

Nau mai ki te ao koiora

MOROITI

Me āta titiro tātou ki tētahi ao pakupaku rawa e kore e taea te kite e te whatu tangata. He aha e noho ana i taua ao?

E kīia ana ko ngā mea paku rawa atu o te ao he moroiti!

He rerehua nē hā?

He oranga tō ētahi moroiti mō tātou pērā i te moroiti puku hauora

I ētahi wā ka pāngia koe ki tētahi moroiti kino kia ngau tō puku.

Ko te moroiti kino rongonui i tēnei wā ko te Huaketo Korona, arā, Covid-19.

He aha te take e whakararu ana a Covid-19?



MOROITI Meka Rekareka



Microscopic observations by
Anton Van Leeuwenhoek



Ko te moroiti te mea paku rawa atu, te hanga māmā o te ao. Ka kitea anake mā te karu whakarahi.



E rima miriona, tiriona tiriona moroiti i te ao, ā, ko rātou te wāhanga nui o ngā mea ora i runga i a Papatūānuku.

Nā te Kaikoiora Tatimana a Anton Van Leeuwenhoek te moroiti tuatahi i kite i te tau 1675.



Ka āhei ngā moroiti ki te mahi takitahi, te mahi takitini rānei.

He hoa pai hoki te moroiti i ētahi wā. Ka āwhina rātou i a tātou ki te mahi miraka pē, te waina, te waipiro, ngā pīkari me te parāoa.



Ka āhei ngā moroiti ki te mahi takitahi, te mahi takitini rānei.

He huhua te āhua, te rahi o ngā moroiti me ngā momo.
Me tuhi pea ētahi moroiti tino rerekē rawa atu?



Ka waihanga ngā moroiti autotrophic i ā rātou ake kai, engari ngā moroiti heterotrophic ka huri ki ētahi atu rauropi hei rapu kai.

E āhei ana ngā moroiti te noho ki ngā wāhi katoa. Kāore he wāhi wera rawa, makariri rawa rānei, ā, pakapaka rawa, mākū rawa rānei mō te moroiti.



Ētahi atu Meka Rekareka Moroiti!

**He aha tēnei
mea te rauropi
papa?**

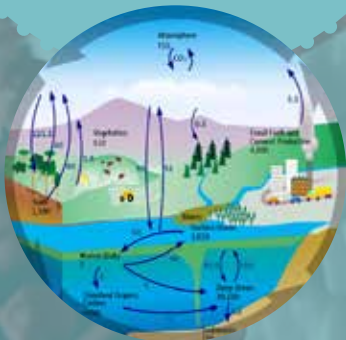


Ka āhei ētahi moroiti ki te whakatipu i ētahi mate ki roto ki rauropi papa, ā, ka kīia nei he “tukumatē”. Ka kuhu ki ō tātou tinana mā te hau, te wai, te kai, te pā atu, te ngau ngārara rānei. Ka tukua ngā mate i tētahi tangata māuiui ki tētahi tangata ora.

He mahi nui tā ngā moroiti i waenga i te tangata me te taiao. He wāhanga rātou o te hurihanga waro, te hurihanga hauota, ā, ka popotia ngā para me ngā mea mate.

He moroiti e tipu ana i roto i ngā kai, ā, ka puta ngā matū tāoke, ka mutu, ka paitini te kai, ka māuiui te tangata, ka mate rānei.

Ko ētahi moroiti ka āwhina mai ki te waihanga rongoā pēnei i ngā rongoā paturopi e whakamate ai, e whakamutu ai rānei te tipu o ngā mate whai moroiti.



**Kua māuiui kē
koe me te
kai i ngā rongoā
paturopi?**

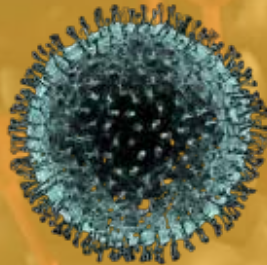


I ētahi wā ka meatia ngā moroiti hei mahi rongoā āraimate ō ētahi mate pērā i te whakamemeke, te korara, te taipō, te koraputaputa, me te mate ate kakā. Ko ngā rongoā āraimate he moroiti mate, ngoikore rānei ka whakauru ki te tinana ki te waihanga i ngā paturopi hei tiaki i te tinana mai i ngā

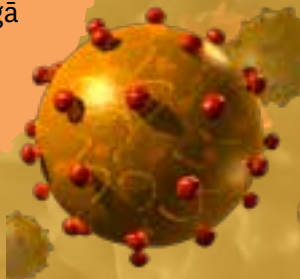


He aha tēnei mea te huaketo?

