ngā rekareka ki ia wāhanga.

E hia ngā mīhini e purua ana e ia ki ia wāhanga?

Kei te whakarākau a Leilani i tētahi keke i mahia e ia hei whakamīharo mo te rā whānau o tōna whaea. E 18 ana mīhini. Ka whakatau a ia ki te wehe i te keke ki te tuatoru, ā, ka hoatu te maha o ngā rekareka ki ia wāhanga.

E hia ngā mīhini e purua ana e ia ki ia wāhanga?

Kei te whakarākau a Leilani i tētahi keke i mahia e ia hei whakamīharo mo te rā whānau o tōna whaea. E 40 ana reka. Ka whakatau a ia ki te wehe i te keke ki ngā tuarima, ā, ka hoatu te maha o ngā rekareka ki ia wāhanga.

E hia ngā mīhini e purua ana e ia ki ia wāhanga?

## Hei āwhina i te kaiako

I te wā o te whakarewatanga, me mātua whakapakari koe he katoa te huinga o ngā mīhini hei wāhanga o te whakawhanake i te horopaki.

Me whakawātea ngā rauemi raima mēnā e hiahiatia ana mā ngā ākonga e tīpako (hei tauira, ngā tāpa hautanga, ngā tīhore pepa) me ngā kaitatau hei tohu i ngā reka.

Whakangāwari i ngā ākonga kia kite kei te kitea e rātou tētahi hautanga o te katoa ahakoa he maha ngā tūemi kei roto i taua huinga. Me aro atu hoki ki te tautapa hei whakaingoa i te mea kua wehea te katoa

## Wā toha

Tīpakohia ngā ākonga hei tiritiri ko wai kua whakamahi i tētahi whakaaturanga kua wehea ki ngā wāhanga hautau, kātahi ka whakamahi i te wehenga ā-wāhanga (hei tauira,  $20 \div 4 = ?$ ) kua whakamahi rānei i te pātahitanga kōaro me te tāpiritanga tukurua, te whakarea rānei (hei tauira,  $4 \times ? = 20$ ).

Ki te kore e whakamahia tētahi o ngā rautaki, whakatauiria hei huarahi anō kua kitea e te kaiako e whakamahia ana 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ ,  $a \neq 0$ ), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div 3$  hei wāhanga e 2 e  $\frac{1}{3}$  o te 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.*

## Hono

Whakapūketetia te rongoā mō ia raru:

$$\frac{1}{4} \text{ o te } 20 = 5$$

$$20 \div 4 = 5$$

$$\frac{1}{3} \text{ o te } 18 = 6$$

$$18 \div 3 = 6$$

$$\frac{1}{5} \text{ o te } 40 = 8$$

$$40 \div 5 = 8$$

He aha ngā tauira me ngā pātahitanga e kitea ana e koe?  
He aha te ture mō te kimi hautanga o tētahi huinga?

## Whainga Ako: Ka ako mokopuna ki te:

Kimihia ngā hautanga o tētahi huinga

### Ngā Tūmahi Takitahi

He pēke 12 tō mīhini, ā, ka tiritiri ōrite koe ki tō hoa.  
He aha te hautanga ka riro i a koe?  
E hia ngā mīhini ka riro i a koe?

He pēke e 24 ngā mīhini, ā, ka tiritiri ōrite koe ki ngā hoa tokotoru.  
He aha te hautanga ka riro i a koe?  
E hia ngā mīhini ka riro i a koe?

He aha te hauwhā o te 8?  
He aha te hauwhā o te 80?

He aha ngā hauwhā e toru o te 8?  
He aha ngā hauwhā e toru o te 80?

He aha te haurua o te 10?  
He aha te haurua o te 100?

He aha te tuatoru o te 6?  
He aha te tuatoru o te 60?

He aha ngā haurua e rua o te 6?  
He aha ngā haurua e rua o te 60?  
He aha ngā haurua e rua o te 600?

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanganga  
hautekau hei hautau, hei  
hautanga ā-ira hoki.

Whakatairite me te  
whakaraupapa i ngā  
hautau hautekau, i ngā  
hautanga ā-ira hautekau  
hoki.

Whiriwhiri i te hautau  
waetahi o tētahi rahinga  
mā te toharite.

