Kete Aronui - Taking Climate Action

Large scale climate action

Building flood protection works

How can we look after our atmosphere to prevent more extreme weather events from occurring around the world?

Floods and droughts will likely get more intense as a warmer atmosphere disrupts weather patterns and causes the climate to change. Flooding is the most common natural hazard we face in Te Taitokerau. Northland Regional Council is building flood protection works to safeguard communities, this includes a retention dam in Whāngarei, raising roads in Panguru and constructing spillways and deflection banks in Awanui and Moerewa.

Action

Building a water catchment model

A water catchment area is land that is bounded by natural features such as hills or mountains, from which all surface water, run-off water and groundwater flows to the lowest point in the landscape. In this activity, students use everyday materials to simulate water flows in a catchment and their effects.

Turn the page for instructions >>>

Share your mahi

Celebrate participation and inspire others. Show what you tried, what worked, what didn't and what you had fun doing.

- School/centre newsletter
- School/centre page/group
- Northland Education for Sustainability

Links to curriculum

Te Whāriki

Strand

Exploration / Mana aotūroa

Goal

Tamariki experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognised

Learning outcome

Tamariki become increasingly capable of playing, inventing and experimenting

NZ Curriculum

Learning areas

- Science - Nature of science - Investigating in science
- Science - Planet Earth and beyond - Earth systems, Interacting systems

Key competencies

- Thinking
- Relating to others
- Participating and contributing

But wait, there's more!

See over the page and open the google folder for more information, activities and videos: https://bit.ly/3ESeiMa

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Building a water catchment model

Instructions for getting started

1. Consider taking advantage of natural slopes in the school or create a slope in the sandpit or use buckets to create hills and valleys. Alternatively, students can work indoors to create smaller individual catchments.

2. Encourage students to include steep and gentle slopes, flat areas and hollows or depressions.

3. Use a cup, watering can or hose to 'rain' on the catchment. Observe where the water goes. Move the water source so it rains in different parts of the catchment and observe the water flows.

6. Place a small leaf at the top of a steep slope. Observe how quickly the leaf moves when it rains. This simulates water velocity.

7. Place a leaf on gentler slopes and/or in a lake. Observe how the leaf moves when it rains.

8. Sprinkle a small amount of sand over the model and observe what happens when it rains. This simulates erosion.

For a large model, you will need

- Tarpaulin
- Watering can or hose with spray to act as rain
- Materials to build slopes (boxes, upturned buckets)
- Small leaves
- Sand
- Outdoor space / sandpit

More information

The information for this activity has been sourced from Science Learning Hub.

You can find more information on the water catchment model activity at: https://www.sciencelearn.org.nz/resources/2887-build-a-model-water-catchment

Links to Enviroschools

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