

# MATHEMATICAL INQUIRY BOOKLETS

Tau me te Taurangi

Tūārere 2 (Tau 5-6)

Pukapuka Kaiako

<b>Rapanga 1</b>	<p><b>Tau Rima</b></p> <p>Kua pūtea te whānau o Rea ki te haere ki tētahi hākari whānau i Rarotonga. I tērā mutunga wiki ka whai takahanga kohi moni rātau i te mākete, a, ka whakarewaina e rātau he \$2198. Kua whakarewa kētia e rātau te \$867. E hia nga moni i whakaarahia katoatia e rātau?</p> <p>Kua pūtea te whānau o Rea ki te haere ki tētahi hākari whānau i Rarotonga. I tērā mutunga wiki ka whai takahanga kohi moni rātau i te mākete. Ināianei kua whakarewaina katoatia e rātau te \$5432. I mua i te mutunga wiki ka \$3789 to rātau. E hia te nui o nga moni i whakaarahia e te takahanga o te mutunga wiki?</p> <p>Kua pūtea te whānau o Rea ki te haere ki tētahi hākari whānau i Rarotonga. I tērā mutunga wiki ka whai takahanga kohi moni rātau i te mākete. Ināianei kua whakarewaina katoatia e rātau te \$6534. I mua i te mutunga wiki ka \$3785 to rātau. E hia te nui o nga moni i whakaarahia e te takahanga o te mutunga wiki?</p> <p><b>Tau Ono</b></p> <p>Kua pūtea moni te kura mo nga pukapuka hou. I tērā mutunga wiki ka whai takahanga kohi moni rātau, a, ka whakarewaina e rātau te \$6748. Kua whakarewa kētia e rātau te \$39867. E hia nga moni i whakaarahia katoatia e rātau?</p> <p>Kua pūtea moni te kura mo tētahi hāmarara hou o te rā. I tērā wiki he takahanga kohi moni tā rātau, ā, ināianei he \$48 432 tā rātau ināianei. I mua i te takahanga e \$13 789 to rātau takahanga. E hia te nui o ngā moni i whakaarahia e te takahanga?</p> <p>Kua pūtea moni te kura mo tētahi akomanga hou. I tērā wiki he takahanga kohi moni tā rātau, ā, ināianei he \$235 534 tā rātau ināianei. I mua i te takahanga e \$93 785 to rātau takahanga. E hia te nui o nga moni i whakaarahia e te takahanga?</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>E hāngai ana ta mātau pūnaha tau i runga anō i nga whakarōpū o te tekau, te take rānei tekau. Ko nga whakarōpūtanga o ngā mea, tekau, rau, me ngā mano e āhei ana ki te wehe i nga huarahi rerekē. Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E</p>

	<p>rua nga rahiinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<ul style="list-style-type: none"> <li>• <b>Te Hanga o ngā Tau Tau 5/6</b></li> <li>• tautohu, te panui, te tuhi, te whakatairite me te whakaraupapa i ngā tau ki te 100,000.</li> <li>• tautohu, te panui, te tuhi, te whakatairite me te whakaraupapa i ngā tau ki te 100,000.</li> <li>• <b>Te Whakarōpū/ Te Uara Tū Tau 5/6</b></li> <li>• whakaputa i te maha o ngā 10, o ngā 100, o ngā 1,000, o ngā 10,000 kei roto i tētahi tau mati-5.</li> <li>• whakaputa i te maha o ngā 10, o ngā 100, o ngā 1,000, o ngā 10,000 kei roto i tētahi tau mati-6.</li> <li>• <b>Ngā Pāheko Tau 5/6</b></li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata: h.t., whakaāwhiwhi 4560 ki te pū 10 pūrua (<math>arā \times 100</math>) ka 4600</li> <li>• whakaāwhiwhi i ngā hautekau me ngā haurau ki te tauoti pātata.</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata ana</li> <li>• <b>Ngā Pāheko Tau 5/6</b></li> <li>• tāpiri me te tango tau ki te 10,000.</li> <li>• tāpiri me te tango tauoti.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamāramatia te kanohi, te wāhi, me te uara katoa o ngā mati i roto i ngā tau.</p> <p>Whakamārama me te whakatautika i te whakamahinga o te uara wāhi hei whakatika i ngā raruraru whakauru.</p> <p>Whakamārama me te whakatautika i te whakamahinga o te ūritetanga me te utu hei whakatika i ngā rapanga tango.</p> <p>Whakamahia me te whakatautika i te pātahitanga kōaro i waenga i te tāpiritanga me te tango hei whakatika i ngā rapanga.</p> <p>Ka whakaatu i ngā whārite ki tētahi raina tau wātea, i te tuhipoka me te whakamahi i tētahi whare uara wāhi.</p>
<b>Nga tini mata o te reo pangarau</b>	<p>Kotahi, tekau, rau, mano, tāpiri, uara wāhi, uara kanohi, uara tāpeke, mati, tāpiri, tango, pātahitanga kōaro.</p>
<b>Wa toha me te Hono</b>	<p>Mō te tū mahi tuatahi, tīpакohia ngā rautaki rongoā ākonga kua whakamahi i te utu me te ūritetanga, te uara wāhi rānei me te whakaingoa anō.</p> <p>Mō ngā tū mahi tuarua, tuatoru hoki, tīpакohia ngā rautaki rongoā ākonga kua whakamahi i ngā pātahitanga kōaro o te tāpiritanga me te tango, te uara wāhi rānei me te whakaingoa anō (tango ā-rohe) – tonoa ngā ākonga kia tauira mā te whakamahi i ngā paraka uara wāhi.</p> <p><i>Inverse relationship</i> 275 – 139 =</p>

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	$139 + \underline{\quad} = 275$ <i>Equivalence and compensation</i> $275 - 139 =$ $275 - 140 = 135$ $135 + 1 = 136$  <i>Place value and renaming</i> $275 - 139 =$ $5 - 9 = ?$ <i>Rename one ten so 15 ones – 9 ones = 6</i> $60 - 30 = 30$ $200 - 100 = 100$ $100 + 30 + 6 = 136$  <b>Hono:</b> Tauirahia ki ngā ākonga me pēhea te whakatika i te tūmahi mā te whakamahi i tētahi hātepe papatono tīwae paerewa me ngā paraka uara whakaingoa anō, wāhi hoki. Whakamahi mārama tonu i te reo uara-wāhi me te whakaatu i ngā hohenga mā ngā paraka uara wāhi. Hei tauira, whakamahia ngā paraka uara-wāhi hei tohu i tēnei tau kātahi ka whakaingoa anō mā te whakawhiti i ngā paraka. Pātai atu ki ngā ākonga kia whakatika i te pātai me te tauira e whai ake nei ki ngā paraka uara wāhi me te whakapūkete poutū: $4687 + 3536 =$
<b>Hei awhina i te kaiako</b>	Ko te whakamahinga pānui o te uara wāhi me te kaha ki te kite i ngā rau hei tekau tekau me te tekau hei mea kotahi tekau. Tātuhia ngā tūhononga hei tohu i ēnei i roto i ngā whare uara wāhi. E tūmanako ana kia whakamahi ngā ākonga i ngā whārite me te raina tau wātea hei tohu i ō rātou whakaaro. E tūmanako ana ngā ākonga kia whakamahi i te hātepe hātepe paerewa me te whakarite i te mātauranga ā-mahi me te ariā, e.g., ka taea e rātou te whakamārama i tēnei mā tētahi tikanga hanga mōhio e pā ana ki te uara wāhi me te whakaingoa anō. Mō te tūmahi takitahi, he paraka uara wāhi e wātea ana.
<b>Rapanga Motuhake</b>	Whakamahia tētahi whare uara wāhi hei whakaoti i ngā whārite e whai ake nei: $157 + 742 =$ $461 + 428 =$ $534 + 2564 =$

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	$1439 + 361 =$ $5528 + 1492 =$ He aha tāu e kite ai? Whakatautikatia o whakaaro.
<b>Ma te kaiako</b>	