Tāpiri, ki te tango rānei i  
ngā hautau, e ōrite ana  
ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi  
tauoti, he tauoti te  
whakautu mā te  
whakamahi i ngā meka  
whakarea, me ngā meka  
whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi  
me ngā tau hanumi, mō  
ngā tauraro pātahi 2, 3, 4,  
5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi  
tauoti, he tauoti te  
whakautu, mā te  
whakamahi i ngā meka  
whakarea, me ngā meka  
whakawehe:  
h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, hauwhā,  
hautorua, haurima,  
hauono, wāhanga, tiritiri  
tika, wehewehe

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

# Tūmahi 10

I piro a Lyla  $\frac{1}{10}$  o ngā whāinga katoa mō tana tīma whutupōro mo te tau. E 4 ngā whāinga i riro i a ia.  
I piro a Sesimani i  $\frac{3}{10}$  o ngā whāinga mo te tīma. E hia ngā whāinga i riro i a ia? E hia ngā whāinga i riro i te tīma i te tau?

He kohinga māpere tā Sima. Ka hoatu e ia ki tōna tuahine ko Rosi e 8 ngā māpere o tana kohanga  $\frac{1}{6}$ .  
I ngaro a ia i te  $\frac{3}{6}$  o te kohinga i te whakataetae i te kura. E hia ngā māpere i ngaro i a ia? E hia ngā māpere i tīmata ai a Sima i roto i tana kohinga?

# Hei āwhina i te kaiako

I te wā o te whakarewatanga, me mātua whakapakari koe he wāhanga ia hautanga o te katoa kotahi hei wāhanga o te whakawhanake i te horopaki o te tūmahi, ā, kei te arotahi te raruraru ki te kimi i te katoa.

Tīmata mā te tono i ngā ākonga ki te whakaoti i te raruraru e whai ake nei, ko te hauwhā o te akomanga e noho ana i runga i te whāriki, arā, e 7 ngā tamariki. E hia ngā tamariki kei roto i te akomanga? I muri i te whakaotinga o te raru, taurira e whakaatu ana i tēnei mā te taurira pae:

|                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| $\frac{1}{4} = 7$ | $\frac{1}{4} = 7$ | $\frac{1}{4} = 7$ | $\frac{1}{4} = 7$ |
|-------------------|-------------------|-------------------|-------------------|

Me whakawātea ngā kaitatau, ngā pīni rānei hei whakamahi mā ngā ākonga hei whakaatu i te horopaki tūmahi, hei whakangāwari rānei i ngā ākonga ki te tā i ēnei. Whakangāwari i ngā ākonga kia kite kei te kimi rātou i te katoa mai i te hautanga i tukuna me te tau i roto i te huinga. Tirohia te tautapa hei whakaingoa i ngā mea kua wehea te katoa (hei taurira, e rua ngā rōpū, e whā ngā rōpū). Tautokona ngā ākonga ki te tohu mā te whakamahi i tētahi taurira pouaka hei whakaatu i te horopaki raru.

# Wā toha

Tīpakohia ngā ākonga ki te tiritiri ko wai e whakawhanake ana i ngā whakaaturanga hei whakatika i ā rātou whakaaro me te whakamahi i tēnei hei whakaatu i te katoa.

|                    |                    |                    |  |  |  |  |  |  |  |
|--------------------|--------------------|--------------------|--|--|--|--|--|--|--|
| $\frac{1}{10} = 4$ | $\frac{1}{10} = 4$ | $\frac{1}{10} = 4$ |  |  |  |  |  |  |  |
|--------------------|--------------------|--------------------|--|--|--|--|--|--|--|

# 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.

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.

Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ , a & b he tau tōpū & b 0), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei taurira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div 3$  hei wāhanga e 2 e  $\frac{1}{3}$  o te 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.

## Hono

Mēnā ko te 5 te  $\frac{1}{4}$  o te huinga, he aha te  $\frac{3}{4}$ ? He aha te katoa?  
Mēnā ko te 5 ko te  $\frac{1}{6}$  o te huinga, he aha te  $\frac{3}{6}$ ? He aha te katoa?  
Mēnā ko te 5 te  $\frac{1}{3}$  o te huinga, he aha te  $\frac{2}{3}$ ? He aha te katoa?  
Mēnā ko te 5 te  $\frac{1}{10}$  o te huinga, he aha te  $\frac{8}{10}$ ? He aha te katoa?  
He aha ngā tauira e kitea ana e koe?  
He aha te ture hei mahi i te katoa?

## Whainga Ako: Ka ako mokopuna ki te:

Kimihia ngā hautanga o tētahi huinga.

### Ngā Tūmahi Takitahi

$\frac{1}{2}$  o te nama he 12, he aha te nama?  
 $\frac{1}{3}$  o ngā mea whakapiri he 12.  
E hia ngā mea whakapiri i  $\frac{2}{3}$ ?  
E hia ngā mea whakapiri i te pepa mea whakapiri katoa?  
 $\frac{1}{6}$  o te peke māpere he 4.  
E hia ngā māpere i  $\frac{4}{6}$  o te pēke māpere?  
E hia te katoa?

