Raranga Matihiko tv

Support Material for Episode 5

Kaitiaki Whenua

Years 1-6

Episode Overview

In this episode we look at kaitiakitanga (guardianship and protection) through the perspective of our environment. We visit the Endemic Wall at Te Papa to view some of the taonga from our whenua (land) and then use block coding to create an animation showing how we can be kaitiaki of our whenua. This episode is designed for students working at levels 1-3 of the NZ curriculum.

Resources to Support Whānau with Learning from Home

Digital technology is now a compulsory part of the New Zealand Curriculum that can be woven across other learning areas to create authentic future focused learning.

This resource will support you and your child to extend their learning with links to support materials for our digital tools and unplugged activities, further research and print resources that you can use at home.

Unplugged Activity – Fern identification flow chart
To tell the difference between ponga and other common NZ tree you can use an identification flow chart. This helps you think like a computer to decide what type of fern you are looking at. You can download our Tree fern identification flow chart or make one of your own.

Digital Tool Tips and Tricks – Scratch
Scratch.com is a free block-code programming website that you can use on all devices, you do need a login to save your work. There are prepopulated blocks of code that you can drag and drop to create a cartoon. Watch our introductory video: Introducing Scratch or Ko Scratch tēnei. View the Educator guides. Episode 5 asks that you create a cartoon ngahere (forest) scene using 'say' 'wait' and 'hide' blocks to show how to be a kaitiaki (guardian) of our whenua (land). You can remix our Scratch project here.

Curriculum Links for Teachers

Technology Progress Outcomes	Computational Thinking PO2: In authentic contexts and taking account of end-users, students give, follow and debug simple algorithms in computerised and non-computerised contexts. They use these algorithms to create simple programs involving outputs and sequencing (putting instructions one after the other) in age-appropriate programming environments.
NZC Learning Areas	Science – **Planet Earth and Beyond -** Students learn that Earth provides all the resources required to sustain life except energy from the Sun, and that, as humans, we act as guardians of these finite resources. This means knowing and understanding the numerous interactions of Earth's four systems with the solar system. Students can then confront the issues facing our planet and make informed decisions about the protection and wise use of Earth's resources. **The living world -** Students develop an understanding of the diversity of life and life processes, of where and how life has evolved, of evolution as the link between life processes and ecology, and of the impact of humans on all forms of life. As a result, they are able to make more informed decisions about significant biological issues. The emphasis is on the biology of New Zealand, including the sustainability of New Zealand's unique fauna and flora and distinctive ecosystems. Social Sciences - **Place and Environment** – Students learn about how people perceive, represent, interpret, and interact with places and environments. They come to understand the relationships that exist between people and the environment.
Learning Intentions	Develop understanding of kaitiakitanga as it is applied in nature. Apply algorithmic thinking to create a digital story in Scratch.
Success Criteria - ***Students will be able to***	Create a digital story using Scratch coding to show guardianship of the environment. Complete an algorithm to share what I know about kaitiakitanga. Debug any mistakes in my algorithm to make it correct.

Ngā Hononga ki te Marautanga

Te Aho Hangarau Matihiko	**Whakaaro Rorohiko (Whakatupuranga 1):** Ko te whakaaro hātepe - Ka wetewetea tētahi tūmahi rorohiko-kore ki ētahi tohutohu tika, tohutohu mārama, me kī, kia māmā ngā tohutohu (whakaaro hātepe). Ka taea te tuku tohutohu, ka tautohu mēnā kei te hē, ā, ka whakatika ai (te patuiro).
Te Marautanga Wahanga Ako 1	**Tikanga ā Iwi:** Te Whakaritenga Pāpori me te Ahurea - Ka whakawhanake mōhiotanga te ākonga ki: ngā take me ngā huarahi e whakarite ai te tangata i a ia anō ki te whakatutuki i ōna matea; ngā motika, ngā tūranga me ngā haepapa o te tangata i a ia e pāhekoheko ana i waenga rōpū; te hononga o te ahurea ki te tuakiri o te tangata me ngā putanga iho o te pāhekohekotanga ahurea.
Te Marautanga Wahanga Ako 2	**Pūtaiao (Te Rauropi 1):** Ka ako haere ko ētahi hiahiatanga kei ngā mea oreore katoa, kia noho ora ai. **(Te Taiao: 3ii):** Ka mārama haere ki ngā āhuatanga o ia mea oreore e rite ana kia whai oranga ai ia i tōna ake wāhi noho.
Ngā Whainga Ako	E taea te whakamārama i tana hononga ki te taiao, kia papatuanuku hoki, e pewhea ana te tiaki pai. e wetewete ngā hātepe e pā ana ki ngā hangarau matihiko.
Ngā Putanga Ako	Whakaoti ngā whaakaro hātepe mo (Scratch) kia waehere tāhūrua te kaitiakitanga o te taiao.

Learning Links and Reading Lists for Whānau and Teachers

Extension Activities
Seed collection and propagation guide for native trees and shrubs (Department of Conservation)
Building Science Concepts (Science Online resource books)
Learnz – Sustainable Seas
Scratch coding challenge

Research Links
iNaturalist - Link for app plant and animal identification
If, then coding language webinar
Enviroschools
Te Papa Tongarewa Museum of New Zealand

Print Resources
Tree Fern ID Flowchart

Literacy Resources

Journal series:
The Competition (Junior Journal 59, Level 2, 2019)
Rāhui (Junior Journal 58, Level 2, 2019)
Kaitiaki of the Stream (School Journal Level 2, October 2013)

Ready to read series:
How Kiwi saved the forest retold by André Ngāpō

Connected series:
Gardening in the Living Room (Level 2 2017)
Protecting the Border (Level 3 2011)

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