



Kaupapa  
Mīharo

Wero  
Hiko

## Ngohe 2.1: Ngā tāhiko pepa

### Ka taea e koe te hanga tētahi tāhiko māmā hei whakakā i ngā rama? He māmā noa iho!

Hangaia tētahi ara e neke ai ngā ia hiko i te puna hiko e whakaputa ana i te hiko, ki te kawenga e whakamahi ana i te hiko.

### Hangaia tō tāhiko

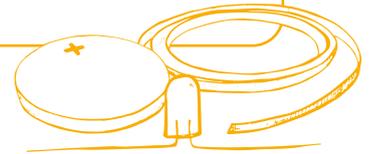
#### Hātepe 1

Tāia tētahi ara i te whakaahua ka tīmata i te pito A, ka hono ki te tohu LED, ka mutu ki te pito B.



#### You only need three basic things:

- Coin battery (the generator)
- Copper tape (the conductive path)
- LED (the load)



#### Hātepe 2

Ūhia te ara nāu i tā ki te tēpa konukura. Waiho tētahi āputa i te wāhi kei reira te tohu LED.



Kia hanga koe i ngā kokonga i tō tāhiko, kua e kuti i te tēpa konukura! Kāore te wāhi hāpiapia o raro o te tēpa e kawea iahiko, nō reira ka whati te tāhiko. Me whakapiko kē kia kokonga te āhua.

#### Hātepe 3

Whakapikohia ngā wae o te LED kia papatahi ai. Tāpirihia te LED ki tō tāhiko, ki runga tonu o te tohu LED.



He wae tōrunga, he wae tōraro anō hoki ō tō LED. Me hono koe i te wae tōrunga o tō LED (ko te wae roa ake) ki te taha tōrunga o tō tāhiko, ā, me hono te wae tōraro (ko te wae poto ake) ki te taha tōraro o tō tāhiko.



#### I mōhio rānei koe?

Ko te pūkawe te ingoa o ngā rawa kawea hiko, ā, ko te ārai te ingoa o ngā rawa kāore e kawea hiko.

#### Hātepe 4

Waiho te pūhiko ki te pito B, ki runga i te tēpa konukura.



He taha tōrunga, he taha tōraro anō hoki ō te pūhiko. He tohu tāpiri kei te taha tōrunga. Waiho te pūhiko ki te tāhiko, ā, me aro te taha tōraro ki raro.

#### Hātepe 5

Whētua te kokonga o tō whārangi kia pā ai te tēpa konukura kei te pito A (ko te taha tōrunga o te tāhiko) ki te taha tōrunga o te pūhiko.



#### I kā rānei i a koe ngā rama?

Kāore i kā mai? E pai ana! Tirohia mēnā kei te tika te takoto o te LED me te pūhiko, kia rere ai tāhiko mai i te tōrunga ki te tōraro.