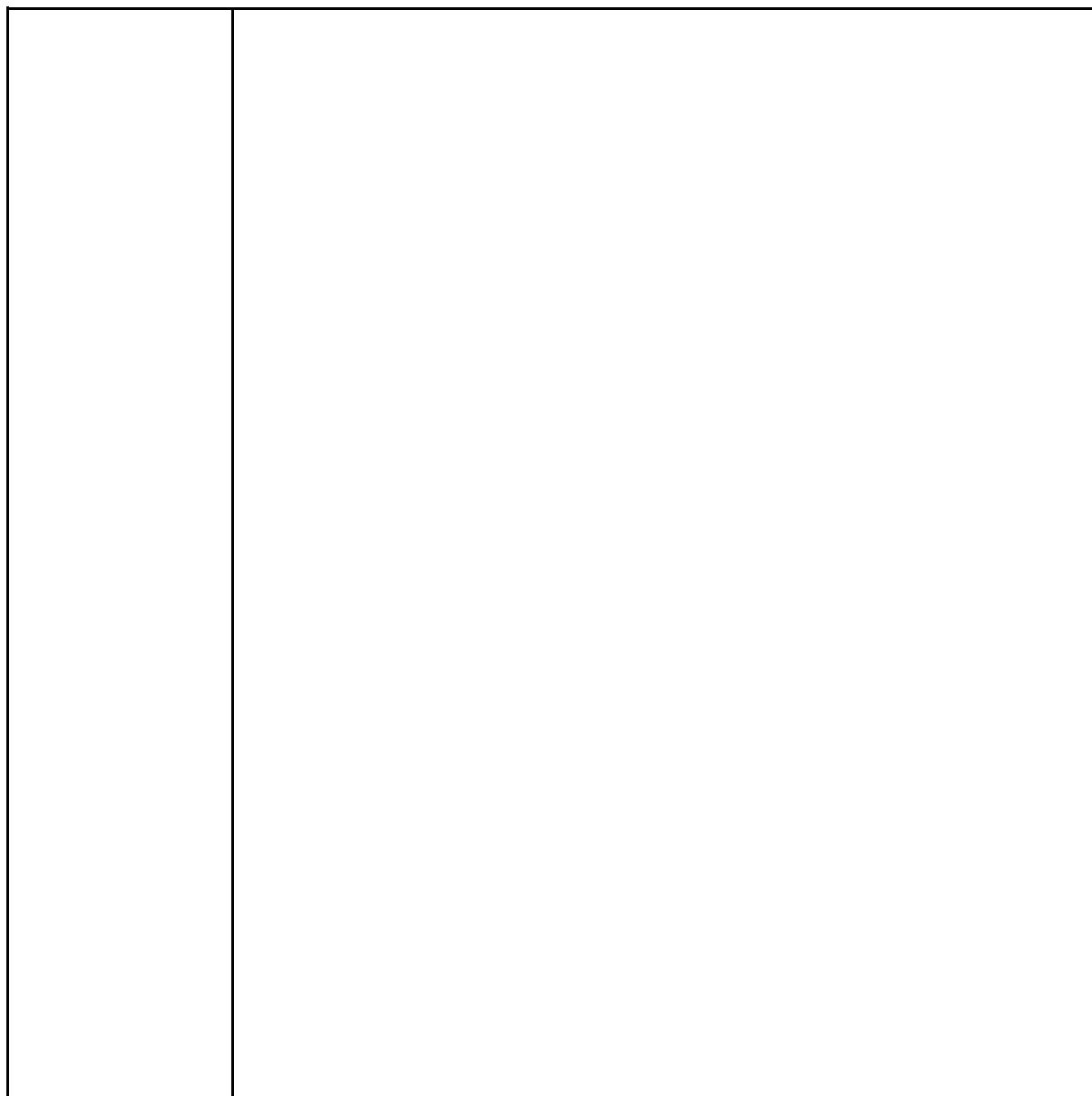
<b>Rapanga 2</b>	Year Five
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	<p>Kua kohia e Kaitiaki he moni. E \$2225 tōna, ā, i muri i tana hoko ihirangi mai i te mākete o Minecraft, e \$539 tōna mauī. E hia ana whakapau? Kei te tākaro a Kaitiaki i tētahi kēmu rorohiko, ā, kua whiwhi piro 9837. Ka whakaakea a ia, a, no te mutunga o te whakaake, ka mahue a ia me te 968 nga piro. E hia nga piro i ngaro i a ia i roto i te whakaake?</p> <p><b>Year Six</b></p> <p>Kua kohia e Kaitiaki he moni. E \$22 225 tōna, ā, i muri i tana hoko ihirangi mai i te mākete o Minecraft, e \$5539 tōna mauī. E hia ana whakapau? Kei te tākaro a Kaitiaki i tētahi kēmu rorohiko, ā, kua whiwhi piro 543 837. Ka whakaakea a ia, a, no te mutunga o te whakaake, ka mahue a ia me te 5968 nga piro. E hia nga piro i ngaro i a ia i roto i te whakaake?</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>E hāngai ana ta mātau pūnaha tau i runga anō i nga whakarōpū o te tekau, te take rānei tekau. Ko nga whakarōpūtanga o ngā mea, tekau, rau, me ngā mano e āhei ana ki te wehe i nga huarahi rerekē. Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<ul style="list-style-type: none"> <li>• <b>Te Hangā o ngā Tau Tau 5/6</b></li> <li>• tautohu, te panui, te tuhi, te whakatairite me te whakaraupapa i ngā tau ki te 100,000.</li> <li>• tautohu, te panui, te tuhi, te whakatairite me te whakaraupapa i ngā tau ki te 100,000.</li> <li>• <b>Te Whakarōpū/ Te Uara Tū Tau 5/6</b></li> <li>• whakaputa i te maha o ngā 10, o ngā 100, o ngā 1,000, o ngā 10,000 kei roto i tētahi tau mati-5.</li> <li>• whakaputa i te maha o ngā 10, o ngā 100, o ngā 1,000, o ngā 10,000 kei roto i tētahi tau mati-6.</li> <li>• <b>Ngā Pāheko Tau 5/6</b></li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata: h.t., whakaāwhiwhi 4560 ki te pū 10 pūrua (arā × 100) ka 4600</li> <li>• whakaāwhiwhi i ngā hautekau me ngā haurau ki te tauoti pātata.</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata ana</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Ngā Pāheko Tau 5/6</b></li> <li>• tāpiri me te tango tau ki te 10,000.</li> <li>• tāpiri me te tango tauoti.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamāramatia te kanohi, te wāhi, me te uara katoa o ngā mati i roto i ngā tau.</p> <p>Whakamārama me te whakatautika i te whakamahinga o te uara wāhi hei whakatika i ngā raruraru tango.</p> <p>Whakamārama me te whakatautika i te whakamahinga o te ūritetanga me te utu hei whakatika i ngā raruraru tango.</p> <p>Whakamahia me te whakatautika i te pātahitanga kōaro i waenga i te tāpiritanga me te tango hei whakatika i ngā raruraru.</p> <p>Ka whakaatu i ngā whārite ki tētahi raina tau wātea, i te tuhipoka me te whakamahi i tētahi whare uara wāhi.</p>
<b>Nga tini mata o te reo pangarau</b>	Kotahi, tekau, rau, mano, tāpiri, tango, uara wāhi, uara kanohi, uara tāpeke, mati, tāpiri, tango, pātahitanga kōaro.
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā rautaki rongoā ākonga kua whakamahi i ngā pātahitanga kōaro o te tāpiritanga me te tango, te ūritetanga me te utu, te uara wāhi rānei me te whakaingoa anō.</p> <p><b>Connect:</b></p> <p>Tauira ki ngā ākonga me pēhea te whakatika i te tūmahi mahiroto mā te whakamahi i tētahi hātepe papatono tīwae paerewa me ngā paraka uara whakaingoa anō, wāhi hoki. Whakamahia māramatia te reo uara-wāhi me te whakaatu i ngā hohenga mā ngā paraka uara wāhi. Hei tauira, whakamahia ngā paraka uara-wāhi hei tohu i tēnei tau kātahi ka whakaingoa anō mā te whakawhiti i te paraka tekau mō ngā mea e 10. <math>2225 - 539 = 5 - 9 = ?</math> Whakaingoa anōtia tētahi tekau kia 15 ngā mea – 9 ngā mea = 6 Ngā mea e Tono ana ki ngā ākonga kia whakaoti i te pātai e whai ake nei me te tauira i tēnei ki ngā paraka uara wāhi me te pūkete poutū: <math>1543 - 626 =</math></p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>I mua i tō whakarewa i te tūmahi, tuhia te 835 947 ki runga i te papa. Pātai atu ki ngā ākonga, he aha tēnei tau? Me pēhea tō tuhi me te whakamārama i tēnei tau mā ngā huarahi rerekē? Tautoko tika i ngā ākonga kia pānui tika i te tau. Hoatu he wā hai mahi i roto i nga takirua me te pūkete, a, ka tohu i a rātau whakaaro. Tūhuratia ngā ariā o te wāhi, te kanohi, me te uara katoa.</li> <li>Tautoko i ngā ākonga hei kōrerorero i ngā mano, ngā mano, ngā rau, tekau, ngā mea me te hanga hononga ki te wāhi, te kanohi, me te uara katoa. Whakamōhiotia tētahi whare uara wāhi hei whakaaturanga, ā, kei runga tēnei i te pakitara, i te papa mā rānei kia tohutoro ai ngā ākonga. Tukuruatia tēnei hei mahana puta noa i te tau me te whakanui ake i ngā tau tae atu ki te 1 000 000. Kia wātea ngā paraka uara wāhi. Ko te whakamahinga pānui o te uara wāhi me te kaha ki te kite i ngā rau hei tekau tekau me te tekau hei mea kotahi tekau. Tātuhia ngā tūhononga</li> </ul>

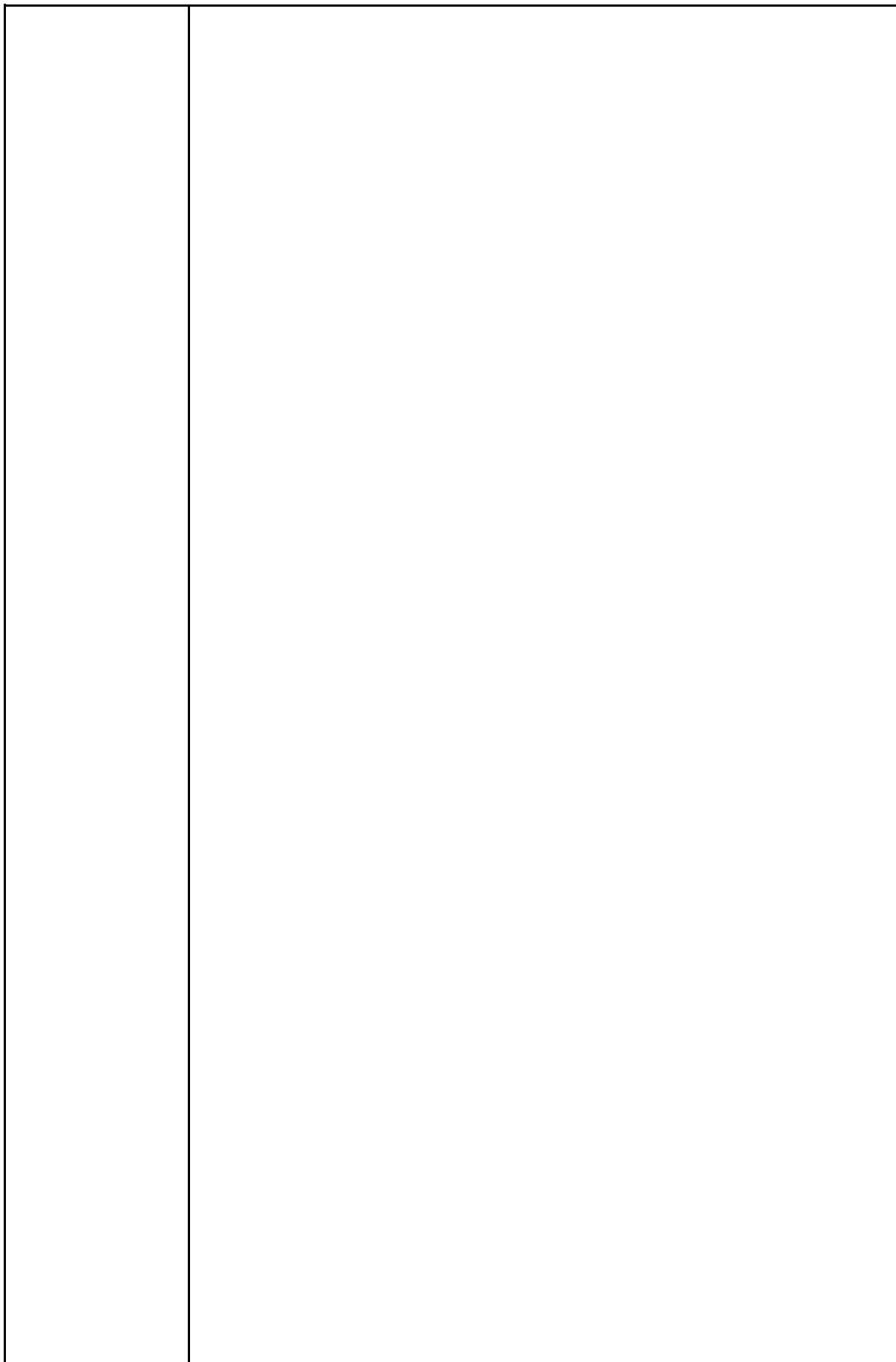
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	hei tohu i ēnei i roto i ngā whare uara wāhi. Whakamōhiotia te raina tau wātea hei tohu i ngā rautaki rongoā. E tūmanako ana kia whakamahia e ngā ākonga ngā whārite hei tohu i o rātau whakaaro. Mō te tūmahi takitahi, he paraka uara wāhi e wātea ana.
<b>Rapanga Motuhake</b>	<p>Whakaoti ēnei:</p> $531 - 249 =$ $735 - \boxed{\quad} = 326$ $\boxed{\quad} - 432 = 278$ $4321 - 1795 =$
<b>Ma te kaiako</b>	



