

TAU 1-2

Pūngao Hiko

Introducing Electrical Energy



TIROHANGA WHĀNUI

Rapu mōhio atu anō mō te pūngao me te hiko. Ko ēhea ngā pūrere kāinga me ngā pūrere kei te tō taha he whakamahi pūngao hiko?

NGĀ HONO O TE MARAUTANGA O AOTEAROA

NGĀ WĀHANGA AKO:	NGĀ WHĀINGA PAETAE:	NGĀ TAUMATA:	NGĀ TAU:
Pūtaiao: Ao Ahupūngao: Ngā uiuinga ahupūngao me ngā ariā ahupūngao	Tūhuratia ngā tauira o ia rā o ngā āhuatanga ahupūngao, pērā i te hiko me te autō me te aho.	1-2	1-4
Ngā āheitanga pūtaiao	Te kohikohi me te whakamāori raraunga, te whakamahi whakaaturanga, me te whakamahi i te pūtaiao.	1-2	1-4
Ingarihi: Te kōrero, te tuhituhi me te whakaatu	Me whakaemi ka tīmata ki te whakamahi i ngā puna mōhiohio, ngā tukanga me ngā rautaki hei tautuhi, hei whakatau me te whakaputa whakaaro.	1-2	1-4
Pāngarau	Tauanga	1-2	1-4

NGĀ MŌHIOHIO MĀ TE KAIKO:

Raupapa ako



TE WHAKAATU
MŌHIOHIO



TE TŪHURA ME TE
WHAKATEWHATEWHA



TE HANGA ME
TE WHAKAATU



TE WHAKAATA ME
TE WHAKAWHĀNUI



ME WHAITAKE

Ngā koronga ako

E ako ana ngā ākonga kia:

- Tīmata i te whai mārama ki ngā ariā o te hiko me te pūngao
- Tautuhi ko ēhea ngā pūrere kāinga me ngā pūrere kei tō rātou wāhi he whakamahi hiko

Paearu angitu

Ka taea e ngā ākonga te:

- Whakamārama ngā ariā o te pūngao me te hiko
- Tuhi taipitopito mō ngā pūrere kāinga me ngā pūrere whakamahi hiko

Ngā rauemi e hiahiatia ana

Kiriata: [Te Tūhura Pūngao me te Hiko](#)

Ī-pukapuka School-gen: [Beaky and Bluey see the light - Putanga Ingarihi](#)

Rau Google: [Ngā mea e mōhio ana ahau he whakamahi hiko](#)

Ngā Tautoko Tāpiri

Science Learning Hub nā Te Whare Wānanga o Waikato: Tuhinga [He aha te pūngao](#)

Ataata: [He aha e hira ai te pūngao?](#)

Ngā Kupu

Pūngao, hiko, pūngao moe, pūrere kāinga, pūrere, waea, autō, pūhiko, kōmaru, hiko.

E tohu ana ngā kuputuhi miramira [karaka](#) i tētahi hono ki ētahi rauemi atu anō. Mēnā kua tāngia e koe tēnei rauemi, me hoki ki schoolgen.co.nz/for-teachers/resources/ hei toro atu ki ngā rauemi kua honoa.

WHEAKO AKO

Kia mōhio: He whakaaro noa iho ēnei, ā, e whakatenatenahia ana ngā kaiako kia whakahāngaitia te mahi ki ngā hiahia me ngā kaingākau o ā rātou ākonga.



TE WHAKAATU MŌHIOHIO

He tata ki te 15 meneti

- Ka taea e ngā ākonga te tuku ō rātau mōhio mō te hiko ki tētahi hoa.
- Tirohia ngā kiriata Google: [Te Tūhura Pūngao me te Hiko](#)
Ka whakaatu tēnei kiriata i ngā kupu: pūngao, hiko, pūrere, pūrere whare me te maha atu. He whakaatu i ētahi ariā taketake o te hiko, ā, he pēhea te whakamahi.
- Pānuitia te [iPukapuka School-gen: Beaky and Bluey See the Light](#) me ngā tamariki, ki a rātou rānei, kia mōhio ake ai mō te pūngao, te pūngao hiko me ngā mea ka taea e koe hei penapena hiko (tirohia ngā rauemi kei te whārangi 2).
- Me kōrero mō ngā mōrearea o te hiko me te take me tūpato ngā ākonga ina whāwhā ana i ngā pūrere kāinga hiko, ā, kia whakamahia i raro i ngā tohutohu a tētahi pakeke.



TE TŪHURA ME TE WHAKATEWHATEWHA

He tata ki te 20 meneti

Ka kohia e ngā ākonga ngā mōhiohio mō ngā pūrere kāinga me ngā pūrere i te kāinga me te kura, mā te whakamahi i te tātauiria ripanga kaute i raro.

TE WHAKAARO PĒRĀ I TĒTAHI TOHUNGA PŪTAIAO:

Me tuku pātai mō ngā wāhi e rere ai te hiko i tō akomanga. He pēhea te tae ki reira? Tūhura he pēhea te whakamahi i te pūngao hiko i tō akomanga.

Pūrere kāinga, pūrere rānei	E hia?	He aha te mea ka whiwhi tātou? (Wera/rama/oro/nekehanga)	He aha te pūtake o tōna hiko? (hiko/kōmaru/pūhiko ērā mea)	Me pēhea tātou e penapena pūngao ai ina whakamahi ana i tēnei?

Hono ki te putanga Google Docs



TE HANGA ME TE WHAKAATU

He tata ki te 15 meneti

Me tuhi pea e ngā ākonga tētahi pikitia, te tuku kauhau, pukapuka rānei he pēhea tā rātou whakamahi hiko i ō rātou ao, mā te whakamahi utauta tōtika, pūmanawa rorohiko rānei, pērā i te: Book Creator, PowerPoint, GAFE rānei.



TE WHAKAATA ME TE WHAKAWHĀNUI

He tata ki te 10-20 meneti

- Me whakaaroaro e hia ngā pūrere kāinga, pūrere hoki kei tō akomanga, tō kāinga, tō kura rānei he whakamahi hiko.
- Me hanga kauwhata, hoahoa pikitia rānei mā te whakamahi i ō **raraunga ripanga kaute**.
- He aha ētahi atu pātai a ngā akonga mō te pūngao me te hiko?
- Mai i tētahi uiui mō te pātai nui/whakaira.



ME WHAITAKE

He tata ki te 15-30 meneti

- Ka taea e ngā ākonga te whakamahi ā rātou kitenga hei tūhura me pēhea e iti iho ai te whakamahi hiko i te akomanga.
- Me hanga pānui whakaahua, whakaaturanga matihiko rānei e whakamārama ana me pēhea te penapena hiko.

Ko te tūmanako i pārekareka ki a koe tēnei rauemi STEM mātauranga.

He kaupapa hapori nā Genesis a School-gen kia hihiko ai ngā kaiako, ngā tamariki me ngā whānau ki te STEM.

Mō ētahi rauemi koreutu atu anō tirohia tā mātau **paetukutuku Genesis School-gen** ka whai i a mātou i runga o Pukamata me Kapoata @schoolgennz