

Paerewa Paetae

Aronga	Pāngarau 1.4				
Ingoa	Te whakamahi whakaaro āhuahanga, whakaaro ine hei whakaoti rapanga				
Kaupae	1	Whiwhinga	5	Aromatawai	Ā-waho
Marau akoranga	Te Marautanga o Aotearoa				
Kokonga akoranga	Pāngarau				
Mana rēhita	Kua rēhitatia	Te rā i mana ai	Hakihea 2023		
Te rā e arotakengia ai	Hakihea 2028	Te rā i puta ai	Hakihea 2023		

Te Whāinga

Ko tā tēnei paerewa he whakamahi whakaaro āhuahanga, whakaaro ine hei whakaoti rapanga. Ko te pūtake o tēnei paerewa he tautoko i ngā ākonga ki te waihanga pūkenga kia taea ai te whakaoti rapanga mō te ine me te āhuahanga.

Paearu Paetae

Paetae	Hei tohu i te paetae: <ul style="list-style-type: none">Ka whakamahi whakaaro āhuahanga, whakaaro ine hei whakaoti rapanga.
Kaiaka	Hei tohu i te kaiaka: <ul style="list-style-type: none">Ka whakamahi whakaaro āhuahanga, whakaaro ine mā roto mai i ngā whakaaro tūhonohono hei whakaoti rapanga.
Kairangi	Hei tohu i te kairangi: <ul style="list-style-type: none">Ka whakamahi whakaaro āhuahanga, whakaaro ine mā roto mai i ngā whakaaro waitara hei whakaoti rapanga.

Kōrero Āpiti

- 1I ahu mai tēnei paerewa paetae i te Taumata 6 o Te Marautanga o Aotearoa (Te Tāhuhu o te Mātauranga, 2017). E hono ana ki te Papa Whakaako mō Pāngarau kei: <https://ncea.education.govt.nz>.

<i>Whāinga Paetae</i>
<p><u><i>Te Ine me te Āhuatanga, Te Hanga</i></u></p> <p>4. Ka whakaputa, ka whakamahi i ngā tikanga koki o te porowhita.</p> <p>5. Ka aro ki ngā āhua ōrite, ā, ka whakamahi whakaaro pānga riterite hei tātai i tētahi tapa.</p> <p>6. Ka whakamahi ōwehenga pākoki me te ture a Pythagoras, i ngā pūāhua ahu-2, ahu-3 hoki.</p>

2 E whai ake nei ngā whakamārama mō ngā paearu paetae:

<p><i>Ka whakamahi whakaaro āhuahanga, whakaaro ine hei whakaoti rapanga.</i></p>	<ul style="list-style-type: none"> • Ka whiriwhiri, ka whakamahi i ētahi tikanga whānui hei whakaoti rapanga. • Ka whakaatu mōhiotanga ki ngā huatau ine/āhuahanga me ngā kupu e hāngai ana. • Ka whakamārama i ngā otinga mēnā kotahi, e rua rānei ngā mahi o roto i te tikanga i whakamahia. • Ka whakamahi kupu āhuahanga/ine, whakaahuahanga rānei hei whakamārama i ngā otinga.
<p><i>Ka whakamahi whakaaro āhuahanga, whakaaro ine mā roto mai i ngā whakaaro tūhonohono hei whakaoti rapanga.</i></p>	<p>Ko te whakaaro tūhonohono te mea nui. Arā, kia kotahi, nui ake rānei o ēnei:</p> <ul style="list-style-type: none"> • Ka whiriwhiri, ka whakatutuki i te raupapatanga mahi arorau e hāngai ana. • Ka tūhono i ētahi huatau rerekē, ētahi whakaahuahanga rerekē rānei. • Ka whakaatu māramatanga ki ngā huatau e hāngai ana. • Ka hanga, ka whakamahi tauira. • Ka tūhono i ngā otinga ki tētahi horopaki, ka whakamahi rānei i ngā kīanga pāngarau hei whakawhitiwhiti whakaaro ki te reo Māori. • Ka whakahāngai i te kaupapa ki tētahi pūāhua Māori me te tautohu i ngā tikanga Māori e whaitake ana.
<p><i>Ka whakamahi whakaaro āhuahanga, whakaaro ine mā roto mai i ngā whakaaro waitara hei whakaoti rapanga.</i></p>	<p>Ko te whakaaro waitara te mea nui. Arā, kia kotahi, nui ake rānei o ēnei:</p> <ul style="list-style-type: none"> • Ka waihanga rautaki hei tūhura, hei whakaoti rānei i tētahi rapanga. • Ka tautohu i ngā huatau e hāngai ana ki te horopaki. • Ka whakaputa i tētahi raupapatanga whakaaro arorau, tētahi hāponotanga rānei. • Ka hanga whakawhānuitanga.