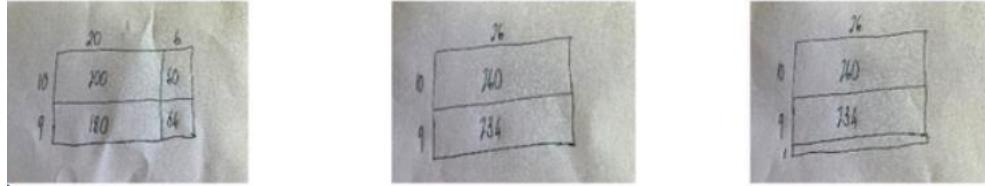
<b>Rapanga 3</b>	<p>Nga ā tauwehe me ngā taurea (kēmu, e rua ngā kaitākaro)</p> <p>Ko te whāinga o tēnei kēmu ko te tangata whakamutunga hei whakawhiti i tētahi tau.</p> <p>1) Ka taea e te kai tākaro tuatahi te kōwhiri i tētahi tau tōrunga iti iho i te 50, me te whakawhiti atu ki runga i te mātiti.</p> <p>2) Me kōwhiri e te kai tākaro tuarua tētahi tau tauwehe, he tau taurea hei whakawhiti i te tau tuatahi.</p> <p>3) Me whakawhiti ngā tau he tauwehe, he taurea rānei o te tau kātahi anō ka whakawhiti atu.</p> <p>Purei i te kēmu mō ētahi wā, ā, tirohia mēnā ka kitea e koe he huarahi toa. Ināianei ka tākaro anō, ka tohe i a koe ki te kimi i te mekameka tino roa e taea ana.</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>E hāngai ana ta mātau pūnaha tau i runga anō i nga whakarōpū o te tekau, te take rānei tekau. Ko nga whakarōpūtanga o ngā mea, tekau, rau, me ngā mano e āhei ana ki te wehe i nga huarahi rerekē. Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehea e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Te hanga o te tau</b> Y7</p> <ul style="list-style-type: none"> <li>• kimi i te tauwehe pātahi nui rawa o ngā tau e rua ki te 100</li> <li>• kimi i te taurea e pātahi iti rawa o ngā tau ki te 10</li> <li>• whakamahi taupū hei tuhi whakareatanga tāruarua me te tautohu pūtakerua ki te 100.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Tāutua ngā tauwehe o ngā tau ki te 100. Tāutua ngā taurea o ngā tau tae atu ki te 100.</p>
<b>Nga tini mata o te reo pangarau</b>	tauwehe, taurea, tau toitū.

<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā ākonga hei tiritiri nāna i hanga rautaki me ngā whakaaro mō te raupapa o ngā tau hei kōwhiri, ā, kua taea te whakamahi i tēnei hei hanga i tētahi mekameka roa.</p> <p><b>Hono:</b> He aha ngā rautaki me ngā ture ka taea e koe te whakamahi hei whakarite i te mekameka kia roa rawa?</p>
<b>Hei awhina i te kaiako</b>	<p>1. I mua i tō whakarewa i te tūmahi, tuhia te 24 ki runga i te papa me te tono i ngā ākonga kia kitea ngā tauwehe katoa mō te 24.</p> <ul style="list-style-type: none"> <li>• Tauira mā te whakamahi i te rākau tauwehe hai tāhopu i tēnei. Hei whakarewa i tēnei tūmahi, whakamāramatia me te whakamārama he aha te tauwehe me te taurea.</li> <li>• Me whakawātea ngā tūtohi whakarea kia whakamahia e ngā ākonga mēnā e hiahiatia ana, he maha rau ngā papa e wātea ana. Whakamōhiotia te kēmu hei kēmu whakataetae, ā, ka tono i ngā ākonga kia tākaro i tēnei wā kia kite ai mēnā ka taea e rātou te kite i ngā huarahi hei kaitākaro whakamutunga hei whakawhitī i tētahi tau ki waho.</li> </ul> <p>Kātahi ka whakawhitī i te kēmu ki tētahi kēmu ngātahi, e mahi tahi ai te kai tākaro e rua ki te ngana ki te waihanga i te mekameka tino roa e taea ana.</p> <p>Ko ngā rautaki me ngā ture ka kitea pea e ngā ākonga ko: karohia ngā tau toitū, kaua e whakamahi i ngā tau 1 ki te 10 kia hiahiatia rā anō he taurea noa iho me te tauwehe o ētahi tau i waenganui i te 1 ki te 100, ko ngā tau nui ake kei a rātou te tauwehe tino nui.</p> <p>Mō te tūmahi takitahi, he maha ngā tūtohi whakarea e wātea ana kia whakamahia e ngā ākonga mēnā e hiahiatia ana, he maha ngā tārua o te papa rau e wātea ana.</p>
<b>Rapanga Motuhake</b>	<p>Pūrei te kēmu tauwehe me ngā taurea ki tētahi hoa ka ngana ki te kimi te mekameka roa rawa.</p> <p>Me maumahara ki ngā ture o raro nei: 1) Ka taea e te kaitākaro tuatahi te kōwhiri i tētahi tau tōrunga iti iho i te 50, me te whakawhitī atu ki te mātiti. 2) Me kōwhiri e te kaitākaro tuarua tētahi tau hei whakawhitī atu he tauwehe, he taurea rānei o te tau tuatahi. 3) Ka huri ki te whakawhitī i ngā tau he tauwehe, he taurea rānei o te tau kātahi anō ka whakawhitī atu.</p>
<b>Ma te kaiako</b>	



<b>Rapanga 4</b>	<p>Tau Rima  Kai te āwhina a Mamia i tana whānau ki te pōkai hāte hai hoko i te mākete.  E 247 ngā hāte ka uru ki ia pouaka. Ka whakamutua e rātau ki nga pouaka e 6. E hia nga hāte e hokona ana e rātau i te mākete?</p> <p>Kai te āwhina a Mamia i tana whānau ki te pōkai hāte hai hoko i te mākete.  E 435 ngā hāte ka uru ki ia pouaka. Ka whakamutua e rātau ki nga pouaka e 9. E hia nga hāte e hokona ana e rātau i te mākete?</p> <p>Tau Ono  Kai te āwhina a Mamia i tana whānau ki te pōkai hāte hai hoko i te mākete.  E 89 nga hāte ka uru ki ia pouaka. Ka whakamutua e rātau ki nga pouaka e 46. E hia nga hāte e hokona ana e rātau i te mākete?</p> <p>Kai te āwhina a Mamia i tana whānau ki te pōkai hāte hai hoko i te mākete.  E 286 ngā hāte ka uru ki ia pouaka  . Ka whakamutua e rātau ki nga pouaka e 15. E hia nga hāte e hokona ana e rātau i te mākete?</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>E hāngai ana ta mātau pūnaha tau i runga anō i nga whakarōpū o te tekau, te take rānei tekau. Ko nga whakarōpūtanga o ngā mea, tekau, rau, me ngā mano e āhei ana ki te wehe i nga huarahi rerekē.</p> <p>Tērā ētahi āhuatanga tauhangā e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Ngā meka Matua</b>  <b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math></li> <li>• whakaputa maharatanga ki ture whakawehi mō ngā whakarea 2, 3, 5, 9 me ngā 10.</li> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math>.</li> </ul> <p><b>Ngā Pāheko</b>  <b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakarea tau mati-3 ki ngā tau mati-1 tau mati-2 hoki:  h.t., <math>6 \times 248</math>, <math>37 \times 84</math></li> </ul>

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	<ul style="list-style-type: none"> <li>whakarea tauoti matimaha: h.t., <math>54 \times 112</math>.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamārama me te whakatautika i te whakamahinga o te āhuatanga ā-waha i roto i te whakareatanga.</p> <p>Whakamārama me te whakatautika i te whakamahinga o te āhuatanga ā-ture i roto i te whakareatanga.</p> <p>Whakaatu whakaaro mā te whakamahi i ngā momo tuhipoka rerekē tae atu ki tētahi horahanga me tētahi tauira huānga</p>
<b>Nga tini mata o te reo pangarau</b>	Ko te āhuatanga motuhake, te rohe, te āhuatanga ā-waha, te tauwehe, te hua.
<b>Wa toha me te Hono</b>	<p>Mēnā kāore anō kia whakamahia he rautaki rongoā, whakamōhiotia tēnei hei rautaki rongoā kua whakamahia e ngā ākonga i mua.</p> <p>Tāhoputia ēnei hei whārite me te tauira e tohu ana i ēnei mā te tauira rohe (<math>19 \times 26</math> e whakaaturia ana hei tauira)</p>  <p><b>Connect:</b>  Pātai atu ki ngā ākonga kia whakaahua me pēhea tō whakaoti i te whārite e whai ake nei mā te whakamahi i te āhuatanga whakawehi, te ūritetanga rānei me te utu, ā, ka tohu mā te tauira rohe: <math>38 \times 45 =</math>  Tauira me pēhea tēnei e taea ai te whakaoti me te whakapūkete hei hātepe papatono poutū.</p>
<b>Hei awhina i te kaiako</b>	<ol style="list-style-type: none"> <li>Tatari kia tāhopu ngā ākonga mā ngā whārite me te tauira rohe.</li> <li>Kimihia ngā rautaki rongoā a ngā ākonga mā te whakamahi i te āhuatanga ā-iwi, i te āhuatanga rānei.</li> </ol> <p>Tūhuratia ngā mea ka tūpono ina whakamahi i te āhuatanga ā-ture.  Ki te whakamahi ngā ākonga i te hātepe papatono paerewa, ka taea te hanga i ngā hononga i waenga i tēnei me te āhuatanga ā-iwi.</p>
<b>Rapanga Motuhake</b>	<p>Tau 5 : Whakaotihia ngā whārite e whai ake nei:</p> $346 \times 5 =$ $663 \times 6 =$ $489 \times 8 =$ Whakaaturia tō rautaki rongoā mā te whakamahi i ngā whārite me tētahi tauira rohe.

