

Our 2024 theme “This changed the world...”

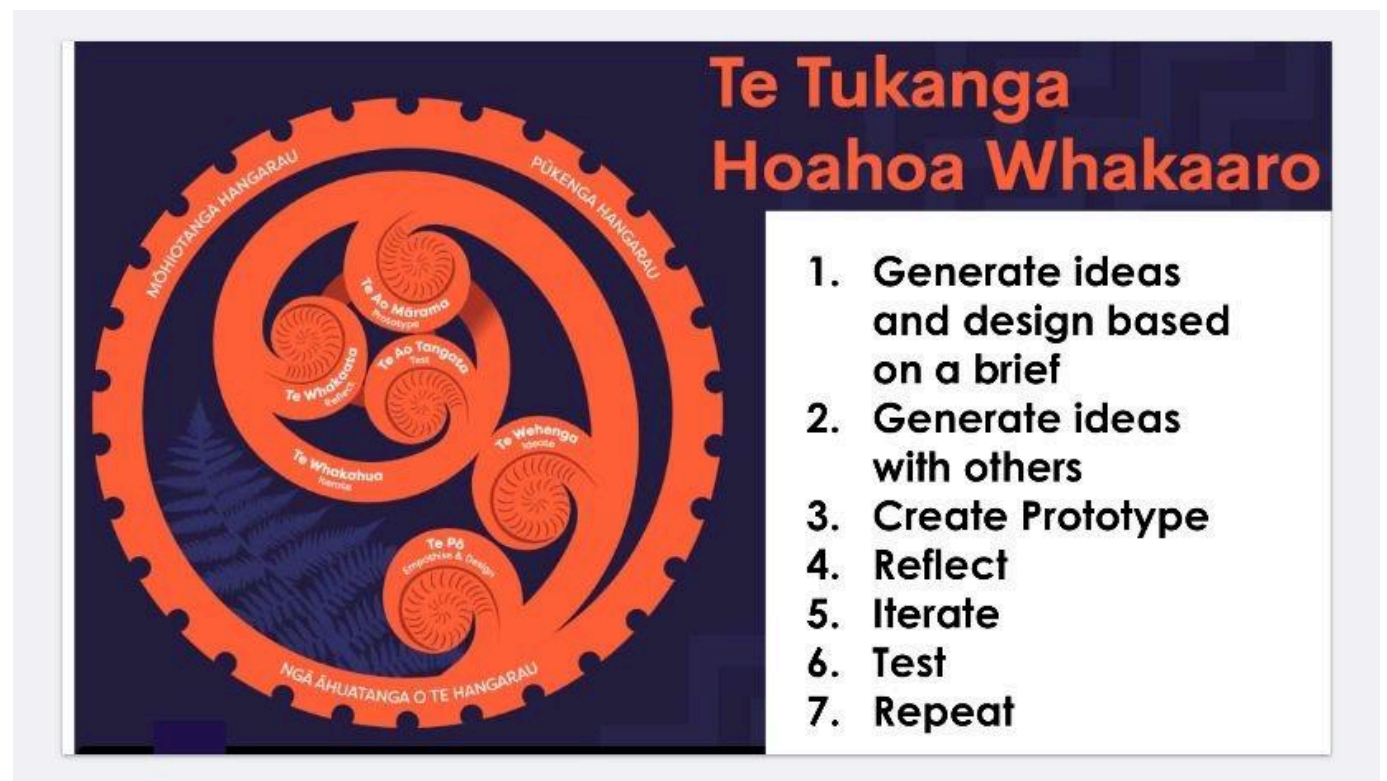
Term One was a Technology theme focused on looking at simple and other machines and how they changed the world.

What is technology?

Technology is intervention by design. It uses intellectual and practical resources to create technological outcomes, which expand human possibilities by addressing needs and realising opportunities.

Design is characterised by innovation and adaptation and is at the heart of technological practice. It is informed by critical and creative thinking and specific design processes.

We used the Te Tukanga Hoahoa Whakaaro as a framework.



Our learning included a visit to MOTAT. This supported our learning about technology through hands-on programmes that encouraged tamariki to think about the processes of invention and innovation and how technology changes over time.

We ended our term by sharing our learning with the other tamariki in the school. We got to show them how our designs worked, share how we came up with our ideas and also explain what we would change or improve on.

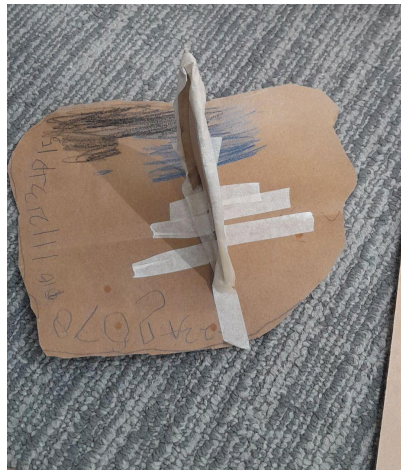
Whānau Puna Learning experiences

Whānau Puna used the Te Tukanga Hoahoa Whakaaro as a framework. This was designed to explain the design thinking and technology process from the perspective of the Māori creation story. In Whānau Puna, the tamariki used dramatic inquiry to explore this story and begin to think like problem solvers. They then learnt about the pūrākau How Māui Slowed the Sun and the problem that Māui encountered and how he used the technology process to come up with a solution. This story served as a stimulus for the children to explore the passing of time. The children stepped back in time and learnt about problems faced in the past with needing to measure the passing of time. They learned about the invention and innovation of clocks, starting with the sundial, through to the sandtimer, pendulum clocks and more. Great experiments and learning took place with making prototypes of these inventions and then using them with increasing accuracy to measure time.


