

WHAT'S ON OUR PLATES?

EXPLORE OUR ACTIVE PLATE BOUNDARY

MODULE

1

Uncovering Knowledge and all its Forms

UNCOVERING KNOWLEDGE

How do we uncover knowledge?

What are two types of knowledge in New Zealand?

1. _____
2. _____

Circle the first form of knowledge in New Zealand

MĀTAURANGA MĀORI

Add in the missing words to complete the sentence below.

generations

past

observation

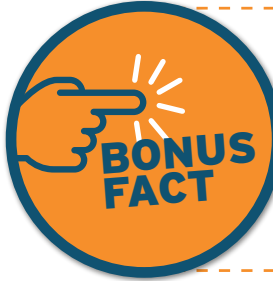
experimentation

Mātauranga Māori has developed over _____, built by _____ and _____ and learning from the _____, through generations of lived experiences.

DID YOU KNOW?

Rūaumoko is the Māori god of earthquakes, volcanoes and seasons.

He is the youngest son of Ranginui (the Sky father) and Papatūānuku (the Earth mother)



The word "Science" comes from the Latin word "Scientia" meaning "Knowledge", which comes from an even older word "scire" meaning "to know".

WESTERN SCIENCE

Western Science is based on observation, experimentation and following a scientific method.

Number the definitions to match up these words with their correct meaning.

1. Analyse

☐ a thing or group of things that helps you find an answer

2. Data

☐ to find out the size of something

3. Evidence

☐ to write down what you know or learned

4. Hypothesis

☐ a careful search for answers

5. Investigation

☐ a bunch of facts or things you know

6. Measure

☐ an idea or group of ideas that explains something

7. Record

☐ what you think will happen based on what you know

8. Theory

☐ to look at the parts of a thing and find out what each part is made of or how it works

INTERWEAVING KNOWLEDGE

Circle **Rangitoto ke te Tonga** / D'Urville Island on the map below



What form of Mātauranga Māori do Ngāti Koata and Ngāti Kuia have of tsunami on Rangitoto ke te Tonga / D'Urville Island?

Circle the best answer:

pepeha (quotations)

mōteatea (laments)

akiwaitara/ pūrākau (stories)

whakataukī / whakatauākī (proverbs)

waiata (songs)

How do scientists look for evidence of past tsunami? Use the following words in your answer.

Sediment **Cores**

Shells **Radio Carbon dating**

DID YOU KNOW?

The magnitude 8.2 **1855 Wairarapa earthquake** ruptured at least 150km of fault at the surface.

It generated a **tsunami** with waves of up to **10 metres high** in Raukawa Moana / Cook Strait, probably due to submarine uplift.

DATING PAST TSUNAMI

Scientists have found evidence of tsunami on Rangitoto ke te Tonga / D'Urville Island and believe the deposits were most likely caused by a tsunami generated by an earthquake.



Where did the earthquake occur?

What year did the earthquake occur?

PREPARING FOR TSUNAMI

Mātauranga Māori and western science both help us learn how to live better in our taiao and prepare for our future.

List some ways that we can prepare for a tsunami:

1. _____
2. _____
3. _____