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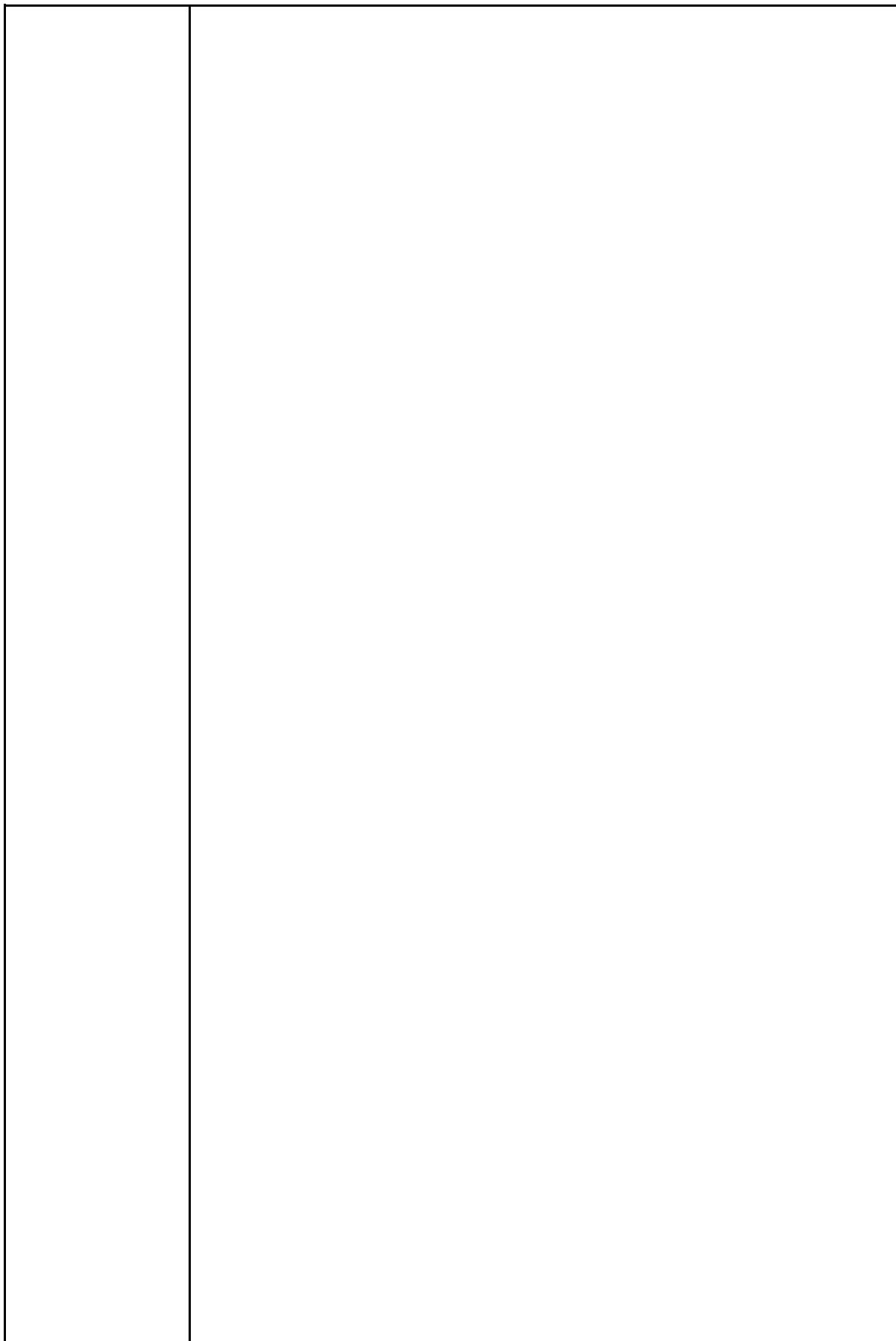
	Tau 6  Whakaoti i ngā whārite e whai ake nei: $346 \times 54 =$ $663 \times 69 =$ $489 \times 81 =$  Whakaaturia tō rautaki rongoā mā te whakamahi whārite me tētahi aratau rohe
<b>Ma te kaiako</b>	

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<b>Rapanga 5</b>	<p>Tau 5</p> <p>E 24 nga tūru o te whare pikitia whitiāhua i ia haupae. E 16 ngā haupae. E hia nga tūru kai roto i te whare pikitia whitiāhua? Whakaaturia tō rongoā mā te whakamahi i ngā whakaaturanga rerekē e rua.</p> <p>E 29 nga tūru o te whare pikitia whitiāhua i ia haupae. E 31 ngā haupae. E hia nga tūru kai roto i te whare pikitia whitiāhua? Whakaaturia tō rongoā mā te whakamahi i ngā whakaaturanga rerekē e rua.</p> <p>Tau 6</p> <p>E 288 te tūnga o te toamaha hokohoko i runga i ia papa. E 32 nga papa o te kāpark. E hia nga motokā e uru ana ki roto i te kāpark? Whakaaturia tō rongoā mā te whakamahi i ngā whakaaturanga rerekē e rua.</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me</p>

	<p>ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhanga i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Ngā meka Matua</b> <b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math></li> <li>• whakaputa maharatanga ki ture whakawehi mō ngā whakarea 2, 3, 5, 9 me ngā 10.</li> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math>.</li> </ul> <p><b>Ngā Pāheko</b> <b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakarea tau mati-3 ki ngā tau mati-1 tau mati-2 hoki: h.t., <math>6 \times 248</math>, <math>37 \times 84</math></li> <li>• whakarea tauotī matimaha: h.t., <math>54 \times 112</math>.</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata:</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata ana</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamārama me te whakatautika i te whakamahinga o te āhuatanga o te wāhanga/āhuatanga ā-waha i roto i te wehenga.</p> <p>Whakamārama me te tohu i te pātahitanga kōaro o te whakarea me te wehenga.</p> <p>E whakaatu ana i te whakaaro mā te whakamahi i ngā momo tuhipoka rerekē.</p>
<b>Nga tini mata o te reo pangarau</b>	Ko te āhuatanga motuhake, te pātahitanga kōaro, tauwehe, hua, otinga , tau wehea
<b>Wa toha me te Hono</b>	<p>Tīpакohia me te raupapa i ngā rautaki rongoā ākonga e whakamahi ana i te āhuatanga ā-iwi, i te āhuatanga ā-ture rānei.</p> <p>Āhuatanga Associative <math>288 \times 32 = (288 \times 3 \times 10) + (288 \times 2)</math>  <math>29 \times 31 = (29 \times 3 \times 10) + (29 \times 1)</math></p> <p>Mēnā kāore anō kia whakamahia he rautaki rongoā, whakamōhiotia tēnei hei rautaki rongoā kua whakamahia e ngā ākonga i mua</p>

	<p><b>Hono:</b>  Pātai atu ki ngā ākonga kia whakaahua me pēhea te whakamahi i te āhuatanga ā-ture mēnā ka whakarea mā te 50, 80 rānei.  Pātai atu ki ngā ākonga kia whakaahua me pēhea te whakaotī i te whārite o raro nei mā te whakamahi i te āhuatanga ā-iwi, ā-ture rānei:  <math>348 \times 151 =</math>  Ngā hononga tauira ki te hātepe papatono tuhituhi paerewa mō te whakareatanga.</p>
<b>Hei awhina i te kaiako</b>	<ol style="list-style-type: none"> <li>I mua i tō whakarewatanga i te tūmahī, tonoa ngā ākonga kia kitea ngā tauwehe noa mō te 48 me te pūkete hei rākau tauwehe. Tukuruatia tēnei ngohe mō ngā tau rerekē i waenga i te 1 ki te 125. Tukuruatia tēnei ngohe puta noa i tēnei wae me te toenga o te tau. Tatari kia tāhopu ngā ākonga mā ngā whārite me te tauira rohe.</li> <li>Tirohia ki ngā rautaki rongoā a ngā ākonga mā te whakamahi i te āhuatanga ā-waha, i te āhuatanga rānei.</li> <li>Tūhuratia ngā mea ka tūpono ina whakamahi i te āhuatanga ā-ture.</li> <li>Ki te whakamahi ngā ākonga i te hātepe papatono paerewa, ka taea te hanga i ngā hononga i waenga i tēnei me te āhuatanga ā-wehe</li> </ol>
<b>Rapanga Motuhake</b>	<p>Whakaotī i ngā whārite e whai ake nei:</p> <p><math>24 \times 18 =</math></p> <p><math>29 \times 45 =</math></p> <p><math>48 \times 32 =</math></p> <p><math>55 \times 47 =</math></p> <p><math>32 \times 67 =</math></p> <p><math>157 \times 62 =</math></p> <p>He aha ngā tauira i kitea e koe me te whakamahi hei āwhina i a koe ki te whakatika i ngā whārite? Ka mahi ngā tauira mō ētahi tau ina whakarea?</p>
<b>Ma te kaiako</b>	





<b>Rapanga 6</b>	<p><b>Year 5</b></p> <p>E hokona ana e Hoani he hāte i te mākete pō. I te mutunga o te marama, ka pēke a ia i te \$395, ā, kei roto hoki te moni i tīmataria e ia. Ki te utu a ia i te \$7 mō ia hāte, e hia ngā hāte i hokona e ia, a, e hia te nui o ngā moni i tīmata ai ia?</p> <p>He aha ērā atu moni e toru i taea e Hoani te mahi tae atu ki te moni i tīmataria e ia? He aha te ture, te tauira rānei ka taea e koe te whakamahi hei kimi i te nui o te mahi a Hoani ahakoa te maha o ngā hāte i hokona e ia?</p> <p><b>Year 6</b></p> <p>E hokona ana e Hoani he hāte i te mākete pō. I te mutunga o te marama, ka pēke a ia i te \$3295, ā, kei roto hoki te moni i tīmataria e ia. Ki te utu a ia i te \$7 mō ia hāte, e hia ngā hāte i hokona e ia, a, e hia te nui o ngā moni i tīmata ai ia? He aha ērā atu moni e toru i taea e Hoani te mahi tae atu ki te moni i tīmataria e ia? He aha te ture, te tauira rānei ka taea e koe te whakamahi hei kimi i te nui o te mahi a Hoani ahakoa te maha o ngā hāte i hokona e ia?</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Ngā meka Matua</b></p> <p><b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math></li> <li>• whakaputa maharatanga ki ture whakawehi mō ngā whakarea 2, 3, 5, 9 me ngā 10.</li> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math>.</li> </ul> <p><b>Ngā Pāheko</b></p> <p><b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakarea tau mati-3 ki ngā tau mati-1 tau mati-2 hoki: h.t., <math>6 \times 248</math>, <math>37 \times 84</math></li> <li>• whakarea tauotī matimaha: h.t., <math>54 \times 112</math>.</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata:</li> </ul>