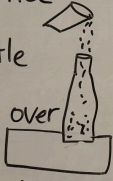
We looked at ways to measure the passing of time.


We made sundials and sand timers.







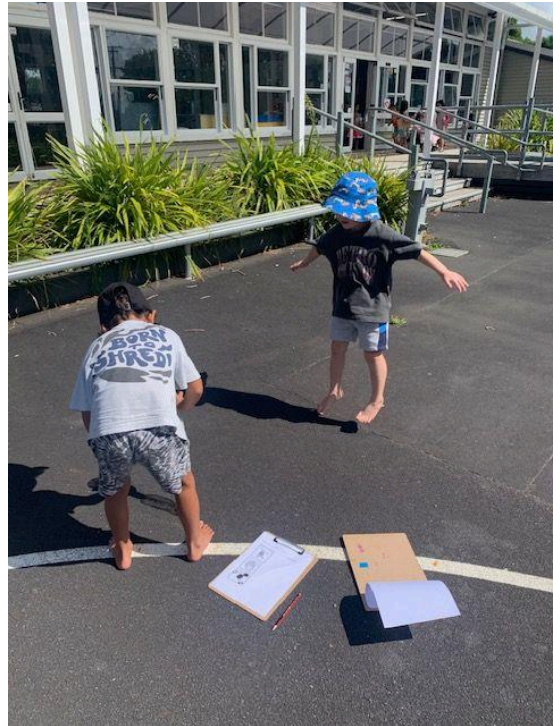
Use a cup  to pour the rice into the bottle  hold the bottle over the tray so it doesn't spill.

take a second bottle and connect them together at the bottle tops with tape  peel the labels so you can see the rice.

If you make a bigger hole, the sand will come out faster

Math Strategies

count on $6 + 4 = 10$	count the items $2 + 3 = 5$	count the objects $2 + 5 = 7$
count on $4 + 3 = 7$	count the items $4 + 2 = 6$	count the objects $1 + 3 = 4$



If you have more rice it will last longer.

This is the problem



I need two pots and
sand and then
Kah - flip it. ~~AD~~ yoy

"A sundial doesn't tell us minutes."



This is my idea

E.g. I'm going to make a sand timer by sticking 2 bottles together.

I will need: list...

Hot glue

2 bottles -
soft sand ✓



Did it work?



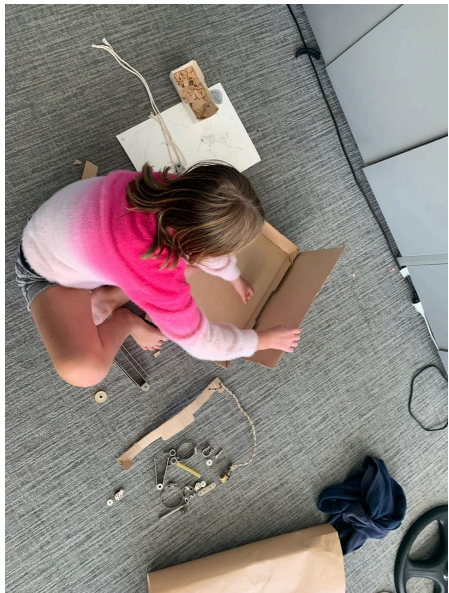
My reflection

It
it was very
for me because
a lot of tape and I used
The rice goes fast
★

Whānau Kokoru Learning experiences

In Whānau Kokoru, we had workshops on the five simple machines, getting to understand how they work, looking at examples in everyday life and creating our own. We then visited MOTAT where ākonga had the chance to explore a whole exhibit on simple machines as well as innovations throughout the ages. Then, ākonga used Te Tukanga Hoahoa Whakaaro as a guide during the process of creating their own innovations/technology. They were posed with an imaginative problem and commission to solve the problem. The problem was that a kiwi was spotted in an area known for predators such as dogs and stoats. The commission was to create a humane trap that could be used to rescue the kiwi, ensuring its comfort and care while inside the trap, using at least three simple machines. They reflected on their work, received feedback, made changes and presented their work to other students in the school. As part of their presentations, the students wrote narratives of the kiwi and procedural writing to explain either how their traps were made or how they work.







Scenes from our MOTAT trip

A session with one of the MOTAT Educators, a visit to the Aviation Hall, a ride in the tram and some time to experience the main site.

