

Outdoor Learning Lesson Plan

by Nature Play QLD

Earth and Space Sciences

- Sudden geological changes and extreme weather events can affect Earth's surface (ACSSU096)

Chemical Sciences

- Changes to materials can be reversible or irreversible(ACSSU095)



Class:

Date:

Time:

Weather:

Resources:

- Sandpit
- Water (hose or buckets)
- Spades
- Sticks
- Rocks
- Leaves
- Butchers paper and markers
- Masking tape
- Pool noodle
- Black plastic lining or tarp

Introduction: (10 mins)

Explain that tsunami is a Japanese word that translates to 'harbour wave'. Ask students their ideas about how they occur in nature? Brainstorm all of the possibilities (earthquakes, volcanic eruptions, landslides).

Discuss the ramifications of tsunamis. In small groups, give students a sheet of butcher's paper and markers to make a chart of all the impacts (positive / negative) that a tsunami might have.

Students share their charts.

Main Activity: (20 mins)

Explain to class that they are going to make a simulation of a tsunami hitting an island.

Divide the class into teams (Water, island construction, building construction, vegetation team, people making team)

Each team works on one element. Water team gathers buckets of water for the simulation. Island construction makes the island in the sandpit. Building construction uses sticks, rocks and other gathered materials to make buildings on the island. Vegetation team uses leaves and branches to make forested areas on the island. People making team create people from sticks and tape for the island.

Water team lays the plastic or tarp in the sea area – at least 1m) around the island. Fills with water and then use pool noodle (press down) to create the wave to hit the shore.

Discussion: (10 mins)

What was the impact of the wave? How could the simulation be improved? Why are simulations useful?

Elaboration:

A series of comprehensive slides to further explore tsunamis and their impact.
<https://knowledge.aidr.org.au/resources/the-ultimate-guide-tsunami/#/>