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	<ul style="list-style-type: none"> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata ana</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamārama me te whakatautika i te whakamahinga o te āhuatanga o te wāhanga/āhuatanga ā-waha i roto i te wehenga.</p> <p>Whakamārama me te tohu i te pātahitanga kōaro o te whakarea me te wehenga.</p> <p>E whakaatu ana i te whakaaro mā te whakamahi i ngā momo tuhipoka rerekē.</p>
<b>Nga tini mata o te reo pangarau</b>	<p>Ko te āhuatanga motuhake, te pātahitanga kōaro, tauwehe, hua, otinga , tau wehea</p>
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā rautaki rongoā ākonga i whakamahia ai e rātou te pātahitanga kōaro o te whakarea me te wehenga</p> <p>Mēnā kāore anō kia whakamahia he rautaki rongoā, whakamōhiotia tēnei hei rautaki rongoā kua whakamahia e ngā ākonga i mua.</p> <p>Inverse relationship <math>395 \div 7 = 7 \times ? = 395</math></p> <p>Distributive property/partial quotients</p> $395 \div 7 = (140 \div 7) + (140 \div 7) + (70 \div 7) + (35 \div 7)$ <p><b>Hono:</b></p> <p>Pātai atu ki ngā ākonga kia whakaahua me pēhea tō whakaoti i te whārite e whai ake nei mā te whakamahi i te pātahitanga kōaro, i te āhuatanga wāhanga rānei: <math>567 \div 6 = 4892 \div 5 =</math></p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>• Tīpakohia ngā rautaki ka tīmata ki te whakamahi i ētahi momo whakaaro maha mēnā he mahi anō ngā ākonga hei whakarea, wehenga rānei.</li> <li>• Tirohia mēnā ka tāngia e ngā ākonga te whakarea mā te tekau ina whakamahi i te pātahitanga kōaro. Ko te whakamahinga tauira o te x 10 kātahi ko te x 5 hei tukanga ngāwari. Kia mōhio mēnā kua whakamahia e ngā ākonga ētahi wāhanga o ngā taurangi. Kia mōhio koe ki te whakamahi i te whakarua me te neke ki te ariā o te whakarea mā te rua hei whakarua</li> </ul>
<b>Rapanga Motuhake</b>	<p>Tau 5</p> <p>Whakaoti i ngā whārite e whai ake nei:</p> $646 \div 4 =$ $781 \div 9 =$ $965 \div 3 =$ <p>Tau 6</p> <p>Whakaoti i ngā whārite e whai ake nei:</p> $5646 \div 4 =$ $9781 \div 9 =$ $7965 \div 3 =$

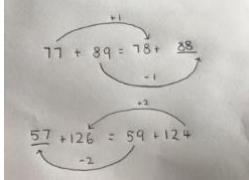
<b>Ma te kaiako</b>	
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<b>Rapanga 7</b>	<p><b>Tau 5</b></p> <p>Kai te haere to mātau kura ki tētahi pāka mo tētahi rā ātaahua me te whakamahi i nga pahi mo te waka. Ka taea e ia pahi te mau i ngā ākonga e 8, ā, e 793 nga tauira hai mau. E hia nga pahi e hiahiatia ana e tātau?</p> <p>What numbers could you use with your solution strategy that would mean you had the same number of people in each bus?</p> <p><b>Year 6</b></p> <p>Kai te haere te kura tuarua ki tētahi pāka mo tētahi rā ātaahua me te whakamahi i nga pahi mo te waka. Ka taea e ia pahi te mau i ngā ākonga e 8, ā, e 4793 nga tauira hai kawe. E hia nga pahi e hiahiatia ana e tātau?</p> <p>He aha ngā tau ka taea e koe te whakamahi ki tō rautaki rongoā, ko te tikanga he ūrite ū ākonga i ia pahi?</p>
<b>Whakaaro matua o te Ao Pangarau</b>	<p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhanga i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Ngā meka Matua</b></p> <p><b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math></li> <li>• whakaputa maharatanga ki ture whakawehi mō ngā whakarea 2, 3, 5, 9 me ngā 10.</li> <li>• whakaputa maharatanga meka whakarea, i ngā meka whakawehi ki te <math>10 \times 10</math>.</li> </ul> <p><b>Ngā Pāheko</b></p> <p><b>Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakarea tau mati-3 ki ngā tau mati-1 tau mati-2 hoki: h.t., <math>6 \times 248</math>, <math>37 \times 84</math></li> <li>• whakarea tauotī matimaha: h.t., <math>54 \times 112</math>.</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata:</li> <li>• whakamahi whakaāwhiwhi me te whakatau tata</li> <li>• whakaāwhiwhi tau oti ki te pū 10 e pātata ana</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamārama me te whakatautika i te whakamahinga o te āhuatanga o te wāhanga/āhuatanga ā-waha i roto i te wehenga.</p> <p>Whakamārama me te tohu i te pātahitanga kōaro o te whakarea me te wehenga. E whakaatu ana i te whakaaro mā te whakamahi i ngā momo tuhipoka rerekē.</p>

*Level 3 – Year 5-6 Teacher booklet: Tau me te Taurangi*

<b>Nga tini mata o te reo pangarau</b>	Ko te āhuatanga motuhake, te pātahitanga kōaro, tauwehe, hua, otinga , tau wehea
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā rautaki rongoā ākonga i whakamahia ai e rātou te āhuatanga o te wāhanga o te rongoā.</p> <p><b>Hono:</b> He aha ngā tau ka huri koe i ēnei ki te whakamahi i tētahi wāhanga o te āhuatanga tūturu/āhuatanga hei wehe?</p> <p><math>587 \div 4 =</math>  <math>783 \div 6 =</math> <math>899 \div 7 =</math></p> <p>Me kōrerorero ngā tamariki i ngā pahekotanga tau ka taea me te kore whakaoti i ēnei. Ngā hononga tauira ki te pātahitanga i waenga i te āhuatanga o te wāhanga/āhuatanga me te hātepe whakawehenga paerewa</p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>Me mōhio ki ngā ākonga e whakamahi ana i te tāpiritanga, te tango rānei, me te tautoko i a rātou hei whakaaro maha. Whakamōhiotia ngā ākonga e whakamahi ana i te āhuatanga kōaro, kei te whakamahi rānei i ngā āhuatanga āhuatanga/āhuatanga ā-wāhanga i roto i ā rātou whakautu.</li> </ul>
<b>Rapanga Motuhake</b>	<p>Tau 5 Whakaoti i ngā whārite e whai ake nei:</p> <p><math>486 \div 5 =</math>  <math>22 \times 14 =</math>  <math>952 \div 6 =</math>  <math>38 \times 21 =</math>  <math>898 \div 4 =</math></p> <p>Tau 6 Whakaoti i ngā whārite e whai ake nei:</p> <p><math>4386 \div 5 =</math>  <math>223 \times 24 =</math>  <math>7952 \div 6 =</math>  <math>381 \times 211 =</math>  <math>8982 \div 4 =</math></p>
<b>Ma te kaiako</b>	

<b>Rapanga 8</b>	<p>Whakaotia ēnei whārite:</p> $14 + 9 = \underline{\hspace{1cm}} + 8$ $\underline{\hspace{1cm}} + 17 = 26 + 15$ $93 - \underline{\hspace{1cm}} = 83 - 37$ $235 - 46 = \underline{\hspace{1cm}} - 48$ $375 + 28 - \underline{\hspace{1cm}} = 377$ $57 + 4 + 5 = 56 + \underline{\hspace{1cm}}$

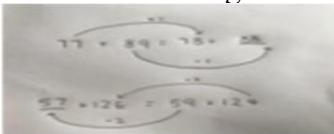
<b>Whakaaro matua o te Ao Pangarau</b>	<p>Tērā ētahi āhuatanga tauhangā e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhangā i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō. Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<ul style="list-style-type: none"> <li>• <b>Ngā whārite me ngā Pānga</b></li> <li>• <b>Tau5/6</b></li> <li>• tuhi me te whakaoti whārite pono, whārite parau rānei, whārite whānui hoki e whai wāhi mai ana ngā pāheko e whā: h.t., <math>674 + 56 - k = 671</math>.</li> <li>• tuhi me te whakaoti whārite pono, whārite parau rānei, whārite whānui hoki e whai wāhi mai ana pāheko e whā, e whai wāhi mai ana hoki i te rite, i te tōrite rānei:</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	<p>Whakamārama me te whakatautika i ngā pātahitanga i waenga i ngā tau i roto i te whārite.</p> <p>Tuhia ngā tauākī o te ūritetanga ki ngā kupu me te whakamahi i te tuhipoka.</p> <p>Whakaoti i ngā raruraru ūrite me te whakamārama me te whakatautika i ngā rongoā.</p>
<b>Nga tini mata o te reo pangarau</b>	<p>He ūrite te tohu, ūrite.</p>
<b>Wa toha me te Hono</b>	<p>Whakaae i ngā ākonga kia tiritiri i ngā mōhiotanga e pā ana ki te tohu ūrite (hei tauira, <math>14 + 9 = 23 + 8</math>) ki te whakatū i a rātou kia uru ki te tohenga.</p> <p>Tīpakohia ngā rautaki rongoā ākonga e whakamahi ana i te whakaaro pānga. <math>14 + 9 = 15 + 8</math> nā te mea he iti iho i te 9 te 8 kia kotahi neke atu i te 14. Ki te kore ngā ākonga e whakamahi i tētahi rautaki pānga, tauirahia tēnei ki a rātou mā te whakamahi pere me ngā whakamāramatanga.</p>  <p><b>Hono:</b></p>

	<p>Pātai atu ki ngā ākonga kia whakatika i ngā raruraru e whai ake nei mā te whakamahi i tētahi rongoā pānga: <math>198 + 174 = \underline{\hspace{2cm}} + 184</math>  <math>372 - \underline{\hspace{2cm}} = 72 - 58</math></p> <p>Tautoko i ngā ākonga kia kite i te rerekētanga o te aronga i waenga i ngā raruraru tāpiritanga (+1, -1) me ngā raruraru ā-roto (-300, -300).</p>
<b>Hei awhina i te kaiako</b>	<p>I mua i tō whakarewa i te tūmahī, pātai atu ki ngā ākonga kia kōrerorero i ēnei rerenga tau pono, hē hoki, me te whakatautika i o rātau whakaaro. Tirohia kia mārama ngā ākonga ki ngā tikanga pono, hē hoki.</p> <p>Whakamōhiotia te tuhipoka o te kore ūrite (<math>\neq</math>) mō ngā rerenga tau e whakaaro ana rātou he hē:</p> $265 = 263$ $77 + 286 = 286 + 77$ $56 + 39 = 54 + 37$ $52 = 40 + 12$ $54 - 5 = 49 - 7$ $63 - 18 = 61 - 16$ <p>Whakamahia ngā tūmahī rerenga tau pono, hē hoki, tuwhera hoki hei mahana puta noa i te tau. I te tuatahi ka taea e ngā ākonga te whakamahi i te tohu ūrite hei kaiwhakahaere, hei tohu rānei hei tuhi i te whakautu panuku. Ka taea hoki e ngā ākonga te whakararuraru i ia taha ki te mahi mēnā e ūrite ana rātau. Me mōhio ki ngā ākonga e whakamahi ana i ngā pātahitanga puta noa i te tohu ūrite kia kite ai mēnā he toenga.</p> <p>Miramiratia ngā ākonga kia tirohia te tohu ūrite me te kimi i ngā pātahitanga i waenga i ngā tau ki te taha mauī me ngā tau kei te taha matau. Me mōhio ki ngā ākonga e whakamahi ana i ngā pātahitanga puta noa i te tohu ūrite kia kite ai mēnā he toenga.</p> <p>Pēhia hei whakamahi i ngā pere me ngā tuhipoka hei miramira i ngā pātahitanga.</p>
<b>Rapanga Motuhake</b>	<p>Whakaotia ēnei whārite:</p> $27 + 16 = 29 + \underline{\hspace{2cm}}$ $51 - \underline{\hspace{2cm}} = 61 - 37$ $\underline{\hspace{2cm}} + 137 = 274 + 139$ $145 - 69 = \underline{\hspace{2cm}} - 68$ $363 + 78 - \underline{\hspace{2cm}} = 365$ $85 + 7 + 2 = 85 + \underline{\hspace{2cm}}$
<b>Ma te kaiako</b>	

**Rapanga 9**

Mahi tahi hei whakatau ko ēhea ngā whārite he pono, he hē rānei.  
Me mātua whakarite e whakaae ana ngā tāngata katoa o tō rōpū, ā, ka  
taea te whakamārama.