He tino itiiti rawa atu
te huaketo, ā, he tino
hopuhopu hoki. Ka kitea
te huaketo i roto i ngā
mea ora.



Huaketo korona



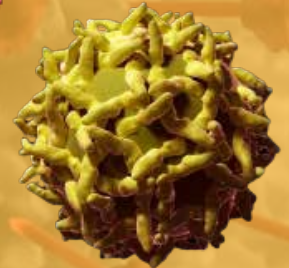
Atekakā C



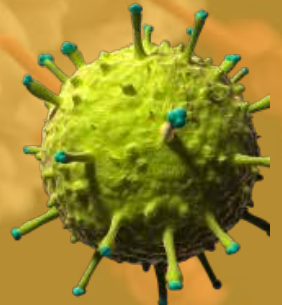
Kia ora! Ko Himani ahau,
he kaiako pūtaiao au i Te
Manawa nei! I te mōhio
koe e rima ngā momo? Ko
te Huaketo, ko te Huakita,
ko te Pūkohu wai ko te
Hekahēka me te Hātare
pūtau-tahi. Me titiro tātou
e kitea ai ngā rerekētanga,
ngā ōritenga.

What does a virus look like?

Kei te whakamahi ngā
kaipūtaiao i te whare
wānanga Wisconsin te X-ray
crystallography me te cryo-
electron microscopy mā te
āhua-3 hei waihanga i ēnei
whakaahua o ngā huaketo.



Kirikā kōwhai



Mate Poaka



Kei a koe he kerepeti,
he pihimiro me ētahi
poipōkai?
Me hanga e koe tētahi
taura huaketo?



Huaketo
rewharewha



Polio

Na, he aha tēnei mea te huakita?

Pērā i te huaketo he itiiti rawa atu hoki te huakita, engari e 100 te rahi ake i te huaketo. Ko te tino rerekētanga i waenga i te huaketo me te huakita me whai mea ora te huaketo pērā i tētahi tipu, tētahi kararehe kia tipu, kia rea, engari te huakita ka tipu noa iho i runga i ngā mea noa.



Ka whakatipu ngā kaipūtaiao i te huakita i roto i ngā paepae i tētahi taiwhanga. He pai tēnei tū mahi e kitea ai e hia nei ngā huakita i runga i ngā papa rerekē.



Kei te nuinga o ngā taiao Papatūānuku te huakita

Ko te huakita tētahi o ngā mea ora tuatahi i puta i a Papatūānuku. I konei i mua noa atu i ngā mokoweri!



I āianei me titiro ki te pūkohu wai!

He whānau huhua, he whānau rahi te whānau pūkohu wai e whakamahi nei i te ahotakakame hei mahi kai pērā tonu i ngā tipu. Ko te rerekētanga o te pukohu wai i ngā tipu, kāore i te takoto pai ngā momo iho me ngā mahi.

He pūkohu wai te kārengo



Ka āwhina te pūkohu wai i ētahi wā! He kai ētahi momo, he hinu, he rongoā hoki ā, ka pare atu hoki i te panoni āhuarangi.

Ka kitea nuitia te pūkohu wai i ngā taiao wai, arā, te moana, ngā awa, ngā roto me ngā repo. E noho tata ana koe ki tētahi wai? Me hiko atu koe ki tētahi awa, tētahi repo, puna wai rānei kia kit pea koe i ētahi pūkohu wai kākāriki, hāwaniwani!



Me rapu kōrero anō i konei!
www.thoughtco.com/human-uses-for-seaweeds-2291917



Who knows what a Fungus is?

