

Episode Overview

In this episode we look at kaitiakitanga (guardianship and protection) through the perspective of our moana (oceans). We visit the Tangata o le Moana exhibition in Te Papa to see a model of a waka houroa (double hulled waka), and use computer assisted design to create our own model waka. 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 – A waka houroa in your living room

Build a waka houroa for your family out of cushions and other found items. What would you take with you?

Digital Tool Tips and Tricks - Tinkercad

[Tinkercad.com](https://www.tinkercad.com) is a free, online tool for 3D design. 'CAD' stands for Computer Assisted Design. This sort of design app is what an architect uses to draw 3D designs. Watch our introductory video: [Introducing Tinkercad](#) or [Ko Tinkercad Tēnei](#). [View the Educator guides](#). Episode 6 shows you how you can use Tinkercad to create a model waka.

Curriculum Links for Teachers

<p>Technology Progress Outcomes</p>	<p>Designing and Developing Digital Outcomes PO1: In authentic contexts and taking account of end-users, students participate in teacher-led activities to develop, manipulate, store, retrieve and share digital content in order to meet technological challenges. In doing so, they identify digital devices and their purposes and understand that humans make them. They know how to use some applications, they can identify the inputs and outputs of a system, and they understand that digital devices store content, which can be retrieved later.</p>
<p>NZC Learning Areas</p>	<p>Technology - Nature of Technology - Students develop an understanding of technology as a discipline and of how it differs from other disciplines. They learn to critique the impact of technology on societies and the environment and to explore how developments and outcomes are valued by different peoples in different times. As they do so, they come to appreciate the socially embedded nature of technology and become increasingly able to engage with current and historical issues and to explore future scenarios. 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.</p>
<p>Learning Intentions</p>	<p>Understand that there is a reciprocal relationship between the ocean and human life. Explore how our tupuna may have planned for a long journey across the ocean using the technologies and resources that they had available. Design a waka hourua replica using Tinkercad.</p>
<p>Success Criteria - Students will be able to</p>	<p>Talk about what a waka hourua needed to have for a journey across the ocean. Create a 3D waka hourua in Tinkercad. Use the handles on an object in Tinkercad to change the size and shape.</p>

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	Hāngarau (Te Whakaharatau Hangarau): Ētahi Pūkenga Hangarau - te whakaraupapa i nga mahi hei hātepe; te arotake i ngā hātepe me te otinga i runga i te aro nui ki te take; te tīpako me te whakamahi i ngā mātāpono hangarau me ngā pūkenga ā-ringa, ngā pūkenga auaha e puta ai he otinga.
Ngā Whaingā Ako	Whakamārama he aha te tikanga o kaitiakitanga ki a Tangaroa me ona tamariki. Whakarite ngā whakaaro hātepe ka waihanga he waka hourua. Ka whakaputa, ka whakatairanga i ōna hiahia hei mahere māmā, arā: te āhua o te hua; ngā rawa; he hātepe kia tīmataria ai te hanga o te waka hourua.
Ngā Putanga Ako	Whakamahi he waka hourua mai ngā ahuahanga toru. Whakamārama he aha ngā whakaaro hātepe me ngā hātepe kia tīmataira ai te hanga.

Learning Links and Reading Lists for Whānau and Teachers

Extension Activities

[Navigation](#) (Science Learning Hub)
[Tinkercad He Wero Hoahoa: Challenge](#)

Research Links

[Google Earth Voyages: How wind becomes energy](#)
[Te Papa Tongarewa Museum of New Zealand](#)

Print Resources

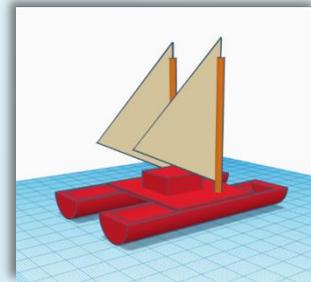
[Tinkercad printable instructions](#)

Literacy Resources

Journal series: [Journey on the Sea](#) (August 2018, Level 3)
[Iris and Dogstar](#) (May 2019, Level 3)
[Tupaia: Master Navigator](#) (August 2019, Level 3)
[Tiakina a Tangaroa](#) (October 2011, Level 2)

Ready to Read: [A Special Visit to Koro and Nanny](#) by Herehere Titio (Level 1)

Connected series: [Giving the Ocean a Voice](#) (Level 2 2013)



mtg Hawke's Bay

WAITANGI
TREATY GROUNDS

Waikato Museum
TE WHARE TAONGA O WAIKATO

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