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanganga  
hautekau hei hautau, hei  
hautanga ā-ira hoki.

Whakatairite me te  
whakaraupapa i ngā  
hautau hautekau, i ngā  
hautanga ā-ira hautekau  
hoki.

Whiriwhiri i te hautau  
waetahi o tētahi rahinga  
mā te toharite.

Tāpiri, ki te tango rānei i  
ngā hautau, e ōrite ana  
ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi  
tauoti, he tauoti te  
whakautu mā te  
whakamahi i ngā meka  
whakarea, me ngā meka  
whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi  
me ngā tau hanumi, mō  
ngā tauraro pātahi 2, 3, 4,  
5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi  
tauoti, he tauoti te  
whakautu, mā te  
whakamahi i ngā meka  
whakarea, me ngā meka  
whakawehe:  
h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, haurua, hauwhā,  
tuawhā, ōrite, wāhanga,  
tiritiri tika

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 11

Kei te hanga tauira a Gabriella mā te whakamahi i ngā pere tae rerekē. E 16 ana pere whero, e 40 ngā pere kikorangi, e 24 ngā pere koura.

Ka wehea e ia te tauira ki ngā wāhanga e 4, ā, ka whakamahia te tau ōrite o ia tae i ia wāhanga.

E hia o ia pere tae ka purua e ia ki ia wāhanga?

Ka aha mēnā ka wehea e ia ki ngā wāhanga e 8?

E hia o ia pere tae ka purua e ia ki ia wāhanga?

## Hei āwhina i te kaiako

I te wā o te whakarewatanga, me mātua whakapakari koe he katoa te huinga pere hei wāhanga o te whakawhanake i te horopaki. Me whakawātea ngā rauemi raima mēnā e hiahiatia ana mā ngā ākonga e tīpako (hei tauira, ngā tāpa hautanga, ngā tihore pepa) me ngā kaitatau hei tohu i ngā pere.

Whakangāwari i ngā ākonga kia kite kei te kitea e rātou tētahi hautanga o te katoa ahakoa he maha ngā tūemi kei roto i taua huinga. Me aro atu hoki ki te tautapa hei whakaingoa i te mea kua wehea te katoa. Aroturuki mō ngā ākonga mā te whakamahi i ngā kupu o te katoa me ngā wāhanga o te huinga.

## Wā toha

Tīpakohia ngā ākonga hei tiritiri kua whakamahi i tētahi whakaaturanga kua wehea ki ngā wāhanga hautau, kātahi ka whakamahi i te wehenga wāhanga (hei tauira,  $16 \div 4 = ?$ ) kua whakamahi rānei i te pātahitanga kōaro me te tāpiritanga tukurua, te whakarea rānei (hei tauira,  $4 \times ? = 16$ ). Ki te kore e whakamahia tētahi o ngā rongoā, whakatauiria hei huarahi anō kua kitea e te kaiako e whakamahia ana i mua.

## Hono

Kia maumahara ki ngā ture mō te kimi i tētahi hautanga o tētahi huinga i hangaia e koe (tirohia anōtia ēnei). Whakaahuatia me pēhea koe e kite ai i ēnei e whai ake nei:

$\frac{1}{4}$  o te 48

$\frac{1}{3}$  o te 99

$\frac{1}{n}$  o te b

## 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ , a & b he tau tōpū & b 0), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div 3$  hei wāhanga e 2 e  $\frac{1}{3}$  o te 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.*

# Whainga Ako: Ka ako mokopuna ki te:

Hurihia ngā hautanga ki ngā hautanga ōrite.

Whakaotia ngā raru e pā ana ki te tango hautanga.

## Ngā Tūmahi Takitahi

He aha te  $\frac{1}{4}$  o te 12?

He aha te  $\frac{3}{4}$  o te 12?

He aha te  $\frac{1}{8}$  o te 24?

He aha te  $\frac{2}{8}$  o te 24?

He aha te  $\frac{1}{3}$  o te 33?

He aha te  $\frac{2}{3}$  o te 33?

He aha te  $\frac{1}{2}$  o te 34?

He aha te  $\frac{1}{5}$  o te 45?

He aha te  $\frac{4}{5}$  o te 45?

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanganga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga:  
h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu, mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe:  
h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, haurua, hauwhā, tuawhā, hauono, hauwaru, ōrite.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Tūmahi 12

E 2 ngā pounamu inu ngohengohe a Hone me ōna tuakana tokorua, a Wiremu rāua ko Jo. E toru hauwhā o te pounamu kotahi te inu a Hone. E inu ana a Wiremu i te rima hauwaru o te pounamu kotahi. Ka inu a Jo i te toenga. E hia te nui o te inu a Jo?