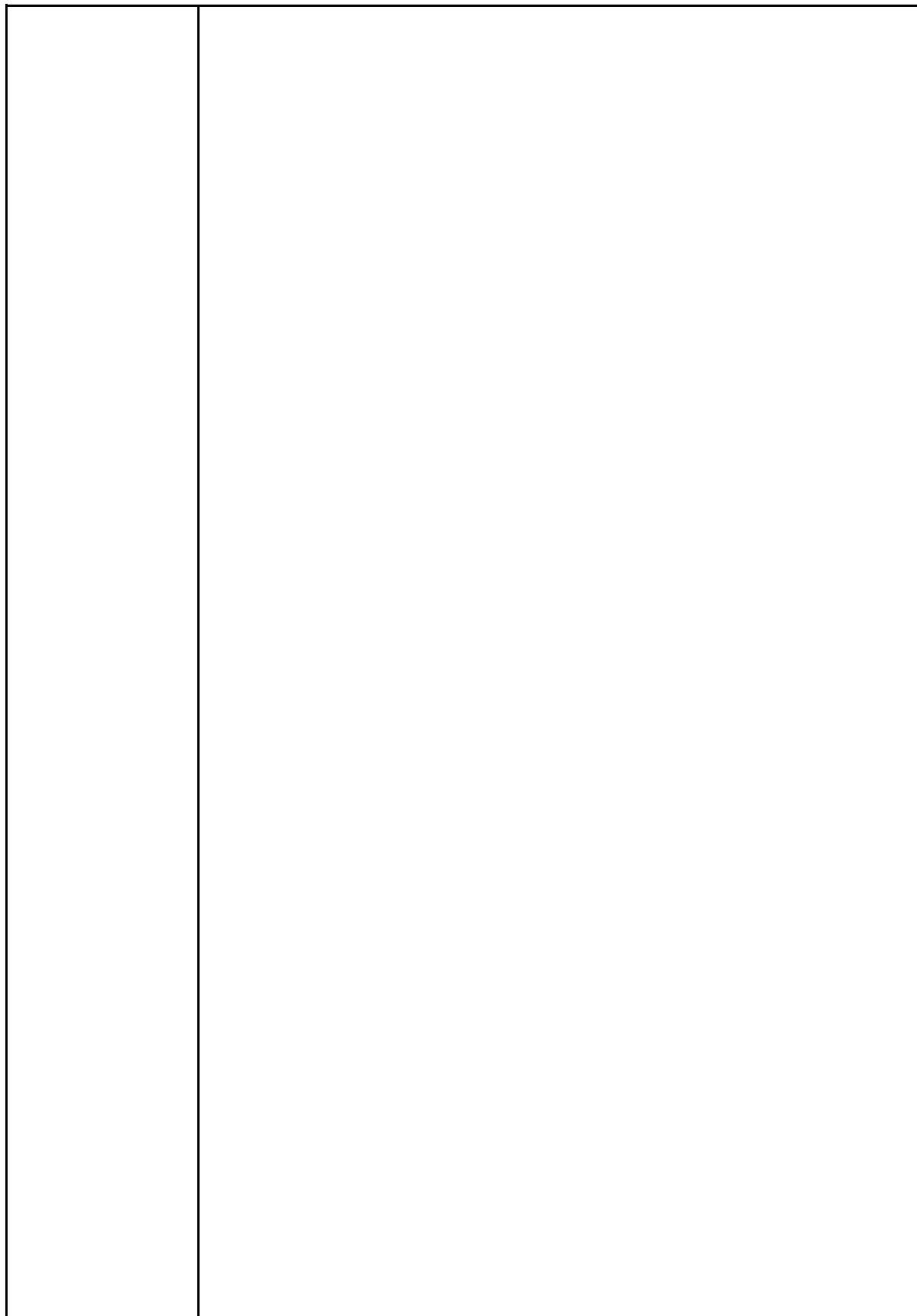
$$536 + 618 = 436 + 718$$
$$8 + 8 + 376 = 376 + 16$$
$$77 - 49 = 75 - 47$$
$$9 + 9 + (5 \times 9) = (2 \times 9) + (5 \times 9)$$
$$16 \times 8 = (16 \times 10) - 16$$
$$9 + 10 + 11 + 12 = 13 + 14 + 15$$

<b>Whakaaro matua o te Ao Pangarau</b>	Tērā ētahi āhuatanga tauhangā e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.
<b>Nga tini mata o te Marautanga</b>	<ul style="list-style-type: none"> <li>• <b>Ngā whārite me ngā Pānga</b></li> <li>• <b>Tau5/6</b></li> <li>• tuhi me te whakaoti whārite pono, whārite parau rānei, whārite whānui hoki e whai wāhi mai ana ngā pāheko e whā: h.t., <math>674 + 56 - k = 671</math>.</li> <li>• tuhi me te whakaoti whārite pono, whārite parau rānei, whārite whānui hoki e whai wāhi mai ana pāheko e whā, e whai wāhi mai ana hoki i te rite, i te tōrite rānei:</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	Tērā ētahi āhuatanga tauhangā e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.
<b>Nga tini mata o te reo pangarau</b>	Ko te pātahitanga kōaro, te kōaro, te āhuatanga, te whakaputa, te whānuitanga.
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā rautaki rongoā ākonga e whakamahi ana i te whakaaro pānga. <math>77 - 49 = 75 - 47</math> he pono nā te mea he iti iho i te 77 me te 47 te 75, ā, e rua iti iho i te 49. Ki te kore ngā ākonga e whakamahi i tētahi rautaki pānga, taukahia tēnei ki a rātou mā te whakamahi pere me ngā whakamāramatanga.</p>  <p><b>Hono:</b>  Ko te tau e haere ana i te __, te tau ōrite i ēnei whārite e rua?  <math>2 \times \underline{\quad} + 15 = 31</math>  <math>2 \times \underline{\quad} + 15 - 9 = 31 - 9</math>  Whakamārama he aha, he aha rānei kāore.</p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>• Whakamaharatia ngā ākonga o te tuhipoka kāore i te ōrite (<math>\neq</math>) mō ngā rerenga tau e whakaaro ana rātau he hē. I te tuatahi ka taea e ngā ākonga te whakamahi i te tohu ōrite hei kaiwhakahaere, hei tohu rānei hei tuhi i te whakautu panuku. Ka taea ēnei mōhiotanga te whakamahi hei whakatū i ngā ākonga hei whakauru ki te tautohe pāngarau. Ka taea hoki e ngā ākonga te whakararuraru i ia taha ki te mahi mēnā e ōrite ana rātau. Heoi anō, me mahi tahi me rātou hei whakangāwari i a rātou kia mōhio ai ka taea e koe te whakamahi i ngā pātahitanga puta noa i te tohu ōrite kia kite ai mēnā he toenga. Miramiratia ngā urupare pānga a ngā ākonga (hei tauira, e mōhio ana ki ngā pātahitanga <math>+ 2, - 2</math>). Pēhia hei whakamahi i ngā pere me ngā</li> </ul>

	<p>tuhipoka hei miramira i ngā pātahitanga. Mō te tūmahi takitahi, he kāri, he tīhore pepa rānei kua rite mō ngā ākonga ki te tuhi me te waihanga i tētahi mokowā e kiia nei ko te pātū rerenga tau pono, hē hoki.</p>
<b>Rapanga Motuhake</b>	<p>Whakamārama me te whakatautika ko ēhea rerenga tau he pono, he hē hoki:</p> $55 = 49 + 5 + 2$ $29 + 34 = 27 + 32$ $314 - 148 = 214 - 48$ $32 - 15 = 34 - 13$ $42 - 13 = 29 - 9$ $15 + 6 + 77 = 4 + 17 + 67$ <p>Tuhia ō ake rerenga tau pono, hē hoki.</p>
<b>Ma te kaiako</b>	

<b>Rapanga 10</b>	Ka whakaoti te inoi i te $98 \times 56 = 5488$ Kātahi ka tono tōna kaiako ki a ia kia whakaoti i ngā whārite e whai ake nei: $56 \times 98 =$ $5488 \div 56 =$ $5488 \div 98 =$ Ka titiro a Lotu ki nga whārite, ā, e kī ana kua mōhio kē a ia ki ngā whakautu me te kore whakaoti i ia mea. He aha ngā tauira e whakaaro ana koe i kitea e Lotu? E mahi tonu ana ēnei tauira i ngā wā katoa? He rerekē nga mahi a ēnei tauira? Tuhia ō ake huinga whārite e whakamahi ana i ngā tauira ūrite.
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<b>Whakaaro matua o te Ao Pangarau</b>	Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga. Ka taea te whakaahua i ngā pātahitanga me ngā ahuwhānuitanga i mahia mō ngā āhuatanga pāngarau e whai tau ana, ahanoa rānei e tārua ana, e tipu ana rānei i ngā huarahi mōhiotia.
<b>Nga tini mata o te Marautanga</b>	<ul style="list-style-type: none"> <li>• tūhura i ngā āhuatanga tohatoha o te whakarea i ngā tauhono me ngā tautango: h.t., <math>6 \times 18</math> ki te <math>6 \times (20 - 2)</math></li> <li>• whakaoti rapanga whakarea mā te whakamahi i te rautaki tau māmā me te tikanga paremata.</li> <li>• whakamahi i ngā āhuatanga tohatoha, ngā āhuatanga pāheko kōaro me ngā āhuatanga herekore.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	Whakamārama me te whakatautika i te āhuatanga nui o te whakarea. Whakamahia ngā whakaaturanga rerekē hei whakatautika.
<b>Nga tini mata o te reo pangarau</b>	Ngā tau rerekē, ahakoa ngā tau, te ahuwhānuitanga, ngā tauira.
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā ākonga kua whakamahi i te pātahitanga kōaro i waenganui i te whakarea me te wehenga, ā, ka taea te whakamārama i tēnei pātahitanga hei mahi i ngā rerenga tau. Tautoko i ngā ākonga hei whakamārama me pēhea tēnei pātahitanga e pā ana ki te whakarea me te wehenga ki ngā tau, tāpiritanga rānei me te mahiroto.</p> <p><b>Hono:</b>      Ka taea e koe te tuhi i ngā awhe o ngā rerenga tau e ūrite ana ki ngā rerenga tau e whai ake nei mā te whakamahi mēnā ka:  <math>Mēnā e 1260 \div 28 = 45</math> kātahi ... Mēnā <math>g \times h = p</math> kātahi ...</p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>• Ka arotahi pea ngā ākonga ki te kimi i ngā whakautu mō ia rerenga tau. Whakatū kē i a rātou kia mōhio ki te pātahitanga kōaro i waenganui i te whakarea me te wehenga, kaua e tatau i ngā whakautu. Mō ngā ngohe takitahi, he taputapu tika tā ngā ākonga hei hanga i ngā tauira raima hei whakamātau i ā rātou āhuatanga (hei tauira, ngā kaikaute, te pepa mātiti, ngā papa peg).</li> </ul>
<b>Independent Rapanga</b>	Ka kī a Hoani "Ina whakarea tahitia e koe e rua ngā tau, ehara i te mea ko tēhea e whakarea ai e koe, ka ūrite te hua". E whakaae ana, e whakahē ana rānei koe ki te wero a Hoani. E mahi ana tēnei mō ngā tau katoa? E mahi ana rānei mō te tāpiritanga, te tango, me te wehenga?
<b>Ma te kaiako</b>	