	<ul style="list-style-type: none"> • Ka whakamahi kīanga pāngarau tika, ka whakawhitiwhiti rānei i te aroā pāngarau ki te reo Māori. • Ka whakahoropaki i te kaupapa ki tētahi pūāhua Māori me te tautohu i ngā tikanga Māori e whaitake ana.
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- 3 E whai ake nei ngā whakamārama mō ngā kupu me ngā kīanga whaitake matua o te paerewa nei:

<i>rapanga</i>	Ko ngā āhuetanga o ia rā, ngā āhuetanga pāngarau rānei, ka whai wāhi mai te whakamahinga o te mātauranga pāngarau, o ngā huatau pāngarau, o ngā tikanga pāngarau rānei.
<i>ētahi tikanga whānui</i>	Kia toru, nui ake rānei ngā tikanga.

- 4 Kia taunga te ākonga ki ngā tikanga e whai wāhi mai ana:
- te ture a Pythagoras
 - ngā pānga pākoki o te tapatoru hāngai
 - ngā taparau he ōrite te āhua
 - ngā hononga koki o te rārangi pūtahi me te rārangi whakarara
 - ngā hononga koki o ngā momo taparau
 - ngā hononga koki o te porowhita
 - te roa, te paenga, te horahanga me te horahanga mata, te rōrahi
 - ngā waeine ngahuru
 - te kītanga, te papatipu, te paemahana me te wā
 - ngā waeine pāpātanga pērā i ērā mō te kiato, te tere, te utu ā-waeine me te whakapau kōhinu.
- 5 Me honohono te ākonga i ngā whakaaro whānui ki ngā pūāhua ahurea, ki ngā pūāhua pāpori (He Uri Whakaheke):
- ki te tautohu i ngā uara, i ngā kawa me ngā tikanga
 - ki te tautohu i ngā kōrero tuku iho, i te mātauranga Māori
 - ki te tūhono i te pāngarau ki ngā take o te takiwā, o te hapū, o te iwi, me ngā kaupapa o te ao whānui.
- 6 Me whakamahi te ākonga i te reo matatini o te pāngarau me ngā rautaki reo maha (He Puna Kōrero) ki te kōrerorero i ngā whakaaro pāngarau nei ki te reo Māori – ā-tuhi, ā-waha, ā-ataata.
- 7 Arā ngā Tikanga Aromatawai mō tēnei paerewa paetae, kei:
<https://ncea.education.govt.nz>.

8 Kuputaka

whakaaro tūhonohono	<i>relational thinking</i>
whakaaro tūhonohono	<i>abstract thinking</i>

Kōrero Whakakapinga

I whakakapingia ngā paerewa 91655-91656 e ngā paerewa 92065-92068.

Tātari Kounga

- 1 Me mātua whakamana ngā Kaituku Akoranga me ngā Whakahaere Whakangungu Ahumahi e te Mana Tohu Mātauranga o Aotearoa ka rēhita ai i ngā hua ka puta mai i ngā aromatawai ki ngā paerewa paetae.
- 2 Ko ngā Kaituku Akoranga me ngā Whakahaere Whakangungu Ahumahi kua mana, ā, e aromatawai ana i ā rātou hōtaka ki ngā paerewa paetae, me uru rātou ki ngā pūnaha whakaōrite e tika ana mō aua paerewa paetae.

Ko te tohutoro ki te Mahere Whakamana, Whakaōritenga hoki0233