E 2 ngā pounamu inu ngohengohe a Hone me ōna tuakana tokorua, a Wiremu rāua ko Jo. E toru ngā hauono o te pounamu kotahi e inu ana a Hone. E inu ana a Wiremu i te 2 hautoru o te pounamu kotahi. Ka inu a Jo i te toenga. E hia te nui o te inu a Jo?

E 2 ngā pounamu inu ngohengohe a Hone me ōna tuakana tokorua, a Wiremu rāua ko Jo. E inu ana a Hone i te rima o te pounamu kotahi. E whā ngā rima o te pounamu kotahi e inu ana a Wiremu. Ka inu a Jo i te toenga. E hia te nui o te inu a Jo?

## Hei āwhina i te kaiako

Me whakawātea ngā rauemi raima mēnā e hiahiatia ana mā ngā ākonga e tīpako (hei tauira, ngā tāpa hautanga, ngā tīhore pepa).

Whakangāwari i ngā ākonga kia mōhio kia ōrite ngā tautapa hei tāpiri, hei tango rānei i ngā hautau.

Mō te tūmahi takitahi, me whakawātea ngā tāpa hautanga, ngā tīhore pepa rānei hei whakamahi mā ngā ākonga ki te hiahiatia.

## Wā toha

Tīpakohia ngā ākonga ki te 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 whakaoti i te raruraru.

## 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.*

*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.*

*Ko te hautanga e whakaahua ana i te wehenga ( $\frac{a}{b} = a \div b$ ,  $a$  &  $b$  he tau tōpū &  $b \neq 0$ ), ā, ka taea te whakamārama i runga i te raina tau mā ngā huarahi e rua. Hei tauira,  $\frac{2}{3} = 2 \div 3$ . I te raina tau, ka taea te whakamārama i te  $2 \div$  te 3 hei wāhanga e 2 e  $\frac{1}{3}$  o te 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.*

## Hono

Me pēhea te huri i ēnei hautanga hei whakaoti i ngā whārite?

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

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

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

## Whainga Ako: Ka ako mokopuna ki te:

Hurihia ngā hautanga ki ngā hautanga ōrite.

Whakaotia ngā raru e pā ana ki te tango hautanga mai i ngā tau oti.

## Ngā Tūmahi Takitahi

Whakaotia tētahi o ngā Tūmahi Aromatawai:

Aromatawai 1: Ngā hautanga (rohe)

Aromatawai 2: Ngā hautanga (tautuhi)

## Marautanga

### Tau 4

Āhukahuka te pānui, te tuhi me te waihanganga hautekau hei hautau, hei hautanga ā-ira hoki.

Whakatairite me te whakaraupapa i ngā hautau hautekau, i ngā hautanga ā-ira hautekau hoki.

Whiriwhiri i te hautau waetahi o tētahi rahinga mā te toharite.

Tāpiri, ki te tango rānei i ngā hautau, e ōrite ana ngā tauraro, kia 1 te otinga: h.t.,  $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} = \frac{8}{8} = 1$

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe: h.t.,  $\frac{1}{4}$  o te 40.

Huri i ngā hautau hanumi me ngā tau hanumi, mō ngā tauraro pātahi 2, 3, 4, 5, 6, me te 10.

### Tau 5

Kimi i te hautanga o tētahi tauoti, he tauoti te whakautu, mā te whakamahi i ngā meka whakarea, me ngā meka whakawehe: h.t.,  $\frac{2}{3}$  o te 24.

## Reo Pāngarau

Katoa, hauwhā, tuawhā, hauwaru, hautoru, hauono, ōrite.

# Ngā Tumanako

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Ngā Rongoā, Ngā Pōhēhētanga

## Aromatawai 1 (rohe)

E kī ana a Willow ka taea e ia te whakamatau he ōrite  $\frac{3}{5}$  ki  $\frac{6}{10}$ .

E whakaae ana, e whakahē ana rānei koe ki a ia? Whakamāramatia he aha koe i whakaae ai, i whakahē rānei.

He aha ngā hautanga e mōhio ana koe e ōrite ana tētahi ki tētahi?  
Whakamāramatia me pēhea koe e mōhio ai.

## Aromatawai 2 (tautuhi)



I te kura e whakatō kākano ana ngā akomanga. Kei a rātou:

Kotahi hauwhā ( $\frac{1}{4}$ ) o te pēke e 32 kākano.

Kotahi te tuaono ( $\frac{1}{6}$ ) o te pēke e 36 kākano.

Kotahi te rima ( $\frac{1}{5}$ ) o te pēke e 35 kākano.

Ko tēhea pēke kei a ia te nuinga o ngā kākano? Whakaaturia ō whakaaro.