<b>Rapanga 11</b>	<p>Ko nga utu tīkiti mo te haerenga pahi e whakaaturia ana i roto i te tūtohi.</p> <table border="1" data-bbox="398 316 1389 945"> <thead> <tr> <th data-bbox="398 316 584 444">Ticket Options</th><th data-bbox="584 316 770 444">Adult</th><th data-bbox="770 316 955 444">Concession</th><th data-bbox="955 316 1389 444">Description</th></tr> </thead> <tbody> <tr> <td data-bbox="398 444 584 550">Single (paper ticket)</td><td data-bbox="584 444 770 550">\$3</td><td data-bbox="770 444 955 550">\$1.20</td><td data-bbox="955 444 1389 550">Unlimited bus travel for 3 hours from first use</td></tr> <tr> <td data-bbox="398 550 584 655">Daily (paper ticket)</td><td data-bbox="584 550 770 655">\$7</td><td data-bbox="770 550 955 655">\$1.70</td><td data-bbox="955 550 1389 655">Unlimited bus travel until the last bus of the day.</td></tr> <tr> <td data-bbox="398 655 584 783">Flexi trip (tap and ride)</td><td data-bbox="584 655 770 783">\$20</td><td data-bbox="770 655 955 783">\$7.50</td><td data-bbox="955 655 1389 783">10 single 3-hour trips are pre-loaded to the card.</td></tr> <tr> <td data-bbox="398 783 584 945">Weekly (tap and ride)</td><td data-bbox="584 783 770 945">\$20</td><td data-bbox="770 783 955 945">\$7.50</td><td data-bbox="955 783 1389 945">Unlimited bus travel for 7 days from first use.</td></tr> </tbody> </table>	Ticket Options	Adult	Concession	Description	Single (paper ticket)	\$3	\$1.20	Unlimited bus travel for 3 hours from first use	Daily (paper ticket)	\$7	\$1.70	Unlimited bus travel until the last bus of the day.	Flexi trip (tap and ride)	\$20	\$7.50	10 single 3-hour trips are pre-loaded to the card.	Weekly (tap and ride)	\$20	\$7.50	Unlimited bus travel for 7 days from first use.
Ticket Options	Adult	Concession	Description																		
Single (paper ticket)	\$3	\$1.20	Unlimited bus travel for 3 hours from first use																		
Daily (paper ticket)	\$7	\$1.70	Unlimited bus travel until the last bus of the day.																		
Flexi trip (tap and ride)	\$20	\$7.50	10 single 3-hour trips are pre-loaded to the card.																		
Weekly (tap and ride)	\$20	\$7.50	Unlimited bus travel for 7 days from first use.																		
	<p>Ka hopukina e Ihaia te pahi ki te Kura Waenga a tērā tau. Me hoko tīkiti pahi pepa a ia, he kāri 'Tap me Ride' rānei. He ākonga, ka taea e ia te whiwhi mana uru ki tēnei wā. Ki te mau a Ihaia i te pahi ki te kura i ia rā, he aha te kōwhiringa tino pai? Whakamāramatia o whakaaro.</p>																				
<b>Whakaaro matua o te Ao Pangarau</b>	<p>Tērā ētahi āhuatanga tauhangā e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p> <p>E whakaatu ana ngā whārite i ngā pātahitanga o te ūritetanga i waenganui i ngā wāhanga i ia taha o te tohu ūrite. Ko ngā āhuatanga o te ūritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu ūrite ki ngā taha e rua o tētahi whārite, ka pupuritia te ūritetanga; Mēnā ka whakanuia, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu ūrite (kāore e whakawehia e te 0), ka pupuritia te ūritetanga; E rua nga rahinga e ūrite ana ki te nuinga tuatoru kotahi e ūrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>																				
<b>Nga tini mata o te Marautanga</b>	<p><b>Mātau ahumoni Tau 5/6</b></p> <ul style="list-style-type: none"> <li>• whakatau tata i te utu, i te wāwāhinga moni hoki, ki te tāra pātata, ki te 10 tāra pātata rānei.</li> <li>• tātai i te hekenga ūrau, o te 10%, o te 25%, o te 50% rānei, o tētahi rahinga tāra: h.t., 10% o \$180.</li> </ul>																				
<b>Whainga Ako</b>	<p>Tūhuratia ngā āhuatanga pūtea tūturu me te tohu i ā rātou kitenga mā te ripanga, whārite rānei.</p>																				

*Level 3 – Year 5-6 Teacher booklet: Tau me te Taurangi*

<b>Ka ako te mokopuna ki te</b>	Whakamahia te tākaro moni hei tohu i te nui. Tataua ngā utu rerekē
<b>Nga tini mata o te reo pangarau</b>	Ngā tāra, ngā hēneti, te uara tino pai, ngā moni toenga
<b>Wa toha me te Hono</b>	Tīpakohia ngā rautaki rongoā ākonga i mahi ā-pūnaha ai i ngā utu mō ngā kōwhiringa rerekē me te whakamahi i tēnei hei whakatautika i ā rātou whakaaro. <b>Hono:</b>  Tīpakohia ngā rautaki rongoā ākonga i mahi ā-pūnaha ai i ngā utu mō ngā kōwhiringa rerekē me te whakamahi i tēnei hei whakatautika i ā rātou whakaaro.
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>I mua i tō whakarewa i te tūmahi, kua tākaro moni e wātea ana, ā, ka tono i ngā ākonga kia whakamahi i te moni hei mahi i tētahi huinga moni mā te whakamahi i ngā tuhipoka me ngā moni rerekē. Mō te tūmahi, e wātea ana te tākaro moni kia whakamahia e ngā ākonga hei tauira i ngā kōwhiringa rerekē hei utu. Me mōhio mēnā ka taea e ngā ākonga te pānui i te ripanga utu me te mōhio ki tēnei, te tautoko mēnā he uaua tā rātou. E tūmanako ana kia ā-pūnaha ngā ākonga ki te mahi i ngā utu mō ia kōwhiringa me te tāhopu i tēnei mā te whakamahi i ngā whārite, i tētahi ripanga raraunga rānei. Mō te tūmahi takitahi, kua tākaro moni e wātea ana</li> </ul>
<b>Rapanga Motuhake</b>	E \$25 tāu hai hoko tina i te kura māu anō me to hoa. He aha ētahi huarahi rerekē hei hoko tina (kai me te inu) mai i te awa o te kura?  Pēhea te nui o te huringa kei a koe?

**Level 3 – Year 5-6 Teacher booklet: Tau me te Taurangi**

	<table border="1"> <thead> <tr> <th colspan="2">Food</th></tr> </thead> <tbody> <tr> <td>Sandwiches</td><td>\$5.50</td></tr> <tr> <td>Pizza Slice</td><td>\$6</td></tr> <tr> <td>Mac'n'cheese</td><td>\$3.70</td></tr> <tr> <td>Pie</td><td>\$6.50</td></tr> <tr> <td>Sushi</td><td>\$8.90</td></tr> <tr> <td>Cookie</td><td>\$2.80</td></tr> <tr> <td>Slice</td><td>\$3</td></tr> <tr> <td>Museli Bar</td><td>\$2.50</td></tr> <tr> <td>Chips</td><td>\$2</td></tr> <tr> <th colspan="2">Drinks</th></tr> <tr> <td>Fruit Juice</td><td>\$3.50</td></tr> <tr> <td>Milk</td><td>\$2</td></tr> <tr> <td>Smoothie</td><td>\$7.50</td></tr> </tbody> </table>	Food		Sandwiches	\$5.50	Pizza Slice	\$6	Mac'n'cheese	\$3.70	Pie	\$6.50	Sushi	\$8.90	Cookie	\$2.80	Slice	\$3	Museli Bar	\$2.50	Chips	\$2	Drinks		Fruit Juice	\$3.50	Milk	\$2	Smoothie	\$7.50
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**Level 3 – Year 5-6 Teacher booklet: Tau me te Taurangi**

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**12**

Sam is ordering fish and chips for a family get-together. There will be 6 people – Sam, his wife, his 2 children, and his parents.

Sam's family usually order 2 hoki, 2 potato fritters, small chips, and 2 kids' packs.



Sam's parents share their order of 2 hoki, 2 potato fritters, and small chips.

- Give two options how Sam might place the order? Explain which option offers the best value for money.
- Should Sam suggest sharing the total cost of the bill? If so, how might the bill be shared?

Fish	
Hoki	\$5.00
Terahiki	\$6.00
Snapper	\$7.00
Snacks	
Chicken Nuggets	\$0.80 each
Dim sims	\$1.00 each
Potato fritters	\$0.80 each
Chips	\$3.00 small \$5.00 medium \$7.50 large

