TELL ME A STORY

Look closely at the hill sides next time you're out and about – they're giving us all sorts of information about New Zealand's past!

A hammer makes a good measuring tool in the field. A standard one is about 30cm long.

GNS Science

Thanks to **Matt Sagar** and **Dominic Strogen** from GNS Science for sharing this cool story with us. They're geologists who study rocks to understand how Te Riu-a-Māui | Zealandia has changed over millions of years. This involves analysing the texture, structure, mineralogy, chemical composition, and age of different types of rock across the country and nearby areas beneath the sea.

This a photo taken by Matt between Springs Junction and Murchison, near the top of Te Wai Pounamu | the South Island.

Can you see the pebbly rock or "conglomerate" and the smooth rock layers? They tell us that an ancient braided river used to flow here about 5–10 million years ago!

The layers slope down to the left hand side. This tell us that this is where a bend was in that braided river.

Cooler still, the pebbles in the rock are the same as those found today in Otago! This tells us that the way NZ looks has changed a lot. Otago and Tasman regions used to be much closer together in the past.

GNS Science

Check out this map by Dom. It shows how our continent Te Riu-a-Māui | Zealandia looked 10 million years ago.

Look for the shapes of Te Ika-a-Māui | the North Island and Te Wai Pounamu | the South Island as we know them today to help you see the difference.

Watch a video of the 100-million-year evolution of Zealandia here: **bit.ly/3L0DmUL**