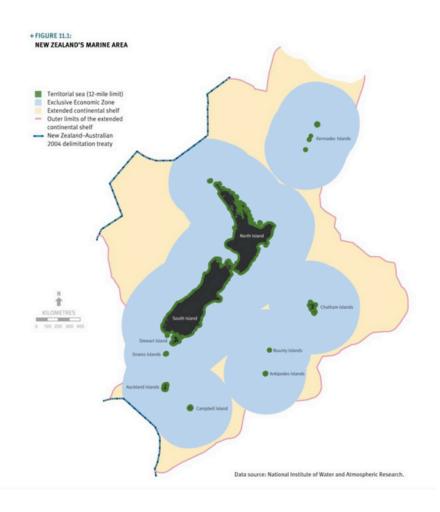


## TOGETHER FOR OUR MOANA - WE'RE SHAPING OUR FUTURE

**INTEGRATED MATHS AND LITERACY LEARNINGS** 

# MATHS New Zealand's ocean size - fractions



New Zealand's Exclusive Economic Zone (EEZ)

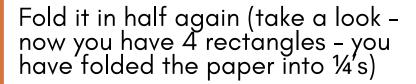
- the part of the ocean that we are in charge of (making rules / caring for)
is about 15 times larger than our land size!

### **MATHS** - fractions:

Here is an easy way to visualise that.

Get an A4 piece of paper.

Fold it in half.



Fold it in half again (you will have 8 rectangles – each one is 1/8th of the paper).

Fold it in half again (you will have 16 rectangles - each one is 1/16th of the paper).





Unfold your paper. Imagine that the whole piece of paper represents NZ's land and sea. Guess how much is land and how much is sea?



Now colour 1 rectangle green. That is our land area. The rest of the paper represents our sea area (15 rectangles).

Can you write the land area and the sea area as fractions?





#### **MATHS** - fractions:

#### **TAKE IT FURTHER**

Cut out the rectangle that represents our land. Now fold that little bit into three equal pieces (thirds). 1/3 of our land is protected as public conservation land.

Can you estimate how much of our sea is protected by marine reserves?

Sadly it is less than 1% (0.38%). That can be represented by folding over a small bit in one of the corners.



Scientists and conservationists are asking the Government to protect 30% of our sea. That is almost 5 rectangles of our paper. Colour that in blue and add some sea life to those 5 rectangles.

Discuss your thoughts about the size difference of land and sea in NZ and the areas that are protected.