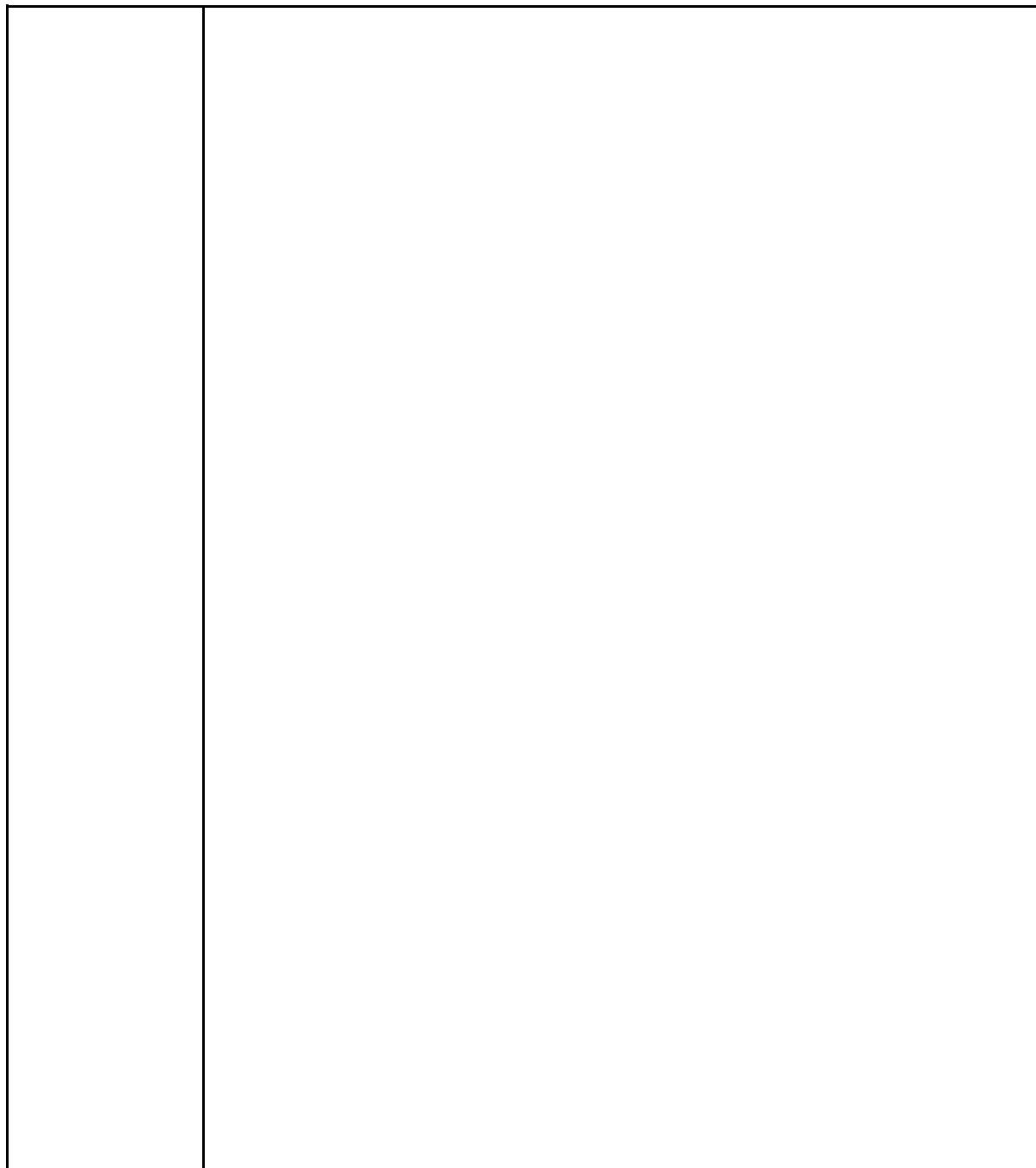
Family Deal 1	
4 hoki 4 potato fritters Large Chips	\$22.50
Family Deal 2	
6 hoki 6 potato fritters Large chips	\$30.00
Kids Pack	
6 chicken nuggets small chips	\$6.00

	<p>E hāngai ana ta mātau pūnaha tau i runga anō i nga whakarōpū o te tekau, te take rānei tekau. Ko nga whakarōpūtanga o ngā mea, tekau, rau, me ngā mano e āhei ana ki te wehe i nga huarahi rerekē. Tērā ētahi āhuatanga tauhanga e whakaahua ana i te tāpiritanga me te whakarea hei mahi. Ko ēnei te āhuatanga kōaro, ā-waha, ā-waha, me ngā āhuatanga tuakiri. He pātahitanga kōaro tō te tāpiritanga me te whakarea me te whakareatanga me te wehenga.</p>
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	<p>E whakaatu ana ngā whārite i ngā pātahitanga o te āritetanga i waenganui i ngā wāhanga i ia taha o te tohu īrite. Ko ngā āhuatanga o te āritetanga ko: Mēnā ka tāpirihia, ka whakaritea rānei te tau tūturu īrite ki ngā taha e rua o tētahi whārite, ka pupuritia te āritetanga; Mēnā ka whakanua, ka wehea rānei ngā taha e rua o tētahi whārite e te tau tūturu īrite (kāore e whakaweheia e te 0), ka pupuritia te āritetanga; E rua nga rahinga e īrite ana ki te nuinga tuatoru kotahi e īrite ana ki a rāua anō.</p> <p>Ka taea te whakamahi i ngā tauira me ngā pātahitanga, e whakaaturia ana, me te ahuwhānui i ngā huarahi maha.</p>
<b>Nga tini mata o te Marautanga</b>	<p><b>Mātau ahumoni Tau 5/6</b></p> <ul style="list-style-type: none"> <li>whakatau tata i te utu, i te wāwāhinga moni hoki, ki te tāra pātata, ki te 10 tāra pātata rānei.</li> <li>tātai i te hekenga īrau, o te 10%, o te 25%, o te 50% rānei, o tētahi rahinga tāra: h.t., 10% o \$180.</li> </ul>
<b>Whainga Ako Ka ako te mokopuna ki te</b>	Tūhuratia ngā āhuatanga pūtea tūturu me te tohu i ā rātou kitenga mā te ripanga, whārite rānei. Whakamahia te tākaro moni hei tohu i te nui. Tataua ngā utu rerekē. Waihangatia he mahere pūtea ngāwari hei raupapa kai
<b>Nga tini mata o te reo pangarau</b>	Ngā tāra, ngā hēneti, te uara tino pai, te moni e toe ana
<b>Wa toha me te Hono</b>	<p>Tīpakohia ngā rautaki rongoā ākonga i mahi ī-pūnaha ai i ngā utu mō ngā kōwhiringa rerekē me te whakamahi i tēnei hei whakatautika i ā rātou whakaaro.</p> <p><b>Hono:</b> Mehe mea e whakahau ana tō whānau i te kai, ka tiria e koe nga utu, me pēhea koe e tiritiri ai? Tautoko i ngā ākonga hei tūhono ki ī rātou uara me te kōrerorero he pēhea te rerekē o ngā rongoā pāngarau me ngā rongoā "ao tūturu" e pā ana ki te moni.</p>
<b>Hei awhina i te kaiako</b>	<ul style="list-style-type: none"> <li>I mua i tō whakarewa i te tūmahia, kua tākaro moni e wātea ana, ī, ka tono i ngā ākonga kia whakamahi i te moni hei mahi i tētahi huinga moni mā te whakamahi i ngā tuhipoka me ngā moni rerekē.</li> <li>Mō te tūmahia, e wātea ana te tākaro moni kia whakamahia e ngā ākonga hei tauira i ngā kōwhiringa rerekē hei utu. Me mōhio mēnā ka taea e ngā ākonga te pānui i te ripanga utu me te mōhio ki tēnei, te tautoko mēnā he uaua tā rātou. E tūmanako ana kia ī-pūnaha ngā ākonga ki te mahi i ngā utu mō ia kōwhiringa me te tāhopu i tēnei mā te whakamahi whārite, ripanga raraunga rānei.</li> </ul>
<b>Rapanga Motuhake</b>	Tīpakohia tētahi, ētahi rānei o ngā tūmahia aromataawai e whai ake nei (kua āpitihia ki te mutunga o te tuhinga)

*Level 3 – Year 5-6 Teacher booklet: Tau me te Taurangi*

	<p>N1B: Ngā raruraru tāpiri me te mahiroto hei tango.</p> <p>N1BC: Tāpiritanga me te tango raruraru hei whakaoti.</p> <p>N16B: Ko ngā raruraru maha me te wehenga hei whakaoti.</p> <p>N16BC: Ko ngā raruraru maha me te wehenga hei whakaoti.</p> <p>NA4: Ngā Āhuatanga o ngā tau me ngā mahi.</p> <p>NA4A: Ngā Āhuatanga o ngā tau me ngā mahi.</p>
<b>Ma te kaiako</b>	



# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASK

NUMBER - ADD / SUB: LEVEL 3 Task N1B

Sose has 97 Pokemon cards in her collection. She wins another 48 Pokemon cards. How many Pokemon cards does Sose have altogether? Prove and justify your answer.

Brandon is playing a video game. He scores 522 points. His sister Louisa scores 385 points. How many more points did Brandon score? Prove and justify your answer.

At the athletics competition, Alexi jumped 3.35 metres for the long-jump. Sima jumped 2.8 metres. Who jumped further and by how much? Solve the problem and justify your answer.

Write one or more word problems for a friend involving addition or subtraction. Show how you would solve it.

# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASK

NUMBER - ADD / SUB: LEVEL 3 Task N1BC

Litea collected 87 flowers to make leis. She already had 46 flowers. How many flowers does Litea have now? Prove and justify your answer.

Fetu's rugby team scored 334 points for the season. They scored 96 points more than the next closest team. What did the other team score for the season? Prove and justify your answer.

To get fit for indoor netball, Hemi ran 4.35km a day, while Maraea ran 3.82 km a day. Who ran further and by how much? Solve the problem and justify your answer.

Write one or more word problems for a friend involving addition or subtraction. Show how you would solve it.

# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASK

NUMBER - MULT / DIV: LEVEL 3 Task N16B

Kai te haere te kura, a, e 17 nga pahi kua whakahaua. Ka taea e ia pahi te mau tamariki e 28. E hia nga tamariki e āhei ana ki te haere?

Kei te neke te puna. E 484 ngā pukapuka, ā, ka taea te whakauru pukapuka e 22 ki ia pouaka. E hia ngā pouaka e hiahiatia ana mo nga pukapuka?

Tuhia ō ake raruraru whakarea, wehenga rānei. Whakaatu me pēhea tō whakaoti i aua mea.

# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASK

NUMBER - MULT / DIV: LEVEL 3 Task N16BC

Kai te whakatūria e te whānau o Lola te hōro mo te rōpū whānau. Kua tatū kētia e rātau e 24 ngā ripanga engari me puru kia 18 ngā tūru ki ia tēpu. E hia nga tūru e hiahiatia katoatia ana e rātau?

Kai te takatū te kura mo te haere kura me nga pahi tāpui. E 426 nga tāngata kai te kura. Ka taea e ia pahi te mau i te toko 24 nga tāngata. E hia nga pahi e hiahiatia ana?

Tuhia ō ake raruraru whakarea, wehenga rānei. Whakaatu me pēhea tō whakaoti i aua mea.

# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASKS

NUMBER PATTERNS: LEVEL 3 Task NA4

$27 \times 12$        $567 + 39$        $72 \div 6$        $(27 \times 6) + (27 \times 6)$

$36 \div 3$        $12 \times 27$        $95 - 27$

$85 - 17$        $567 + 39 + 1 = \square - 1$        $27 \times 2 \times 6$

Tirohia ngā rerenga tau o runga ake nei

1. Whakaahuatia he aha ngā tauira ka kitea e koe
2. He aha i mahi ai ō tauira?
3. Kai te mahi rātau me ētahi atu tau?
4. Ka mahi tonu rātau i ngā wā katoa? Whakamārama me te whakatautika i ō whakaaro

# DMIC

## DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES ASSESSMENT TASKS

NUMBER PATTERNS: LEVEL 3 Task NA4A (Parallel task)

$26 \times 14$

$479 + 58$

$84 \div 8$

$(26 \times 10) + (26 \times 4)$

$42 \div 4$

$14 \times 26$

$73 - 28$

$83 - 38$

$479 + 58 - 5 = \square - 5$

$26 \times 7 \times 2$

Tirohia ngā rerenga tau o runga ake nei

1. Whakaahuatia he aha ngā tauira ka kitea e koe
2. He aha i mahi ai ō tauira?
3. Kai te mahi rātau me ētahi atu tau?
4. Ka mahi tonu rātau i ngā wā katoa? Whakamārama me te whakatautika i ō whakaaro