Ko au! Ko au!
Mōhio ana au ki
ētahi hekaheka!

Kāre e taea e te hekaheka te mahi ahotakakame pēnei me ngā tipu. Ka ngongo kē i ngā kai kāore i te mahi kai.

He aha te tikanga o te ahotakakame



He momo moroiti kōmāmā, he mea ora rānei te hekaheka, engari ehara i te tipu, ehara hoki i te kararehe. Ko ētahi momo hekaheka e mōhiohia ana, ko te harore, ngā pūhekaheka, ngā kūpā, ngā truffle me ngā ihi.

Ka tipu ngā hekaheka pūtau-huhua mā ngā rauara torohihi. Ka whakarea mā ngā pua atua.

Nā Norm Baker i tango whakaahua pūhekaheka (Runga) nā te ringatoi Johanna Martensson i whakamahi pūhekaheka i āna mahi toi! (mataua) Me pātai ōu mātua i mua i te mahi i tēnei mahi i te kāinga).



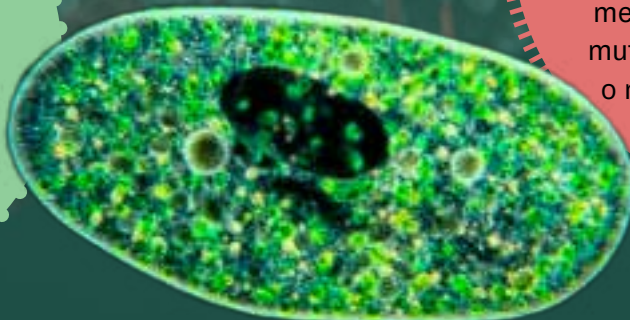
Ā, ka mutu, ko te hātare pūtau-tahi

(pronounced: pro-toe-ZO-uh)

He rawe ki te hātare pūtau-tahi te mākū, nō konei ka hōrapa i ētahi wā ngā mate kōpiro me ētahi atu mate mā te wai paru. Nā ngā hātare pūtau-tahi te eku, te kiāria me te kōea.



He moroiti paku (kāore i te māmā) te hātare pūtau-tahi. E kīia nei he pūtau kotahi te hātare pūtau-tahi pērā i te moroiti. Engari, he rahi ake i te huakita me te whai karihi me ētahi atu hanga pūtau, ka mutu, e āhua rite ki ngā pūtau o ngā tipu me ngā kararehe.

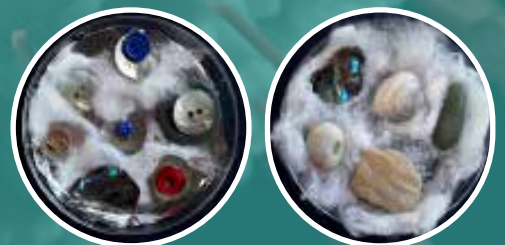
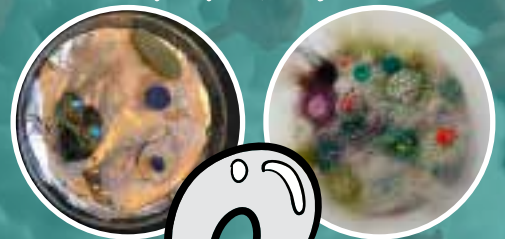


Me mahi toi e awea ana e ngā moroiti!

Kei te waihanga a Elin Thomas i ngā paepae e kī ana ki te pūhekaheka engari kāore i te mahi ngā hanawiti pata pīnati tahito. Ka mahi te ringa toi muka nei i āna whakamātau pūtaiao kia waihanga anō i ētahi pua atua makaro mā te mahi tūāpapa wūru kātahi ka āta hanga i ētahi tipu mā te tuimāwhai me te mahi tuitui.



E mōhio ana koe ko ēhea ng ā mea tūturu?



Tēnā pea ka āhei koe ki te mahi i tēnei mahi māu anō, mā te whakamahi i ngā taputapu i tō kāinga me tō māra – pērā i te wūru, te wūru miro, te pepa hiriwā, ngā pātene, ngā kota, ngā rau, ngā kōhatu, pepa kahurangi ki roto i tētahi ipu pērā i te tini, hoeha, pereti rānei. Ka āhei hoki pea te mahi i tētahi tuitui, tuimāwhai rānei. Ki te kore koe e mōhio, pātaihia ōu tipuna, rapua te ipurangi rānei. Ka rekareka te mahi!



Me huri tō mahi toi hei kahurangi?

Moroiti o te Kāuta!

Kua ako tātou mā ētahi moroiti he mate ka puta, engari he pai ētahi atu mā tātou! He nui ngā huakita e noho ana ki ō tātou kiri, ki ō tātou pūnaha kūnātu kia ora pai tātou. Ka whakamahi moroiti tātou hei hanga kai, me titiro tātou ki ngā mahi hei mahi moroiti i tō kāuta.

I rapu harore a Kirsty me te mahi i tēnei risotto harore!



Me āta tiro ngā harore kia mōhio he mea hei kai i te mea ko ētahi he mea paitini. Inā tētahi aratohu pai! www.wikihow.com/Identify-Edible-Mushrooms

E toru ngā pūnaha moroiti ā Mirjam i tōna kāuta rāhui. Te katoa kua hangaia ki te huakita me te īhi e noho awhiawhi ana. Ko te tikanga kei te tautoko tēnā i tēnā kia tipu, kia rea, kia panoni te pūtaka kai (ngā huka) ki tētahi kai 'hou'. Ko āna pūnaha moroiti e toru ka āwhina i a ia ki te hanga kombucha, (inu mirumiru) parāoa kawa me te pia kōpī.



Kombucha

Kei a au tētahi 'scooby' hei hanga kombucha, H tītipu mōkito taupuhipuhi o te huakita me te īhi ka whāngaia ki te tī mātao me te huka. Ka toroī haere me te scooby mō tētahi wā ka purua ki ngā pātara iti, ki ngā tiā rānei kātahi ka tāpiri huarākau, kōpī rānei kia tāwara. Ka waiho kia tū mō te 3-5 rangi kātahi ka rite ki te inu. He inu mirumiru māori. He nui tonu ngā pae ipurangi e kitea ai he tohukai, he mōhiohio. Ka taea e koe te whakatipu i tō ake scooby mā ngā mea iti ka rewa kei raro i te kombucha ka hokona i te toa.

Inā taku scooby i rō tiā

Pia Kōpī



I te mea ka pai ki ahau ēnei inu mirumiru I rapu au i te kōrero mō te hanga i taku ake pia kōpī. I kitea ehara i te mahi uaua māku anō, ā, ka taea te 'hopu' ēnei tītipu mōkito i tēnei wā tonu, i te kāinga! Ko te tītipu mōkito me tiki mō tēnei tukanga ka meatia hoki ki te huakita me te īhi. Inā tētahi hononga hei tīmata i taku mahi.

afarmofyourhome.com/growing-your-own-ginger-beer-plant/



Parāoa kawa

Na, ko te tītipu mōkito tuatoru ko tētahi i hopukia e au i te tīmatanga o tēnei rāhui. I whakamahia te puehu parāoa rai me te wai ka waiho ki te kāpata whakawera wai, ā, koirā te wā ka tīmata te mahi tūmatarau. Ia rā, ia rā i whāngai au i a “Herbert” (i whakaaro au kia whai ingoa), ki ētahi puehu parāoa me te wai. Ka kitea kua nui te tītipu mōkito ka whakamahia hei tunu parāoa kore īhi. Ka mīharo! Nā te tīmatanga o “Herbert” ka panoni haere te kakara i ia rā, i ia rā. Mai i te panana pakaka ki te wai tango parakena maikuku ki te winika! He mea nui te tiro tiro haere kia kore ai he hekaheka e tipu i tō tītipu mōkito i te mea koia rā te moroiti e kore koe e pīrangī hei wāhi o tēnei tukanga. He nui tonu ngā tohutohu kei te ipurangi, nō reira rapua. Ko tāku i āiane he whakatipu anō i tētahi hekaheka papai hei hanga tihi kahurangi!

Mahi Tūhuratanga